

2005

## UTB/TSC Undergraduate Catalog 2005-2006

University of Texas at Brownsville

Texas Southmost College

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**UNDERGRADUATE CATALOG**  
**2005-2006**



THE UNIVERSITY OF TEXAS AT BROWNSVILLE  
and  
TEXAS SOUTHMOST COLLEGE

UNDERGRADUATE CATALOG  
2005-06

# HISTORY & OPERATION OF THE PARTNERSHIP

The University of Texas at Brownsville and Texas Southmost College have entered into a bold new partnership to provide expanding educational opportunities in the Lower Rio Grande Valley and the state. This creative initiative is designed to improve the continuity, quality, and efficiency of the educational programs and support services offered by the University and the College.

It combines the administrative, instructional and support services of the upper-level university and the community college and eliminates the artificial barriers between them. Continued program development, new program implementation, systemic cooperation with local schools, and partnerships with other institutions of higher learning are major goals of this emerging partnership.

Texas Southmost College was created by the Brownsville Independent School District in 1926. It was the second community college to be founded in the state of Texas. Originally known as the Junior College of the Lower Rio Grande Valley, its name was changed in 1931 to Brownsville Junior College. Upon the establishment of the Southmost Union Junior College District in 1949, it was renamed Texas Southmost College.

The bill that created The University of Texas at Brownsville in 1991 also authorized it to enter into a partnership arrangement with Texas Southmost College. The partnership was created under the provisions of Chapter 51, Subchapter L of the Texas Education Code. The establishment of that partnership and its operational implementation in the Fall of 1992 began the history of The University of Texas at Brownsville in partnership with Texas Southmost College.

The Partnership has its foundation in the establishment of two higher education institutions: The University of Texas at Brownsville and Texas Southmost College. The University of Texas at Brownsville and the Partnership were created by the Texas legislature in May 1991. The foundation for The University of Texas at Brownsville was laid in 1973 when Pan American University opened a Center on the campus of Texas Southmost College to teach upper-level and graduate courses. In 1977, the Legislature approved the establishment of Pan American University at Brownsville as an upper-level center. In 1989, Pan American University at Brownsville became a part of the University of Texas System as a consequence of The University of Texas-Pan American merger. This was the prelude to the establishment in 1991 of what is today – The University of Texas at Brownsville, a free-standing university.

The governing boards of The University of Texas at Brownsville and Texas Southmost College each retain their statutory responsibilities. The University of Texas at Brownsville and the Partnership are governed by the nine-member Board of Regents of the UT System appointed by the Governor. The Southmost Union Junior College District is governed by a seven-member board elected at large from the ad valorem taxing district of the college, which includes most of Cameron County. Chapter 51 of the Texas Education Code also provided for the governing board of each institution to appoint members to a Partnership Advisory Committee which is composed of three members from each board. This committee makes recommendations concerning the development of coordinated programs and services to meet the needs of the communities served by the Partnership.

The operation of the Partnership consolidates the administrative, instructional and support services of the two institutions. Under the provisions of the Partnership, Texas Southmost College retains all of its property and assets. The University of Texas at Brownsville leases needed facilities from the District. Through this unique partnership arrangement, The University of Texas at Brownsville and Texas Southmost College have embarked on a quest to provide the finest educational opportunities that their consolidated resources can create.

# MISSION AND PHILOSOPHY STATEMENT

## *The University of Texas at Brownsville & Texas Southmost College Partnership*

### **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 continuing education, public service, and cultural value to meet the needs of the community. The partnership combines the strengths of the community college and those of an upper-level university by increasing student access and eliminating interinstitutional barriers while fulfilling the distinctive responsibilities of each type of institution.

The University of Texas at Brownsville and Texas Southmost College Partnership offers certificate, associate, baccalaureate, and master's degrees in professional programs designed to meet student demand and regional needs. UTB/TSC also supports the delivery of doctoral programs through cooperative agreements with doctoral degree-granting institutions.

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 binational 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.

### **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, gender, age, veteran status, disability, or sexual orientation. All complaints are filed with the Office of the Vice President for Business Affairs, located at Tandy Hall #109. Procedures for filing complaints are found in the Handbook of Operating Procedures, §3.1.

# **The University of Texas at Brownsville**

The University of Texas at Brownsville is part of The University of Texas System. The University's offerings are approved by the Coordinating Board and The University of Texas System. The University of Texas at Brownsville is approved for teacher education by the Texas Education Agency.

## **Accreditations**

The University of Texas at Brownsville is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award bachelors and masters degrees.

## **Affiliations**

American Association of Colleges for Teacher Education  
American Council on Education  
Association of American Colleges  
Association of Texas Colleges and Universities  
Southern Association of Colleges and Schools

# **Texas Southmost College**

Texas Southmost College's offerings are approved by the Texas Higher Education Coordinating Board, Texas College and University System, and the Texas Education Agency. Texas Southmost College is authorized under federal law to enroll non-immigrant alien students.

## **Accreditations**

Texas Southmost College is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award certificates and associate degrees.

## **Affiliations**

Texas Association of Community Colleges  
Association of Texas Colleges and Universities  
Southern Association of Colleges and Schools  
American Association of Community and Junior Colleges

# **Disclaimer**

This 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 reserve 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.

*Catalog printed September 2005*

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# 2005-06 Calendars

## Fall 2005

July 1	Priority Application Deadline
April 11-July 17	Early Registration
August 17	Early Registration Payment Deadline
August 18	Early Registration Voids for Non-Payment
July 18-August 21	Late Registration (\$30 late registration fee)*
August 22	First Class Day
August 22-24	Add/Drop
September 1	Undergraduate Graduation Application Deadline
September 1	Graduate Graduation Application/Master's Comp. Exam Applications Deadline
September 1	Late Registration/Add-Drop Payment Deadline (4 p.m.)
September 2	Late Registration Voids for Non-Payment
September 5	Labor Day Holiday
September 7	Official Record Date
September 7	Deadline to Withdraw without Recorded Grade
September 7	Deadline for Pass/Fail Petitions
October 14	Mid-Term
October 24	Deadline to withdraw with a "W"
November 5	Master's Comprehensive Exam
November 11	Deadline to Submit Completed Master's Thesis
November 23-26	Thanksgiving Holiday
December 3	Last Class Day
December 5-12	Final Exams
December 13	Grades due to Office of the Registrar
December 14	No registration activity
December 15	Grades available on Scorpion Online
December 17	Commencement

## Spring 2006

December 1	Priority Application Deadline
Nov. 14-Dec. 18	Early Registration
January 11	Early Registration Payment Deadline
January 12	Early Registration Voids for Non-Payment
Dec. 19-Jan. 12	Late Registration (\$30 late registration fee)*
January 16	Martin Luther King Holiday
T, January 17	First Class Day
January 17-19	Add/Drop
February 1	Undergraduate Graduation Application Deadline
February 1	Graduate Graduation Application/Master's Comp. Exam Applications Deadline
January 26	Late Registration/Add-Drop Payment Deadline (4 p.m.)
January 27	Late Registration Voids for Non-Payment
February 1	Official Record Date
February 1	Deadline to Withdraw without Recorded Grade
February 1	Deadline for Pass/Fail Petitions
March 10	Mid-Term
March 13-18	Spring Break
March 27	Deadline to withdraw with a "W"
April 1	Master's Comprehensive Exam
April 7	Deadline to Submit Completed Master's Thesis
May 1	Last Class Day
May 2-9	Final Exams
May 10	Grades due to Office of the Registrar
May 11	No registration activity
May 12	Grades available on Scorpion Online
May 13	Commencement

## May 2006

April 10-May 1	Early Registration
May 10	Early Registration Payment Deadline
May 11	Early Registration Voids for Non-Payment
May 15	First Class Day

May 15	No registration activity
May 15	Add/Drop
April 1	Undergraduate Graduation Application Deadline
May 15	Late Registration/Add-Drop Payment Deadline (4 p.m.)
May 16	Late Registration Voids for Non-Payment
May 16	Official Record Date
May 16	Deadline to Withdraw without Recorded Grade
May 16	Deadline for Pass/Fail Petitions
May 25	Deadline to withdraw with a "W"
June 2	Last Class Day
June 3	Final Exams
June 5	Grades due to Office of the Registrar
June 6	No registration activity
June 7	Grades available on Scorpion Online
	* Payment deadline 4:00 p.m. on final day

## Summer I 2006

May 1	Priority Application Deadline
April 10-May 14	Early Registration
May 30	Early Registration Payment Deadline
May 31	Early Registration Voids for Non-Payment
May 15-June 4	Late Registration (\$30 late registration fee)*
June 5	First Class Day
June 5-6	No registration activity
June 5-6	Add/Drop
April 1	Undergraduate Graduation Application Deadline
May 1	Graduate Graduation Application/Master's Comp. Exam Applications Deadline
	Late Registration/Add-Drop Payment Deadline (4 p.m.)
June 7	Late Registration Voids for Non-Payment
June 8	Official Record Date
June 8	Deadline to Withdraw without Recorded Grade
June 8	Deadline for Pass/Fail Petitions
June 22	Deadline to withdraw with a "W"
Tu, July 4	Independence Day Holiday
July 5	Last Class Day
July 6	Final Exams
July 7	Grades due to Office of the Registrar
July 10	No registration activity
July 11	Grades available on Scorpion Online

## Summer II 2006

June 1	Priority Application Deadline
April 10-June 18	Early Registration
July 7	Early Registration Payment Deadline
July 7	Early Registration Voids for Non-Payment
June 19-July 11	Late Registration (\$30 late registration fee)*
W, July 12	First Class Day
July 12-13	Add/Drop
April 1	Undergraduate Graduation Application Deadline
May 1	Graduate Graduation Application/Master's Comp. Exam Applications Deadline
	Late Registration/Add-Drop Payment Deadline (4 p.m.)
July 14	Late Registration Voids for Non-Payment
July 17	Official Record Date
July 17	Deadline to Withdraw without Recorded Grade
July 17	Deadline for Pass/Fail Petitions
July 31	Deadline to withdraw with a "W"
July 15	Master's Comprehensive Exam
July 21	Deadline to Submit Completed Master's Thesis
August 10	Last Class Day
August 11	Final Exams

*In all semesters, grades due to Deans' offices 24 hours after final exam completed  
For the most up-to-date Calendars, visit [www.utb.edu](http://www.utb.edu), and select 'Calendars.'*



# ENROLLMENT SERVICES

# OFFICE OF ADMISSIONS

Tandy Hall 115

882-8295

## Go Center/Info Shop - Tandy Hall Foyer and Library

Strategically placed throughout the UTB/TSC campus, the Go Centers/Info Shops were created to improve relations with and provide efficient service and concise information to students, faculty, staff, and the community. Through the use of cross-trained personnel and online student services, these centers have successfully served as a tool to minimize paperwork, lines, and confusion experienced by current and prospective students. As a “one-stop center” for information, we provide general university information, as well as guidance concerning, but not limited to, admissions criteria, financial aid, testing, advising, degree auditing, billing, grades, and registration.

## Admissions Policy

The institution maintains an “open door” admissions policy, but admission does not guarantee admission to all programs. Information about these programs is available at the Academic Advising Center in Tandy Hall 214.

## Admission Requirements

Anyone meeting one of the following conditions may be admitted:

1. By High School Graduation – An official high school transcript showing the high school seal and date of graduation must be submitted to the Office of Admissions in Tandy Hall 115 prior to registration.
  2. By Examination – Applicants who did not graduate from high school may be admitted by successfully completing the General Education Development (GED) Testing Program. A copy of the Certificate of High School Equivalency with test scores must be submitted to the Office of Admissions in Tandy Hall 115 prior to registration.
  3. By Individual Approval – Applicants who do not qualify for admission under either of the above mentioned conditions may be admitted if they are at least 18 years of age. Applicants must submit two letters of reference using the forms provided by the Office of Admissions in Tandy Hall 115.
  4. By Transfer from Another College – Students who have attended other colleges must submit official transcripts from each institution to the Office of Admissions in Tandy Hall 115 prior to registration.
- \*\* Veterans applying for benefits must provide a transcript to verify credit for previous education.
5. By Fresh Start – An applicant for admission may seek to enter this institution pursuant to the state’s “academic fresh start” statute, Texas Education Code, §51.927. If the applicant informs the Office of Admissions or the Office of the Registrar in writing of his/her election under the statute, the institution will not consider academic course credits of grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who makes the election to apply under this statute may not receive any course credits for courses taken 10 or more years prior to enrollment. An applicant who has earned a baccalaureate degree under the “academic fresh start” statute, Texas Education Code, §51.927, will be evaluated on the grade point average of the course of work

completed after enrollment under “academic fresh start” and the other criteria stated herein.

6. By Concurrent Enrollment – High school students may, upon recommendation of their high school principal, be permitted to enroll. Concurrently enrolled students receive college credit only. The Request for Concurrent Enrollment Form, which is available at the Office of Admissions, and a copy of the high school transcript with test scores must be submitted to the Office of Admissions in Tandy Hall 115. Students interested in concurrent enrollment, must meet the Texas Success Initiative (TSI) testing requirement. Information on testing requirements is available at the Testing Office in Tandy Hall 216.
7. By Dual Enrollment – High school students may, upon permission of the parent/guardian, be permitted to enroll. Dual enrolled students receive simultaneous high school and college credit. The Dual Enrollment Application and Student Guidelines Form, available at the Office of Admissions, must be submitted to the Office of Admissions in Tandy Hall 115 along with a copy of the high school transcript with test scores. Students interested in dual enrollment, must meet the Texas Success Initiative (TSI) testing requirement. Information on testing requirements is available at the Testing Office in Tandy Hall 216.
8. Adult and Continuing Education – Applicants under this category will not be required to submit academic or residency documentation until they attempt to enroll for academic credit courses.
9. Audit – Offered on a space-available basis for auditing some courses. Students who choose to audit courses must obtain departmental approval and will not receive academic credit for the course. Interested persons should contact the Office of Admissions in Tandy Hall 115.

*Documents received by the Office of Admissions become property of UTB/TSC and cannot be returned to students.*

## Steps for Undergraduate Admission

√ Step 1 – Submit completed Admissions Application to the Office of Admissions in Tandy Hall 115.

√ Step 2 – Submit one of the following academic credentials to the Office of Admissions in Tandy Hall 115.

- Incoming Freshman – High school transcript, GED certificate, or two letters of reference for individual approval.
- Transfer Student – Official college transcripts for institution(s) attended.

√ Step 3 – Submit proof of state residency documents for tuition purposes to the Office of Admissions in Tandy Hall 115.

\*\* All residency documents must include the student’s name and address and must be dated 12 months prior to enrolling. This includes former students who have not attended UTB/TSC for more than a year.

Examples of proof of residency:

- Permanent Texas Driver’s Licence/ID card
- Texas Voter Registration Card
- Texas high school or college transcript
- Property tax statement or receipt
- Lease agreement
- Utility bill
- Employer’s statement (indicating date of employment)
- Canceled check/bank statement

√ Step 4 – Testing

- Freshman – All incoming freshmen who are not exempt must meet

the Texas Success Initiative (TSI) requirement (*see page 17*). Visit the Testing Office in Tandy Hall 216 or call (956) 882-8875 for more information on testing requirements.

- Transfer Student – Submit official placement test scores to the Testing Office in Tandy Hall 216 or call (956) 882-8875 for more information on testing requirements.

#### √ Step 5 – Advising

- Freshman Only – All incoming freshmen must meet with an academic advisor. Visit the Academic Advising Center located in Tandy Hall 214 or call (956) 882-7362 for an appointment.

#### √ Step 6 – Orientation

- Freshman Only – All incoming freshmen must attend orientation. Register for orientation by filling out the Scorpionation form and paying the \$20 fee at the Business Office in Tandy Hall 107.

A \$20 orientation fee will be charged. If a student fails to attend his/her appointed session, a no-show/cancellation fee of \$15 will be charged. For more information regarding orientation, visit the Office of the Dean of Students at the Student Union 1.20 or call (956) 882-5141.

## Program of Study Declaration

### What is a Program of Study Declaration?

A Program of Study Declaration is an official declaration of the program of study (degree plan) a student plans to follow during his/her educational career. To declare a program of study, the student must see an advisor in the Academic Advising Center, Tandy Hall 214.

### What happens when a student declares a program of study?

A Program of Study Declaration is entered for the student and a program of study (degree plan) is given to the student. The program of study contains the required course work a student must complete to obtain a certificate or degree.

### Why is it important to declare a program of study?

The declaration ensures that the student receives a list of required course work to help guide the student semester by semester. It also gives the student the opportunity to be guided by an academic advisor and/or faculty member. The declaration also helps departments to have a better idea of who their students are and can then provide better services such as group advising, course scheduling, and long-term planning to more effectively meet the needs of students.

### What happens if a student is undecided about what he/she wants to study?

The Academic Advising Center encourages students to visit with advisors and indicate they are undecided as to what they want to study. Advisors can guide students as they search to find their career decisions.

### What can students do for themselves when it comes to declaring a program of study?

Students should take a pro-active approach and visit with an advisor as soon as possible.

## Residency Classification for Tuition Purposes

### Lower Division Resident In-District Students

Residents of the taxing district of Texas Southmost College, which includes Brownsville, South Padre Island, Port Isabel, Laguna Vista, Bayview, Los Fresnos, Olmito, Rancho Viejo, and routes 3, 5, 7, 8 and 9 in San Benito pay in-district tuition rates. These are students who pay taxes to Texas

Southmost College.

Individuals who are domiciled in the United States and own property in the district subject to ad valorem taxation, and their dependents, are also charged the in-district rate.

Evidence of ownership of such property shall be a current certificate of payment provided by the Cameron County, Texas, Tax-Assessor Collector. It must be submitted with the application for admission and will be retained. This evidence must be resubmitted annually.

Dependents of property owners must submit a copy of the prior year's income tax form listing the student as a dependent.

An international student, for example a student on a F-1 or J-1 visa, who is not permitted to establish domicile in the United States does not qualify for the in-district tuition rate. This provision only extends to students who enroll in lower division courses and does not extend to upper division or graduate level courses. For more information, contact the Office of Admissions.

### Lower Division Resident Out-Of-District Students

Residents who do not reside in the taxing district described above.

### Lower Division Non-Resident Students

Citizens or permanent residents of the United States not eligible to be classified as residents.

Foreign students are aliens who are not permanent residents of the United States or who have not been permitted by Congress to adopt the United States as domicile while in this country. An individual classified as a non-resident or foreign student may qualify, under exceptions specified in the statutes and rules, for resident tuition rates and other charges while continuing to be classified as a non-resident or foreign student.

Students entering for the first time, or students reentering after an absence of more than one semester, should carefully read the rules governing residence in order to be prepared to pay the required tuition fee. Information and advice regarding residency status is available from the Office of Admissions.

### Upper Division, UTB Undergraduate and Graduate Resident Students

Students under 18 whose families have lived in Texas for 12 months prior to registration, or students 18 or over who have lived in Texas for 12 months prior to registration. Residents are 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 United States and who have otherwise met the state requirements for establishing residency for tuition purposes.

### Upper Division, UTB Undergraduate and Graduate Non-Resident Students

Citizens, national or permanent residents of the United States or non-residents 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 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 gradually require a minimum of 12 months residence in Texas prior to enrollment.

### Upper Division, UTB Undergraduate and Graduate Foreign Students

Non-residents who are not permanent residents of the United States or have not been permitted by Congress to adopt the United States as their domicile. An individual classified as a non-resident 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 non-resident

or a foreign student. Information on residency, reclassification, tuition exceptions and waivers is available at the Office of Admissions and/or the Office of Student Financial Aid Assistance.

(Tuition and fees are subject to change as laws and conditions may necessitate.)

## **Student Responsibilities**

### **Oath of Residency**

Section 54.0521, Texas Education Code, requires an oath of residency. The student is responsible for providing proof of residency documentation as required by the public institution of higher education. If there is any question as to right to classification as a resident of Texas, it is the student's obligation, prior to or at the time of enrollment, to raise the question with the administrative officials of the institution in which he or she is enrolling for official determination. Students classified as Texas residents must affirm the correctness of that classification as part of the admission procedure. If the student's classification as a resident becomes inappropriate for any reason, it is the responsibility of the student to notify the proper administrative officials at the institution. Failure to notify the institution constitutes a violation of the oath of residency and may result in disciplinary action and/or other penalties.

### **Special Notice for Non-Resident Students**

Section 54.052, *Texas Education Code*, states that "an individual shall be classified as a Texas Resident until the individual establishes a residence outside this state if the individual resided with the individual's parent, guardian, or conservator while attending a public or private high school in this state and:

- graduated from a public or private high school or received the equivalent of a high school diploma (GED) in the State of Texas;
- resided in the State of Texas for at least three years as of the date the person graduated from high school or received the equivalent of a high school diploma;
- registers as an entering student, and has NOT received academic credit nor participated in the Dual/Concurrent Enrollment Program in an institution of higher education earlier than the semester of Fall 2001; and
- provides to the institution an affidavit stating that the individual will file an application to become a permanent resident at the earliest opportunity the individual is eligible to do so.

### **Reclassification as a Non-resident**

People who have been classified as residents of Texas will be reclassified as non-resident students whenever they report, or there is found to exist, circumstances indicating a change in legal residence to another state. If students who have been classified as residents of Texas are found to have been erroneously classified, those students will be classified as non-residents and will be required to pay the difference between resident and non-resident fees for those semesters in which they were erroneously classified.

### **Reclassification as a Resident**

People classified as non-residents of Texas upon first enrollment are presumed to be non-residents while they continue as students. After residing in Texas for at least 12 months, a non-resident student may be reclassified as a resident student as provided in the rules. Tuition as a resident of Texas will be charged at any subsequent registration as long as he continues to maintain his legal residence in Texas. Supporting documentation for reclassification must be submitted to the Office of Admissions prior to the official record date.

## **International Students Undergraduate Admission Requirements**

All international students must comply with all the previously mentioned admission requirements.

1. Additionally, all students must request a form I-20 AB at the Office of Admissions (Tandy Hall 115) in order to obtain a student visa at the nearest U.S. Consulate or Embassy. Otherwise, students must present immigration documentation including INS work permit, copy of application for residency, passport with any type of visa or Crossing Card prior to the first day of class.
2. All international students must maintain approved comprehensive medical insurance while enrolled. The cost varies and is in the amount of the premium approved for the University of Texas System health insurance plan. This cost will be automatically added to the tuition and fees at every registration. This charge may not be paid in installments. Mexican students are exempt from this requirement except those on J-1 visa.
3. A waiver from this fee may be obtained by providing proof of an acceptable alternate insurance to the Student Health Services Director (Cortez Hall 228). Proof of insurance must include, identification card with insurer's name, policy coverage showing effective and expiration dates, including coverage of at least \$100,000.00 in medical benefits. This 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 108) for a \$35 annual fee. This waiver must be renewed every year.
4. U.S. residents or citizens who wish to purchase health insurance may contact the Student Health Services Director at Cortez Hall 228.

For admissions procedures and required tests for Graduate Studies consult the office of Office of Graduate Studies at Champion Hall, 1<sup>st</sup> Floor.

## **Readmission of Former Students**

Former students of UTB or TSC are required to file a readmission application if they have not been enrolled during the previous semester.

Former students must submit transcripts from all colleges attended since the last enrollment. Students who have earned less than a 2.00 (4.00=A) average over all work completed since attending or who left their last institution on probation may be readmitted on probation. Students who are not eligible to return immediately to any former institution(s) must meet with the Admissions Committee. Appointments may be scheduled at the Academic Advising Center.

## **Admission for Non-Degree Students**

Students who do not intend to seek a degree or complete a program are asked to contact the Office of Admissions about a special admissions policy for undergraduate or graduate courses.

## **Transfer of Credit Policy for Transient Students**

Transient students attending UTB/TSC for summer classes need to visit with an academic advisor for review/evaluation of transcripts. Visit the Academic Advising Center located in Tandy Hall 214.

## Transfer of Credit Policy

Regular undergraduate academic credit may be transferred from another institution if:

- the credit was earned at an accredited institution;
- the nature, content, and level of the courses for which credit is sought are comparable to courses offered by UTB and TSC; and
- the courses for which credit is sought are appropriate and applicable to programs offered by UTB and TSC.

Transfer credits accepted for admission purposes may not be applicable for degree purposes. Catalog descriptions and other materials from the institution at which the credit was earned will be used to determine if transfer credit will be applicable for degree purposes. In the case of post-secondary work from foreign institutions, The Country Index, published by the International Education Research Foundation, Inc., will be used to determine if transfer credit will be applicable for admissions or degree purposes. There is no limit on the number of hours credited on acceptable transfer courses.

Courses that do not transfer may include:

1. Pre-college courses such as remedial reading, developmental reading, speed reading, remedial science and orientation.
2. Drill or skill courses such as filing methods and vocational or technical training courses such as shop courses, not part of the AAS or Certificate programs. (There will be exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences and the Bachelor of Applied Technology degrees.)
4. Doctrinal courses in religion. Courses in religion of a historical or literary nature (but non-doctrinal) are transferable up to a maximum of 12 semester hours of lower-division credit.

No credit will normally be given for “life experience.” There will be exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences degree and Bachelor of Applied Technology degrees when this credit has been validated and placed on the transcript by an accredited community college or technical institution as integral part of an AAS degree or Certificate Program or through the course EXPL 2101 as part of a prerequisite toward an A.A.S. degree or Certificate program at UTB/TSC.

Semester credit hour blocks of occupational/technical or workforce programs that are used toward the BAT or BAAS program tracks.

American Council on Education (ACE) Guides determine the Evaluation of Educational Experiences in the Armed Services. Former members of the Armed Services will request transcripts of their military education and training from the College of their Service. The Veterans’ Affairs Office will assist students in this process. Departments and/or the Academic Advising Center can verify the listed course equivalents in the *Guides to Evaluation of Educational Experiences in the Armed Forces*.

## Recommended College Preparatory Program for High School Students

### Core Curriculum: College Preparation

#### Core Curriculum Credits Courses

English Language Arts	4	English I-IV
Mathematics	2	Algebra I and Geometry
Science	2	Courses to be selected from State Board of Education-approved courses, excluding applied and introductory courses. Appropriate

		courses include Physical Science, Biology I and II, Chemistry I and II, Physics I and II
Social Studies	4	United States History (1) United States Government (0.5) World History Studies (1) World Geography (1) Economics (0.5)
Foreign Language	3	Levels I-III proficiency of the same language
Health	0.5	0.5 credit minimum
Fine Arts	0.5	0.5 credit minimum
Physical Education	0.5	0.5 credits
Computer Science	0-1	Demonstrated proficiency at Level I
<b>Total</b>	<b>18.5</b>	

### Additional Course Work Required for College Preparation Program

19 TAC Chapter 75 Courses College Preparation Program

English/Language Arts		College Board Advanced Placement English Literature and Literature and Composition could be substituted for English IV
Mathematics		2 additional credits including Algebra II and Precalculus (or Trigonometry and either Elementary Analysis or Analytic Geometry).
Science		One additional credit from Physical Science, Biology I and II, Chemistry I and II, or Physics I and II.
Fine Arts		1/2 credits
Specialty		N/A
Electives		2.5
<b>Total</b>		<b>24.5</b>

### Additional Course Work Required for the Technical Preparation (Tech-Prep) Program

19 TAC Chapter 75 Courses Tech-Prep Preparation Program

English/Language Arts		Substitutions for English IV as required for a specific Tech-Prep program (e.g. Research / Technical Writing, Business Communications, Introduction to Speech Communications, Public Speaking)
Mathematics		A minimum of one additional credit as required by a specific Tech-Prep program, or Algebra II, Precalculus, Trigonometry, Elementary Analysis, Analytic Geometry, or advanced Mathematics for Business. An additional (4th) math credit may be required.
Science		A minimum of one additional credit may be required for a specific Tech-Prep program.
Fine Arts		As appropriate.
Specialty		A specified coherent sequence of technology courses required for a specific Tech-Prep program.
Electives		As appropriate.
<b>Total</b>		<b>24.5</b>

# Resolution of Transfer Disputes for Lower Division Courses

The following procedures (as outlined in the Texas Higher Education Coordinating Board rule Chapter 4, Subchapter B, §4.27) shall be followed by public institutions of higher education in resolving disputes involving transfer of TSC lower-division courses.

- If a public institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and the other institution that transfer of the course credit is denied. A receiving institution shall also provide written notice of the reasons for denying credit for a particular course or set of courses at the request of the sending institution.
- A student who receives notice as specified above may dispute the denial of credit by contacting a designated official at either the sending or receiving institution.
- The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with the Texas Higher Education Coordinating Board rules and/or guidelines.
- If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of the denial, the institution that denies the course credit for transfer shall notify the Commissioner of the Texas Higher Education Coordinating Board of its denial and the reasons for the denial.

The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

Questions concerning the evaluation of transfer credit should be referred to the Office of Admissions in Tandy Hall 115.

UTB/TSC students who have difficulty having the UTB/TSC credit accepted at other Texas public institutions should contact the Office of the Registrar at UTB/TSC for initiation of the transfer dispute resolution process.

## Official Procedures

### Change of Address

A student's current mailing and permanent address must be correctly listed on records. Any change in the mailing address should be promptly reported to the Office of Admissions in Tandy Hall 115. Students will not be excused from penalties on grounds of not receiving communications if the new address was not reported. Students may not claim indulgence on the plea of having moved lodgings and therefore not having received the communication.

### Change of Name

Records of students' names are based upon the application for admission. Subsequent changes of name should be promptly reported to the Office of Admissions in Tandy Hall 115.

Students wishing to change their name on their permanent academic records must present the appropriate documentation. To correct spelling or proper sequence of a name, students must present copies of their birth certificate. To change to a new legal name, students must present the proper name change form and a copy of the signed court order showing

the authorized new legal name. To assume a husband's name, students must present the proper name change form and a copy of the marriage certificate. Female students who wish to discontinue the use of a married name and resume the use of a maiden name, or another name, must present a divorce decree or signed court order showing court restoration of the maiden, or other name. Former students (not currently enrolled) may change a legal name to a new legal name by following the above procedure.

### Copies

Students may have copies of their educational records. These copies will be made at the student's expense at rates authorized in the Texas Public Information Act except that official transcripts will be \$5.00. Official transcript requests cannot be processed if the student has any outstanding institutional debts or if the student is not in compliance with the federal financial aid requirements or other institutional requirements.

## Dual (High School) Enrollment

A student can receive college credit for coursework taken in high school while enrolled in the Dual Enrollment Program. A student enrolled in Dual Enrollment in high school receives credit for the high school courses and for the college courses.

## Concurrent Enrollment

A student can enroll in a college course, and receive college credit, while in high school as long as the student meets college admissions and college ready requirement.

# NEW STUDENT RELATIONS

*Tandy Hall 116* (956) 882-8860 or (877) UTB-TSCI

The mission of the Office of New Student Relations is to provide quality services, promote opportunities available through programs of study, and access to information and assistance to prospective students during the enrollment process. The department coordinates campus visits and group tours for prospective students and their families. For more information or to schedule a campus tour, contact this office.

# OFFICE OF THE REGISTRAR

*Tandy Hall 105* (956) 882-8254

## Registration

To attend classes, students must first register or enroll for the courses they wish to attend and pay all appropriate tuition and fees. Students must complete all admission procedures prior to registration. Information on registration dates and times is listed in the Academic Calendar and the printed course schedule for each semester. Information on registration procedures and deadlines may be obtained at either the Academic Advising Center (Tandy Hall 214, 882-7362), the Go Center/Info Shop (Tandy Hall Lobby, 882-7611), or the Office of the Registrar (Tandy Hall 105, 882-8254).

## Registration Requirements

1. Clear all admissions requirements.
2. Clear all outstanding institutional debts.

3. Clear all outstanding institutional holds on academic records.
4. Complete testing requirements.
5. Receive advising. New students are required to receive academic advising. For more information, visit the Academic Advising Center in Tandy Hall 214 or call 882-7362.
6. Attend Orientation. Incoming freshmen are required to attend an orientation session. Visit the Office of the Dean of Students at the Student Union 1.20 or call 882-5141.

## Registration Methods

Students may register for classes through Scorpion Online ([www.utb.edu](http://www.utb.edu)) or by using the STAR Telephone System (982-5800). Students encountering problems with registration are encouraged to contact either the Academic Advising Center (Tandy Hall 214, 882-7362), the Go Center/Info Shop (Tandy Hall Lobby, 882-7611), or the Office of the Registrar (Tandy Hall 105, 882-8254).

## Registration Blocks

Block Type	Contact	Phone	Location
Admissions	Admissions	882-8295	Tandy 115
Financial Holds/Bars	Business Office	882-8202	Tandy 107
Foreign Student	Counseling Center	882-8292	Tandy 205
Graduate Overload	Graduate Studies	882-6552	Champion
Graduate Status	Graduate Studies	882-6552	Champion
Library Fines	Library	882-8221	Library
Placement Test	Advising Center	882-7362	Tandy 214
Student Petition	Department Office	Specific classes listed	
Suspension	Advising Center	882-8292	Tandy 205
Undergrad. Overload	Dean of School/College: See appropriate Dean		

Examples of outstanding financial holds and requirements that will prevent a student from registering for a semester:

- Admissions Records Pending
- Balance on Emergency Loan
- Balance on Financial Aid Repayment
- Balance on Installment Plan
- Balance on Student Account
- Exit Loan Interview
- Library Fines
- Parking Citation

For all other registration block questions, contact the Academic Advising Center at Tandy Hall 214, or call 882-7362.

## Registration for Students with Disabilities

Students with disabilities may request assistance through Disability Services. Students who need help with registration should contact the office during early registration. Students who need special services throughout the semester should inform Disability Services several weeks before the semester. For more information, contact Disability Services, located in the Camille Lightner Center at 882-7374.

## Adding a Class

A student may add a course during the Add and Drop period as indicated on the Academic Calendar. After the Add and Drop period, a student

may add a course for academic reasons only with the permission of the appropriate Dean. The determination of the Dean is final.

Students may add a class through Scorpion Online ([www.utb.edu](http://www.utb.edu)), the Telephone Registration System (982-5800), or in person at the Office of the Registrar in Tandy Hall 105. The student is responsible for ensuring that their request is processed by the specified deadline.

## Dropping a Class

A student may drop a course during the Add and Drop period as indicated on the Academic Calendar. After the Add and Drop period, a student may drop a course according to the deadlines indicated on the Academic Calendar (see chart below for additional information). A student's financial assistance may be affected when dropping a class. Students should be advised that the Texas Legislature has capped the number of attempted development hours the state will fund at 27 and the number of undergraduate credit hours at 170. Courses dropped after the Official Record Date (ORD) count against these totals.

Class is Dropped...	Refund	Grade
During the Add and Drop period yet still enrolled in at least 1 credit hour	Full Refund	No grade assigned
After the Add and Drop period but prior to the Official Record Date yet still enrolled in at least 1 credit hour	Full Refund	No grade assigned
After Official Record Date but prior to the Deadline to Withdraw yet still enrolled in at least 1 credit hour	No Refund	Grade "W" assigned

Students may drop a class through Scorpion Online ([www.utb.edu](http://www.utb.edu)), the STAR Telephone System (982-5800), or in person at the Office of the Registrar in Tandy Hall 105. The Student is responsible for ensuring that their request is processed by the specified deadline.

## Withdrawing from all Classes

Prior to the official record date, students may completely withdraw from all classes without a recorded grade. After the official date, students may withdraw from all classes and receive a "W" on their permanent records. The deadline to withdraw with a grade of a "W" is specified in the Academic Calendar for each enrollment period. Students who do not withdraw before the deadline may not be given a grade of "W" on the final grade sheet.

At the instructor's discretion, and consistent with the policy stated on the course syllabus, an instructor may drop a student from class for non-attendance. An instructor-initiated drop will result in a "W" or an "F" on the student's permanent record.

Withdrawing from all Classes...	Grade
During the Add and Drop period	No grade assigned
After the Add and Drop period but prior to the Official Record Date	No grade assigned
After Official Record Date but prior to the Deadline to Withdraw	Grade of "W" assigned

Students may withdraw from all classes through Scorpion Online ([www.utb.edu](http://www.utb.edu)), the STAR Telephone System (982-5800), or in person at the Office of the Registrar in Tandy Hall 105. The student is responsible for ensuring that their request is processed by the specified deadline.

## Unofficial Transcripts

An unofficial transcript lists all of a student's coursework but does not include the institution's name, seal or signature of the Registrar. Unofficial transcripts may be issued free of charge to students who have an institutional "hold" placed on their records. Unofficial transcripts may not be mailed out or faxed. Unofficial transcripts will be distributed only to the student whose name appears on the transcript. If the student is not present at the time of the request, he/she must submit a written authorization in order for a third party to pick up the unofficial transcript. This third party must present picture identification and a written authorization (from the student whose name appears on the unofficial transcript) at the Office of the Registrar before the unofficial transcript is released.

Note: Current students may print their unofficial transcripts by using Scorpion Online ([www.utb.edu](http://www.utb.edu)).

## Official Transcripts

An official transcript is a comprehensive record of the student's academic progress. It includes transferred courses, credit earned by exam, degrees awarded, and any test scores required by the state. An official transcript lists the name of the institution, the official institution seals and the signature of the Registrar. There is a \$5.00 fee for each transcript requested.

Official transcript requests cannot be processed if the student has any outstanding institutional debts or if the student is not in compliance with federal financial aid requirements or other institutional requirements. Students may request official transcripts in person at the Office of the Registrar in Tandy Hall 105, by mail, by fax, or by third party request.

## Graduation Check

Graduation check is a degree audit that is performed at the time the student is ready to graduate to verify that all course requirements in a program of study (degree plan) have been met and the student is eligible for a certificate or degree.

Students should seek a degree audit of their programs of study one semester prior to graduation check to avoid graduation conflicts. An academic advisor can assist the student with a degree audit.

## Graduation Application

Degrees are not awarded automatically upon completion of scholastic requirements. To be considered as a candidate for a degree, a student must submit a complete graduation application packet for a degree to the Office of the Registrar by the appropriate deadline. Graduation application deadlines are: September 1 for December graduation, February 1 for May graduation and April 1 for August graduation.

Students who graduate with their first baccalaureate degree may be eligible for a tuition rebate. See "Tuition Rebate Program" for more information about this opportunity.

## Verification of Enrollment

Verification of Enrollment is the process where the Office of the Registrar provides proof that a student is enrolled in credit classes for a particular term. This service can be requested, in writing, for any previous or currently enrolled semester that a student needs to show enrollment. For current-term verification, enrollment cannot be verified until after the official record date as indicated on the Academic Calendar. Verification of Enrollment

may be released to other agencies as stipulated by the Family Educational Rights and Privacy Act. Requests for Verification of Enrollment responses in Spanish must be indicated on the form.

Note: Verification of Enrollment for student loan deferment purposes should be requested at the Office of Student Financial Assistance located in Tandy Hall 206.

*Documents received by the Office of the Registrar become property of UTB/TSC and cannot be returned to students.*

## ACADEMIC ADVISING

Tandy Hall 214

882-7362

## Academic Advising Center

The Academic Advising Center provides academic advising to students and assists them in making decisions about their educational and career goals. In partnership, faculty and staff in the Academic Advising Center and throughout the various university colleges and schools are available to assist students who have chosen a Program of Study certificate program, associate degree program, or bachelor's degree program. Academic Advising Center staff will assist students who are undecided about their majors.

Academic advising is an ongoing planning process for students. Beginning when a student is an incoming freshman, academic advising allows a student, along with faculty and staff advisors, to explore and develop a student's career interests and Program of Study. Through the academic advising relationship established between the student and the advisor, the student has the opportunity to:

- learn about academic policies and procedures, such as
  - assessment and placement,
  - developmental course sequence,
  - Texas Success Initiative (TSI),
  - advising contacts with faculty and staff advisors, and
  - graduation requirements
- clarify career interests, goals and opportunities
- learn about educational opportunities and degree requirements, such as
  - Certificate Programs (1 year),
  - Associate Degree Programs (2 years),
  - Bachelor's Degree Programs (4 years),
  - Major and Minor options,
  - Teaching Certification Requirements,
  - Professional School Requirements (Pre-Law, Pre-Med, etc.),
  - Transfer Requirements,
  - Graduate School Requirements, and
- increase her/his involvement, persistence, and retention toward the successful completion of an academic Program of Study.

Students are responsible for:

- seeking appropriate academic advising,
- becoming familiar with Program of Study requirements, and
- enrolling in appropriate classes that will ensure timely and successful progress toward completion of her/his Program of Study.

By seeking academic advising more frequently with academic advisors, students receive current academic guidance that ensures a smooth and timely completion of academic goals.



# FINANCIAL AID

Tandy Hall 206

882-8277

## Office of Student Financial Assistance

The Student Financial Assistance programs provide financial assistance to eligible students who, without such aid, would be unable to attend college. Financial assistance for eligible students is available in the form of grants, loans, college work-study, veterans' benefits, and scholarships.

Students are encouraged and in some cases required, to complete the Free Application for Federal Student Aid (FAFSA) if they wish to be considered for some of the scholarships offered at UTB/TSC. All students are strongly encouraged to complete the federal financial aid application process and to check with the Office of Student Financial Assistance periodically regarding the availability of scholarships.

Students subject to Selective Service registration are required to be registered or prove exemption from selective service registration in order to be eligible to receive federal or state financial assistance.

Students are required to maintain certain scholastic standards in order to continue receiving certain financial aid. See next section for more information.

**Application Awards:** The Free Application for Federal Student Assistance (FAFSA) is used to consider students for all financial assistance. Eligible students will be offered grants and College Work Study (if CWS funds are available). If an award is not sufficient to cover the student's educational expenses, a loan will be considered. Students must make arrangements to get loan counseling at the Office of Student Financial Assistance before a loan can be processed. Additional paperwork and specific deadlines apply to the loan process. Contact the Office of Student Financial Assistance for this information.

**Distribution of Funds:** Typically, financial assistance funds will be applied to the student's account to cover tuition and fees. The balance of the award for that period is disbursed by check and is mailed to the student or deposited to the UTB/TSC Sting Card on or about the first class day. Eligible students who register late will receive the balance of their award after the official record date. College Work Study funds are paid on a bi-weekly basis as they are earned. Loan proceeds for first-time borrowers will arrive 30 days after the first class day and will also be sent to the student by mail.

**Competitive Scholarships:** Academic scholarships shall be awarded on a competitive basis based on demonstrated academic achievement, or potential, as evidenced by scores on standardized tests, earned grade point average or other relevant academic criteria. Scholarships are awarded to promote academic excellence.

## 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, 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 date the student initiates the withdrawal or the date the institution determines the student officially or unofficially withdrew (stopped out) is used for calculating the percentage used in the formula for Return of Title

IV funds. 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.

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.

Note: For additional information on withdrawals, Return of Title IV, and sample calculations, see a Financial Aid Advisor.

### All "F" grades on Transcript

If the student fails to earn a passing grade in at least one class during the semester (received all F's on transcript), 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% in time for that semester, the student may owe funds to the Title IV financial aid programs and/or the institution. Students have 10 days from the date the institution notifies them to clarify their enrollment status. 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 45<sup>th</sup> 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
- 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.

### 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. Federal SEOG Grant
  6. 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 30 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 30 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.

**Note: Students completely withdrawing after the Official Record Date (ORD) should also refer to the Federal Financial Aid Satisfactory Academic Progress Standards.**

## Federal Financial Aid Satisfactory Academic Progress Standards (Undergraduates)

### Financial Aid Satisfactory Progress Policy

Financial aid satisfactory progress standards will be evaluated at the end of the Fall, Spring and Summer Semesters (May, Summer 1 and Summer 2 performance will be measured at the conclusion of Summer 2). Students failing either the quantitative or qualitative standard measures are subject to the financial aid suspension cycle.

### Financial Aid Standards

#### Quantitative Measure

The quantitative measure to receive student aid consideration evaluates the ratio of cumulative hours attempted vs. earned. Attempted hours are those credits for which a student is registered for on the official record date of each semester or session. Earned hours are those credits for which a student receives a passing grade (according to Grade Standards published in the Undergraduate/Graduate Catalogs).

Grades of A, B, C, D, F, W, WC, WF, WP, WM, G, I, P, CR, NR, S, U, DF, WP, and DR will be considered for the quantitative measure. Included in this quantitative measure is the provision regarding **maximum allowable hours**. All periods of enrollment must be considered, even those for which the student did not receive financial aid as well as hours transferred in from another school. If undergraduate cumulative hours earned exceed 185 credits, or if cumulative undergraduate hours attempted exceed 231 credits, a student may no longer receive any form of financial aid for undergraduate studies. If cumulative graduate hours earned exceed 54 credits, a student may no longer receive any form of financial aid for graduate studies.

### Cumulative Hours Attempted

Undergraduate Students  
Graduate Students

### Must Successfully Complete

70% of credit hours attempted  
90% of credit hours attempted

### Qualitative Measure

The qualitative measure to receive student aid consideration is the policy defined by the Registrar for determining scholastic standing (GPA) and is published as Standards of Work in the Undergraduate/Graduate Catalogs.

Cumulative Hours Attempted	Minimum Cumulative GPA	Minimum Last Term GPA
1-30 undergraduate credit hours	1.60	2.00
31-59 undergraduate credit hours	1.75	2.00
60 or more undergraduate credit hours	2.00	2.00
Graduate credit hours	3.00	

## Financial Aid Suspension Cycle

### Financial Aid Warning / Probation

If at the end of the initial evaluation the student is not meeting financial aid satisfactory progress standards, the student will enter into a Warning status. If at the end of the second evaluation the student has not regained financial aid satisfactory progress, the student will proceed into a Probation status. During the warning and 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.

### Financial Aid Suspension

If at the end of the third evaluation period, the student has not regained satisfactory academic progress, the student will be placed on financial aid Suspension and will be ineligible for financial aid until both the quantitative and qualitative standards are satisfied. Financial aid will be suspended until the student successfully regains quantitative (70% or 90%) and qualitative (GPA) standards. Additionally, the student may not exceed the maximum allowable hours. The student is responsible for paying tuition and fees (and will not be reimbursed) during the period(s) of financial aid suspension.

### Financial Aid Suspension Appeals

To appeal suspension from financial aid, students must submit to the Financial Aid Office, a written appeal (with supporting documentation) detailing unusual or mitigating circumstances that prevented the student from meeting financial aid satisfactory progress standards. Mitigating circumstances may include: death of a close family member, personal injury or illness or other extraordinary circumstances. A decision will be rendered by the Financial Aid Office within two weeks and the decision 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 As-**

### **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.

## **TESTING OFFICE**

Tandy Hall 216

882-8875

### **Texas Success Initiative (TSI) Program**

The Texas Success Initiative (TSI) Program is required by state law to ensure that students enrolled in Texas public colleges and universities possess the academic skills needed to perform effectively in college-level coursework. TSI includes a testing component designed to identify and provide information about your reading, writing, and math skills. For more information, visit [www.theccb.state.tx.us](http://www.theccb.state.tx.us)

#### **TSI Requirements**

Effective Fall 2003 the Texas Higher Education Coordinating Board (THECB) implemented the Texas Success Initiative (TSI) for Texas public institutions of higher education, a program to replace the former TASP program. It is the intent of the Texas Higher Education Coordinating Board that Texas public institutions of higher education use the flexibility and responsibility of TSI rules to improve individualized programs to ensure the success of students in higher education. The University of Texas at Brownsville and Texas Southmost College makes every effort to ensure that students have equal opportunity for success in their academic coursework. In order to facilitate their college readiness for such coursework, the Testing Office assesses students with a TSI required assessment instrument and places them based on their assessment results.

#### **TSI Assessment Instruments**

TSI approved test instruments are ACCUPLACER, ASSET/withWriting, COMPASS and Texas Higher Education Assessment (THEA), formerly known as TASP. The test of choice at UTB/TSC is either Quick THEA, COMPASS/eWrite, or ASSET/withWriting.

### **Exemptions/Waivers**

1. For a period of five years from the date of assessment, a student who is tested and performs at or above the following standards is exempt: (Scores for exemption must be attained in one sitting)
  - a. ACT: English = 19, Math = 19, Composite = 23.
  - b. SAT: Verbal = 500, Math = 500, Combined Total = 1070.
2. For a period of three years from the date of assessment, a student who is tested and performs on the Texas Assessment of Academic Skills (TAAS) with minimum scaled scores of 1770 (Writing), 89 (TLI-Reading), and 86 (TLI-Math) is exempt for TSI purposes.
3. For a period of three years from the date of assessment, a student who is tested and performs on the Eleventh grade exit-level Texas Assessment of Knowledge and Skills (TAKS) with a minimum scale score of 2200 on the math section and a minimum scale score of 2200 on the English Language Arts (ELA) section with a writing subsection score of at least 3, is exempt for TSI purposes.
4. A student that has graduated with an associate or baccalaureate degree from a regionally accredited institution or from a recognized international institution and submits appropriate documentation of degree and official transcripts is exempt.
5. A student who transfers from a regionally accredited private or independent institution of higher education or a regionally accredited out-of-state institution of higher education and who has satisfactorily completed at least 3 hours of college-level English, math, or a reading-intense course with a grade of "C" or better is exempt in that area.
6. A student who has previously attended any accredited institution of higher education and has been determined to have met readiness standards by that institution is exempt. An official transcript must be submitted.
7. A student who is enrolled in a one year or less certificate program will be *waived* of TSI requirements.
8. A student who is serving on active duty as a member of the armed forces of the United States, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States and has been serving for at least three years preceding enrollment is exempt.
9. A student who on or after August 1, 1990, was honorably discharged, retired, or released from active duty as a member of the armed forces of the United States or the Texas National Guard or service as a member of a reserve component of the armed forces of the United States is exempt.
10. A non-degree-seeking or non-certificate-seeking student is *waived* from TSI requirements.

#### **Minimum Passing TSI Standards**

Students who meet the TSI State standard for reading, writing, and math will be able to enroll into college level course(s). If the minimum passing standard is not met for reading, writing, and math the student will enroll in the appropriate developmental course(s).

<i>Instrument</i>	<i>Writing</i>	<i>Reading</i>	<i>Math</i>
THEA/Quick THEA	220	230	230
ASSET/withWriting	40w/WS=5 or WS=6 or higher	41	Ele Alg = 38
COMPASS	59w/WS=5 or WS=6 or higher	81	Alg = 39

## TSI Retest Requirements

In compliance with Section 4.59 (c), a student is required to retake an assessment instrument for TSI purposes after successfully completing all developmental education if the student did not initially perform at or above the following scores:

<i>Instrument</i>	<i>Writing</i>	<i>Reading</i>	<i>Math</i>
THEA/Quick THEA	205	201	206
ASSET/with Writing		35 (objective)	35
Ele Alg 30 Alg 23	COMPASS	44 (objective)	64

All TSI rules are subject to change. For the latest TSI information visit the Testing Office Tandy Hall 216 or call (956) 882-8875.

## Assessment Test

The assessment program is designed to provide effective educational services by identifying students' strengths and weaknesses in basic skills. The assessment information is used to provide advisement and placement in courses which will best help students improve skills in English, reading, and mathematics. Assessment and certain minimal scores may also be criteria for selection into various University programs.

Appropriate reading and English skills are a prerequisite for entering academic courses with the exception of mathematics, Spanish, English as a Second Language, art, music, and speech. Appropriate mathematics skills are a prerequisite for entering academic courses in mathematics. Passing scores in the assessment battery are reviewed periodically and are subject to change.

Assessment is mandatory for all new full- and part-time students except:

- students who have passed all three sections of the THEA test, or a test for Texas Success Initiative (TSI) purposes,
- students enrolling in courses for self-enrichment (maximum 9 hours),
- students having a bachelor's degree, or
- students enrolling only in Continuing Education courses.

Students with disabilities who will require accommodations to take the Assessment test must present proof of disability to the Testing Office in a timely manner.

## Credit by Examination

Students may earn course credit by demonstrating their skills through testing. Some students may have taken college level courses while in high school or may have mastered subject areas in nontraditional ways. In such cases, credit is granted when learning is demonstrated in various standardized examinations.

Credit for specific courses is awarded on the basis of testing programs that The College Board have developed and validated and for which norms have been established. UTB/TSC grants credit for particular Advanced Placement (AP) tests and particular College Level Examination Program (CLEP) tests. Contact the Testing Office to obtain a copy of the current Credit By Examination brochure which contains a listing of tests accepted, minimum required scores and course equivalents.

Credit by examination policies are as follows.

1. All former and current students are eligible for credit. New students may be eligible for credit provided they are enrolled for the next regular enrollment period (semester or summer session) and are not, at that time, concurrently enrolled in high school.

2. Credit by examination may not be:

- earned for any course in which a student is currently enrolled.
- earned in any course for which a student previously has received a grade either in this or any other university.
- earned in any subject in which the student already has credit for the same or a more advanced course in the subject.
- earned in any course which has prerequisites unless the prerequisites have been fulfilled prior to the submission of examination scores. This does not preclude the possibility of meeting a sophomore standing prerequisite either by examination or by a combination of course work and examination.
- used to reduce the general degree requirement to have completed in residence of at least 24 semester credit hours, including at least 12 of the last 18.

In case of doubt regarding eligibility for credit by examination, the appropriate Department Chair and Dean will make the final decision. Examinations may not be repeated within one year.

Specific information about any of the testing programs may be obtained at the Testing Office at Tandy Hall 216.

## Developmental Course Placement and Sequence

A student who has tested (THEA, Compass E-Write, etc.) and scores below minimum college ready test scores requires academic advising for course placement and sequencing.

# STUDENT FINANCIAL SERVICES

# TUITION AND FEES

## Financial Responsibility

### Returning Students

Prior to registering for a semester, 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 Fines

### For All Students

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 has been selected by the student. All tuition and fees payments must be received at the Business Office before the payment deadline date.

All students receiving Federal Title IV grant or loan assistance will have all tuition and fees charged against the award. Any remaining balance will be disbursed to the student in the form of a check which will be mailed to the student. Initial balances are generally mailed to the student on or about the first day of class.

It is the student's responsibility to ensure that their financial assistance has been awarded.

- \* If a student account has a balance of \$75 or more resulting from the original registration, the student's registration will be voided. Students who add classes and do not pay by the add/drop payment deadline will not be dropped from their classes. Students will be officially enrolled in the classes and will receive a grade. It is the student's responsibility and obligation to pay for the tuition and fees for the added class.

### Types of Payments Accepted at the Business Office

- Cash
- Personal Checks (include ID)
- Money Order (include ID)
- VISA (include ID)
- MasterCard (include ID)
- Sting Card

For your convenience, a check payment drop box is located next to the Business Office at Tandy Hall 107. All payments must be received before payment deadline dates. Payments must be for the full amount of tuition and fees. Student identification numbers should be indicated on checks. Check payments may be mailed and must be received by the Business Office on or before the payment deadline date.

### Checks should be mailed to:

The University of Texas at Brownsville and Texas Southmost College  
Business Office • P.O. Box 3640 • Brownsville, TX 78520-3640

When the bank for whatever reason returns a check, a \$25.00 nonrefundable return check service charge is assessed. The student is given 10 days from the date of notice to make full payment by cash, money order, or cashier's check. Once the student has had returned checks, then for future payments we reserve the right not to accept any 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 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 number, Expiration date
- Printed name of credit card holder and signature of credit card holder
- Students' telephone number.

### Assessment of Tuition and Fees

Tuition and fees are subject to change by the Texas Legislature and become effective in accordance with state statute. The Texas Legislature does not set the specific amount for any particular student fee. The student fees assessed are authorized by state statute; however, the specific fee amounts and the determination to increase fees are made by the University administration and The University of Texas System Board of Regents.

## Classification of Students for Assessing of Tuition Rates

- Students enrolled in TSC courses (i.e., course numbers beginning with either 0, 1 or 2) will be assessed TSC Lower Division tuition rates. The residency status of a student determines the rate that is charged for tuition. See the tuition and fee tables for additional information.
- Students enrolled in UTB courses (i.e., course numbers beginning with either 3 or 4) will be assessed UTB Upper Division tuition rates. The residency status of a student determines the rate that is charged for tuition. See the tuition and fee tables for additional information.
- Students enrolled in University Plan courses (i.e., course abbreviation name ends with a "U") will be assessed UTB Upper Division tuition rates. The residency status of a student determines the rate that is charged for tuition. See the tuition and fee tables for additional information.
- Students enrolled in Graduate courses (i.e., course numbers start with 5 or above) will be assessed Graduate tuition rates. The residency status of a student determines the rate that is charged for tuition. See the tuition and fee tables for additional information.
- Students may take both TSC courses and UTB courses and Graduate courses (concurrently enrolled student). In this case, total tuition and fees will be determined by state regulations applying to concurrent enrollment. Any concurrent enrollment amount adjustments will be manually calculated and entered by the Business Office.
- International Students should follow the Non-Resident Tuition Rate.

## Payment by Installment

The Installment Payment Plan is only available during the Fall and Spring semesters. The Installment plan is only for tuition and fees.

### Who qualifies and how does it work?

To qualify a person must:

- Be a current student at UTB/TSC
- Be free of any outstanding financial balance with UTB/TSC
- Have no form of financial aid including any scholarship programs
- Be registered for a minimum of six credit hours or more
- Pay a non-refundable fee of \$22.50 for the installment plan (\$7.50 per installment)
- Fill-out and sign installment plan promissory note in order to complete process

### How does it work?

Once the student is qualified for the Installment Payment Plan, the student is required to pay for one-half (50 percent) of the tuition and fees and the non-refundable \$22.50. The remaining half will be equally divided in two payments due at later dates.

For example: Tuition and fees are \$800.00; installment initial payment will be 50 percent or \$400.00 plus the \$22.50 fee, for a total initial payment of \$422.50. The other half is divided equally \$200.00 and \$200.00, which are due at later dates.

If a student selects the installment plan and then drops below the required six credit hours, the balance of tuition and fees becomes due in full. If a student selects the installment plan, and adds additional classes during the add/drop period, the plan will not be adjusted to accommodate added courses.

### Late Installment Payments

For any late payments on installments, there is a five-day grace period after which a non-refundable late payment charge of \$5.00 will be assessed in addition to the installment payment amount due. If the second installment payment is not made until the final payment is due and it is after the five-day grace period then a non-refundable reinstatement charge of \$25.00 will be assessed in addition to the installment payment amount due. In this instance, a student would be charged a total of \$35.00 in addition to the installment payment amount.

### Failure to Pay Installment Plan

Students who fail to fully pay tuition and fees, including any late charges are subject to one or more of the following actions, at the University's option:

- Prevent from re-admission to the institution
- Withholding of grades, degrees and official transcripts
- All penalties and actions authorized by law

Notes: The Payment by Installment Plan is subject to change without notice or obligation in keeping with the policies and actions of The University of Texas System Board of Regents and in conforming with the laws of the State of Texas. The student is subject to pay tuition and fees, which are non-refundable upon complete withdrawal. The refund is based on tuition and fees – not on the amount paid by the student.

## Tuition and Fee Exemptions

The Texas Legislature has provided a tuition and fee exemption, excluding general property deposit and student services fees, provided under §54.201 et. seq. 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: Blind/Deaf Student Exemption Program; Certified Educational Aide Exemption; Children of Disabled or Deceased Firemen, Peace Officers, Game Wardens and Employees of Correctional Institutions; Children of U.S. Military who are Missing in Action or Prisoners of War (MIA/POWs); Concurrent Enrollment Waiver; Early High School Graduation Scholarship; Exemption for Dual-Enrolled Students; Exemption for Highest Ranking High School Graduate; Exemption for Peace Officers Disabled in the Line of Duty; Exemptions for Texas Veterans (Hazlewood); Fire Fighter Exemption Program; Orphans of Texas Members of the U.S. Armed Forces or National Guard; Senior Citizen, 55 or Older, Tuition Reduction Program; Senior Citizen, 65 or Older, Free Tuition for six Credit Hours; Senior Citizen, 65 or Older, Free Tuition for Auditing Classes; Students in Foster or other Residential Care; TANF Exemption Program; Texas National Guard Tuition Assistance Program.

This information is provided in summary form. For more information, contact the Office of Student Financial Assistance at Tandy Hall 206.

## Tuition Waivers Based on Residency

### Lower Division – For Non-Residents

The same rate of tuition and fees charged residents of the Southmost Union Junior College District for lower-division courses shall be charged to people, and their dependents, who are permitted by Congress to domicile in the United States and who own property which is subject to ad valorem taxation by the college district. Aliens not domiciled in the United States are not eligible for this waiver. Interested students should contact the Office of Admissions at Tandy Hall 115, or call 882-8295.

### Lower Division, Upper Division, UTB Undergraduate, Graduate – Residents of Mexico

State law allows students who are citizens of Mexico and who document financial need to pay the same tuition as residents of the State of Texas when enrolling. To be eligible for this waiver, students must complete all admission and registration requirements. Application deadlines for the Mexican National Tuition Waiver are August 1 for the Fall semester, December 1 for the Spring semester, and May 1 for the Summer sessions. Interested students should visit the Office of Student Financial Assistance at Tandy Hall 206, or call 882-8277.

Note: Students qualifying for tuition waivers continue to be classified as non-resident or foreign for residency purposes.

## TUITION REBATE PROGRAM

The purpose of the tuition rebate program is to provide a financial incentive for students to prepare for university studies while completing their high school work, avail themselves of academic counseling, make early career decisions, and complete their baccalaureate studies with as few courses outside the degree plan as possible. Minimizing the number of courses taken by students results in financial savings to students, parents, and the state.

### Eligible Students

To be eligible for rebates under this program, students must meet all of the following conditions:

- they must have enrolled for the first time in an institution of higher education in the fall 1997 semester or later,
- they must be requesting a rebate for work related to a first baccalaureate degree received from a Texas public university,
- they must have been a resident of Texas, must have attempted all

coursework at a Texas public institution of higher education, and have been entitled to pay resident tuition at all times while pursuing the degree, and

- they must have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree under the catalog under which they were graduated. Hours attempted include transfer credits, course credit earned exclusively by examination, courses that are dropped after the official census date, for credit developmental courses, optional internship and cooperative education courses, and repeated courses. Courses dropped for reasons that are determined by the institution to be totally beyond the control of the student shall not be counted.

## Amount of Tuition Rebate

- The amount of tuition to be rebated to a student under this program is \$1,000, unless the total amount of undergraduate tuition paid by the student to the institution awarding the degree was less than \$1,000, in which event the amount of tuition to be rebated is an amount equal to the amount of undergraduate tuition paid by the student to the institution.
- A student who paid the institution awarding the degree an amount of undergraduate tuition less than \$1,000 may qualify for an increase in the amount of the rebate, not to exceed a total rebate of \$1,000, for any amount of undergraduate tuition the student paid to other Texas public institutions of higher education by providing the institution awarding the degree with proof of the total amount of that tuition paid to other institutions.
- Tuition rebates shall be reduced by the amount of any outstanding student loan, including an emergency loan, owed to or guaranteed by this state, including the Texas Guaranteed Student Loan Corporation. If a student has more than one outstanding student loan, the institution shall apply the amount of the rebate to the loans as directed by the student.

If the student fails to provide timely instructions on the application of the amount, the institution shall apply the amount of the rebate to retire the loans with the highest interest rates first.

## Responsibilities of Students

- Students desiring to qualify for tuition rebates are responsible for complying with all university rules and regulations related to administration of the program.
- Students desiring to qualify for tuition rebates are solely responsible for enrolling only in courses that will qualify them for the rebates.
- A student who has transferred from another institution of higher education is responsible for providing to the institution awarding the degree official transcripts from all institutions attended by the student.
- Students must apply for rebates at the Office of the Registrar prior to receiving their baccalaureate degrees on forms provided by the institution and must keep the institution informed of their addresses for at least 60 days after their graduation date.

## Deposits

**General Property Deposit** \$10.00

All Upper Division, UTB Undergraduate and Graduate students must make a General Property Deposit to help offset the cost of property loss or damage. 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 four years from the date of last attendance, will be forfeited.

## Required Fees - All Students

<b>Student Services Fee</b>	<b>\$10.00 per semester credit hour</b> \$150.00 maximum, prorated for May Session
<b>Student Union Fee</b>	<b>\$41.56 per long semester</b> Pro-rated to \$20.78 for each summer session, regardless of length.
<b>Building Use Fee (TSC students only)</b>	<b>\$44.00 per semester credit hour</b>
<b>Computer Use Fee</b>	<b>\$10.00 per semester credit hour</b>
<b>Records Fee</b>	<b>\$10.00 per semester</b>
<b>Automated Services Fee</b>	<b>\$30.00 per semester</b>
<b>Academic Advising Fee</b>	<b>\$25.00 per semester</b>
<b>Library Fee</b>	<b>\$2.00 per semester credit hour</b>
<b>International Education Fee</b>	<b>\$2.00 per semester.</b>
<b>Medical Services Fee</b>	<b>\$20.00 per semester</b> Pro-rated to \$10.00 for each summer session, regardless of length
<b>Student Recreation Fee</b>	<b>\$79.00 per semester</b> Pro-rated to \$39.50 for each summer session, regardless of length

## Academic Course Fees

*Fees subject to change without notice*

<b>Admission to School of Business Upper Division Fee</b>	<b>50.00</b>
One-time fee for students admitted into Upper Division in the School of Business.	
<b>Business Administration Accounting Department</b>	
<b>Computer Usage Fee</b>	<b>30.00</b>
Per semester fee for any student enrolled in any BMIS/BMISU courses, and BUSU 2441, BMIS 3351, BMIS 6330, ACCT 3351, MANA 4366, MANA 6350, BUSI 3343, FINA 3382, MANA 3363, MARK 4378, MARK 6330, MANA 6320, MANA 6360, FINA 6301, BUSI 6310, and ACCT 4331 courses.	
<b>Business Technology Department Fee</b>	<b>65.00</b>
For all courses in this department except for Paralegal courses	
<b>Business Technology Department Fee</b>	<b>40.00</b>
For Paralegal or Legal Assistant courses	
<b>Biology Majors Fee</b>	<b>10.00</b>
Per semester fee per student for all Biology Majors	
<b>Biology Upper Division Course Fee</b>	<b>30.00</b>
Per-course per-semester fee per student for all students registered in any upper division biology course. (UTB only)	
<b>Chemistry and Environmental Sciences – Organic Chemistry Fee</b>	<b>12.00</b>
Per-course per-semester fee for students enrolled in CHEM 2123, 2125, 2323, 2325	
<b>Chemistry and Environmental Sciences – Upper Division Chemistry Fee</b>	<b>20.00</b>
Per-course per-semester fee for any student enrolled in any upper division Chemistry course (UTB only)	
<b>Computer Literacy Fee</b>	<b>30.00</b>
Per-course per-semester fee for students enrolled in COSC 1310	
<b>Computer Science Department CS Program Fee</b>	<b>65.00</b>
Per-student per-semester fee for any student enrolled in any COSC and TCIS courses	
<b>Deficiency Plan Fee – School of Education</b>	<b>40.00</b>



Assessed to students in the School of Education.		
<b>Developmental Writing Fee – English &amp; Communications</b>	<b>10.00</b>	
Per-course per-semester fee for students enrolled in ENGL 0320 and ENGL 0321		
<b>Distance Education Fees</b>		
<b>UT Telecampus Web-Based Fee</b>	<b>up to 80.00</b>	
Per semester credit hour		
<b>UTB/TSC Web-Based or Interactive Video Fee</b>	<b>25.00</b>	
Per semester credit hour		
<b>UTB/TSC Telecourse Fee</b>	<b>25.00</b>	
Per semester credit hour		
<b>Virtual College of Texas Fee</b>	<b>25.00 per semester credit hour</b>	
<b>Emergency Medical Technology – Exam Fee</b>	<b>25.00</b>	
Pre-hospital trauma, life support or national/state certification		
<b>Emergency Medical Technology – Exam Fee</b>	<b>150.00</b>	
Medical dispatching, national/state certification		
<b>Engineering Department Fee</b>	<b>80.00</b>	
Per semester fee for any student enrolled in any Engineering or Engineering Technology course, both lower and upper division		
<b>General Education Fee</b>	<b>10.00</b>	
Per-semester fee for students for all General Education majors		
<b>General Education Science Fee</b>	<b>12.00</b>	
Per-course per-semester fee for all students enrolled in any course that satisfies the General Education Science requirement		
<b>Induction Fee for School of Health Sciences</b>	<b>10.00</b>	
Induction fee for the student in the School of Health Sciences.		
<b>Industrial Technology Department:</b>		
<b>Auto Mechanics Program Fee</b>	<b>10.00</b>	
Per-course per-semester fee for students enrolled in these courses AUMT – 1201,1407, 2305		
<b>Auto Mechanics Program Fee</b>	<b>20.00</b>	
Per-course per-semester for students enrolled in these courses AUMT – 1419, 1445, 2417, 2434		
<b>Auto Mechanics Program Fee</b>	<b>30.00</b>	
Per-course per-semester for students enrolled in these courses AUMT – 1410, 1416, 2209, 2425		
<b>A/C &amp; Refrigeration Program Fee</b>	<b>10.00</b>	
Per-course per-semester fee for students enrolled in these courses HART – 1301, 1345		
<b>A/C &amp; Refrigeration Program Fee</b>	<b>20.00</b>	
Per-course per-semester fee for students enrolled in these courses HART – 1307, 1341, 2345, 2338, 2349 & MAIR 1349		
<b>A/C &amp; Refrigeration Program Fee</b>	<b>25.00</b>	
Per-course per-semester fee for students enrolled in HART 2336		
<b>Auto Body Program Fee</b>	<b>35.00</b>	
Per-course per-semester fee for students enrolled in these courses ABDR – 1411, 1431, 1453, 1519, 1541, 1542, 2255, 2257, 2549		
<b>CAD Technology Program Support Fee</b>	<b>60.00</b>	
Per-course fee per semester fee for all ARCE and DFTG courses.		
<b>Machine Shop Program Fee</b>	<b>5.00</b>	
Per-course per-semester fee for students enrolled in these courses MCHN – 1300, 1317, 1332, 1338		
<b>Machine Shop Program Fee</b>	<b>15.00</b>	
Per-course per-semester fee for students enrolled in these courses MCHN – 1253, 1254, 1302, 1305, 1320, 1338, 1341, 1343, 1352, 2433, 2437		
<b>Machine Shop Program Fee</b>	<b>30.00</b>	
Per-course per-semester fee for students enrolled in these courses MCHN – 1253, 1254, 1302, 1320, 1341, 1352, 2433, 2437		
<b>Building Trades Program Fee</b>	<b>5.00</b>	
Per-course per-semester fee for students enrolled in these courses CNBT – 1301, 1305, 1307, 1342, 1366; CRPT – 1325, 1329 ELPT – 1349, 1364; PFPB – 2437		
<b>Building Trades Program Fee</b>	<b>15.00</b>	
Per-course per-semester fee for students enrolled in these courses ELPT 1311, 1325, 1329, 1342, 1345		
<b>Building Trades Program Fee</b>	<b>25.00</b>	
Per-course per-semester fee for students enrolled in these courses ELPT 1321; CNBT 1302, 1311; WDWK 1313		
<b>Building Trades Program Fee</b>	<b>30.00</b>	
Per-course per-semester fee for students enrolled in these courses CRPT – 1311, 1315, 1323, 1341, 1345; PFPB – 1345, 1421, 2301, 2408, 2409		
<b>Kinesiology Department – Outdoor Education Course Fee</b>	<b>\$20.00</b>	
KINEU 2304; Per-course per-semester fee.		
<b>Mathematics Department – Calculator Penalty Fee</b>	<b>20.00</b>	
Per semester fee for all students not abiding by Calculator Contract		
<b>Nursing – HESI Exam Fee</b>	<b>17.00</b>	
Exam required for passing the NCLEX prep for the following programs: Mental Health Nursing, Child-Bearing Family Care, Care of Children and Family.		
<b>Nursing – HESI Exam Fee</b>	<b>43.00</b>	
Exam required for passing the NCLEX prep for the following programs: Intro to Professional Nursing.		
<b>Nursing – HESI Exam Fee</b>	<b>59.00</b>	
Exam required for passing the NCLEX prep for the following programs: Transition to Nursing Practice		
<b>Nursing – HESI Exam Fee</b>	<b>30.00</b>	
Exam required for passing the NCLEX prep for the following programs: Complex Health Care Needs		
<b>Physics and Astronomy Department Fee</b>	<b>30.00</b>	
Per-course per-semester fee for all students enrolled in any of the upper division Physics and Physical Science courses.		
<b>School of Education – Foreign Field Experience Fee</b>	<b>550.00</b>	
Fee for students who take EDEC 6310.65 and BILC 6322.65.		
<b>School of Health Sciences:</b>		
<b>Nursing Department: Meds' Total Curriculum Support for ADN Program</b>	<b>75.00</b>	
To defray costs of exam/assessment package		
<b>Nursing Department: Nursing Skills Course Fee</b>	<b>18.00</b>	
Per semester fee for any student enrolled in the courses RNSG 1108, 1205, 1215, 1413, 2307, 2441		
<b>Special Education (SPED) Assessment Instruments Fee</b>	<b>25.00</b>	
Per-course per-semester fee: SPED 6301, SPED 6302, SPED 6303, SPED 6306, SPED 6307, SPED 6309, SPED 6600, EPSY 6315		
<b>Teacher Education Program Admission Fee</b>	<b>50.00</b>	
For students in the School of Education upon application to the Teacher Education Program.		
<b>Vocational Nursing Orientation Fees</b>	<b>30.00</b>	
For preparatory workshop		
<b>Vocational Nursing Applied Skills I</b>	<b>60.00</b>	
For all program participants		

Vocational Nursing Graduation Certificate Fee 8.00

## Other Fees

Add/Drop Fee 5.00

Per course per semester, is assessed to defray the costs of adding and dropping courses during the add/drop periods.

Alternative TASP Remediation Fee 75.00

Students are assessed this fee to defray costs associated with remediating students who fail the TASP exam in particular area.

Auditing Fee 50.00

Per class audited, if the instructor permits auditing a course, this is a nonrefundable fee.

Alternative Certification Program Extension Fee 1,000.00

Comprehensive Exam fee (Graduate Students) 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.

Emergency Loan Late Payment Fee 15.00

For every 30 days payment is late.

Foreign Insurance Fee per semester 339.00

Fee subject to change without notice.

Graduate Students Application Fee 30.00

Assessed to defray costs for processing the Graduate Application.

Graduation Fee 25.00

This non-refundable fee is charged for undergraduate and graduate certificates and degrees to defray costs for processing applications, diplomas and other commencement expenses. All Commencement participants are required to purchase the proper regalia from the Bookstore. No student will be permitted to participate without the proper regalia. Students wishing to transfer their Graduation Application to the next period must pay an additional fee of \$5.00.

Identification Card Replacement Fee 10.00

Per card.

Installment Payment Fee 22.50

Available ONLY during Fall and Spring semesters for Undergraduate and Graduate Students.

Laboratory Fees

See Laboratory Fees for more information.

Late Admissions Application Fee 15.00

Assessed to each application submitted after the posted deadline

Late Graduate Application Fee 15.00

Assessed to each application submitted after the posted deadline

Late Payment Charges – Installments 5.00

See Installment Payment for more information

Late Registration Fee 30.00

Library Fees

Late Fee .30 per day that book remains overdue

Overdue Books Fee 30.00

Overdue items Variable, according to time the item is overdue.

Overdue Reserve Material Fee 20.00

Lost Materials Fee Variable

As per original or replacement costs of item plus \$30.00 service fee.

Damaged items Variable

According to the extent of the damaged and cost of repair or replacement.

Off-Campus Fee, per course 15.00

Orientation Fee 20.00

Orientation No Show/Cancellation Fee 15.00

Reinstatement Charge 25.00

See Installment Payment for more information.

Returned Check Charge 25.00

This nonrefundable charge will be assessed to students for each returned check. (See Financial Responsibility.) The institution may refuse to accept checks from students who have previously had a check returned for insufficient funds, account closed, irregular signature, stopped payment, etc.

Student Housing Fees

Private Rooms 1,550.00

Per each Fall or Spring semester per room

Double Rooms 1,150.00

Per each Fall or Spring semester per student

Student Liability Insurance Fee 18.13

Per academic year; fee subject to change without notice.

Testing Fees (Subject to change without notice)

ASSET Test Fee 5.00

Compass – Ewrite 39.00

Graduate Record Exam (GRE) 115.00

Graduate Management Admissions Test (GMAT) 225.00

Quick THEA Fee 10.00

New fee for students that take the Quick TASP in lieu of the regular.

Test of English as a Foreign Language (TOEFL) 115.00

Test Score Copy Fee 1.00

Texas Success Initiative Fee 75.00

Thesis Binding Fee 48.00

An original and three copies of a Master's Thesis must be bound and presented to UTB/TSC. The exact cost depends on the length of the thesis.

Transcript Fee (Official) 5.00

Tuition Installment Incidental Charge 7.50

See Payment by Installment for more information.

Vehicle Registration/Operation Permit 20.00

All students, who will operate a motor vehicle in the campus area, must register the vehicle with the Campus Police Office and obtain a parking permit. The fee is non-refundable after the first class day and is valid for the issued semester or summer session only. Fees will be assessed as follows:

Parking Classifications

Faculty, Staff, Students (annual fee) 60.00

Disabled Students Permit No charge\*

Afternoon Students (1:00-4:30 p.m. only) 6.00

Replacement Permit 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 disabled people or disabled veterans as defined by §681.001(2), *Texas Transportation Code*.

## Laboratory Fees

Applied Music [MUAP] 45.00

1201, 1202, 1205, 1206, 1209, 1210, 1213, 1214, 1215, 1216, 1217, 1218, 1221, 1222, 1225, 1226, 1229, 1230, 1233, 1234, 1237, 1238, 1241, 1242, 1245, 1246, 1249, 1250, 1253, 1254, 1257, 1258, 1261, 1262, 1265, 1266, 1269, 1270, 1281, 1282, 1287, 1288, 1301, 1302,

1305, 1306, 1309, 1310, 1312, 1317, 1318, 1321, 1322, 1325, 1326, 1329, 1330, 1333, 1334, 1337, 1338, 1341, 1342, 1345, 1346, 1349, 1350, 1353, 1354, 1357, 1358, 1361, 1362, 1365, 1366, 1369, 1370, 1381, 1382, 1387, 1388, 2201, 2202, 2205, 2206, 2209, 2210, 2213, 2214, 2215, 2216, 2217, 2218, 2221, 2222, 2225, 2226, 2229, 2230, 2233, 2234, 2237, 2238, 2241, 2242, 2245, 2246, 2249, 2250, 2253, 2254, 2257, 2258, 2261, 2262, 2265, 2266, 2269, 2270, 2281, 2282, 2287, 2288, 2301, 2302, 2317, 2318, 2321, 2322, 2325, 2326, 2329, 2330, 2333, 2334, 2337, 2338, 2341, 2342, 2345, 2346, 2349, 2350, 2353, 2354, 2357, 2358, 2361, 2362, 2365, 2366, 2369, 2370, 2381, 2382, 2387, 2388	
<b>Applied Music [MUAP]</b>	<b>70.00</b>
2305, 2306, 2309, 2310, 3201, 3202, 3205, 3206, 3209, 3210, 3213, 3214, 3217, 3218, 3221, 3222, 3225, 3226, 3229, 3230, 3233, 3234, 3237, 3238, 3241, 3242, 3245, 3246, 3249, 3250, 3253, 3254, 3257, 3258, 3261, 3262, 3265, 3266, 3269, 3270, 3281, 3282, 3401, 3402, 4201, 4202, 4205, 4206, 4209, 4210, 4212, 4213, 4214, 4217, 4218, 4221, 4222, 4225, 4226, 4229, 4230, 4233, 4234, 4237, 4238, 4241, 4242, 4245, 4246, 4249, 4250, 4254, 4257, 4258, 4261, 4262, 4265, 4266, 4270, 4281, 4282, 4401, 4402	
<b>Art [ARTS]</b>	<b>45.00</b>
1311, 1312, 1316, 1317, 1374, 2233, 2313, 2333, 2356, 2357, 2379, 3323, 4331, 4333, 4336	
<b>Art [ARTS]</b> 1376, 2316, 2317, 3321, 4337	<b>70.00</b>
<b>Art [ARTS]</b>	<b>95.00</b>
1370, 2326, 2327, 2346, 2347, 2377, 2378, 3371, 3326, 4391	
<b>Art [ARTS]</b> 3314	<b>95.00</b>
<b>Child Care and Development [CDEC]</b>	<b>8.00</b>
1331, 1358, 1359, 1367, 1401, 1406, 1411, 2366, 2587	
<b>Communication [COMM]</b> 2303, 2324, 2325, 2373	<b>8.00</b>
<b>Computer Information Systems Lab Courses</b>	<b>8.00</b>
[ITSC, ITSE, ITSW, POFI]	
<b>Criminal Justice [CRIJ]</b> 4401, 2314	<b>25.00</b>
<b>Dance [DANC]</b>	<b>8.00</b>
<b>Diesel Mechanics [DEMR]</b> 1402, 1404, 1406, 1408, 1409	<b>5.00</b>
<b>Diesel Mechanics [DEMR]</b> 1101, 1407	<b>15.00</b>
<b>Diesel Mechanics [DEMR]</b>	<b>30.00</b>
1403, 1405, 1413, 1419, 1423, 1521, 1506, 1505, 1510, 1516	
<b>Drama [DRAM]</b> 1351	<b>8.00</b>
<b>Drafting [DFTG]</b>	<b>8.00</b>
<b>Education - Curriculum and Instruction [EDCI]</b>	<b>12.50</b>
4310, 4311, 4312, 4398	
<b>Education - Curriculum and Instruction [EDCI]</b> 4309, 4315	<b>25.00</b>
<b>Education - Curriculum and Instruction [EDCI]</b> 4611, 4641	<b>25.00</b>
<b>Education [EDSC]</b> 4305, 4374	<b>10.00</b>
<b>Education [EDSC]</b> 4375	<b>25.00</b>
<b>Electronics [TELC]</b>	<b>8.00</b>
<b>Electronics [ELEC]</b> 1302, 1421	<b>8.00</b>
<b>Emergency Medical Technology [HPRS]</b> 1204	<b>8.00</b>
<b>Emergency Medical Technology [EMSP]</b>	<b>8.00</b>
1147, 1149, 1209, 1356, 1401, 2135, 2444, 2290, 2315, 1208, 2243, 2434	
<b>Hospitality Cooperative Education [THRM]</b> 2401, 2405	<b>8.00</b>
<b>International Business [IBUS]</b>	<b>8.00</b>
1301, 2331, 2339, 2341, 2345, 2366	
<b>Kinesiology [KINE]</b> All Activity courses	<b>8.00</b>
<b>Legal Assisting [LGLA]</b>	<b>8.00</b>
<b>Marketing-Technical [MRKG]</b> 1311	<b>8.00</b>
<b>Mathematics [MATH]</b>	<b>30.00</b>
0100, 0120, 0320, 0321, 0322, 0420, 0421, 0422	
<b>Medical Laboratory Technology [MLAB]</b>	<b>8.00</b>
<b>Music [MUSI]</b> 1188	<b>8.00</b>
<b>Music [MUSI]</b> 3308, 3309	<b>15.00</b>
<b>Music [MUSI]</b> 1311, 1312, 2311, 2312, 4211	<b>20.00</b>
<b>Nursing [TVNU]</b> 1266	<b>30.00</b>
<b>Radiologic Technology [RADR]</b> 1411, 1213, 2305, 2309	<b>8.00</b>
<b>Radiologic Technology [DMSO]</b> 1441, 2441	<b>8.00</b>
<b>Reading [READ]</b> 0100, 0300, 0320, 0321, 0322	<b>30.00</b>
<b>Respiratory Therapy [HPRS]</b> 1106, 1204	<b>8.00</b>
<b>Respiratory Therapy [RSPT]</b>	<b>8.00</b>
1241, 1290, 1315, 1316, 2135, 2139, 2201, 2305, 2314, 2353	
<b>Special Education [SPED]</b> 4313	<b>12.50</b>
<b>Sting Success Series [NCB]</b> 1000, 2000	<b>75.00</b>
<b>Technical Electronics [CETT]</b> 1429	<b>25.00</b>
<b>Technical Electronics [IEIR]</b> 1406	<b>15.00</b>
<b>Technical Electronics [IEIR]</b> 1402, 2465	<b>18.00</b>
<b>Technical Electronics [IEIR]</b> 1404	<b>22.00</b>
<b>Technical Electronics [CETT]</b> 1445	<b>24.00</b>
<b>Technical Electronics [INTC]</b> 1307	<b>25.00</b>
<b>Technical Electronics [EECT]</b> 2439	<b>28.00</b>
<b>Technical Electronics [CETT]</b> 1321, 1425, 1441, 2425	<b>30.00</b>
<b>Technical Electronics [RBTC]</b> 1405	<b>30.00</b>

## 2005-06 Tuition Rates

### Lower Division

TSC In-District Students:

\$31.00 per semester credit hour; \$75.00 minimum.

TSC Out-of-District Students:

50.00 per semester credit hour; 120.00 minimum.

Non-Resident Students (Foreign or Out of State):

326.00 per semester credit hour.

### Upper Division and UTB Undergraduate

(Courses with abbreviations ending with letter U)

Resident Students (District or Out of District):

\$94.00 per semester credit hour

Non-Resident Students (Foreign or Out of State):

370.00 per semester credit hour.

Out-of-State Web-based: 296.00 per semester credit hour.

### Graduate Level

Resident Students (District or Out of District):

\$113.00 per semester credit hour

Non-Resident Students (Foreign or Out of State):

389.00 per semester credit hour.

Out-of-State Web-based: 296.00 per semester credit hour.

## TSC Lower Division Tuition and Fee Tables

Resident In-District .....	Resident Out-of-District .....	Non-Resident (Foreign or Out-of-State)
Semester Tuition ..... Required ..... Total	Semester Tuition ..... Required ..... Total	Semester Tuition.....Required ..... Total
Credit hrs\$31.00/hr..... Fees*.....	Credit hrs\$50.00/hr ..... Fees*.....	Credit hrs\$326/hr ..... Fees*.....
..... min \$75.00 .....	.....min \$120 .....	.....
1..... \$ 75.00..... \$ 273.56..... \$ 348.56	1 ..... \$ 120.00..... \$ 273.56 ..... \$ 393.56	1 ..... \$ 326.00 ..... \$ 273.56..... \$ 599.56
2..... \$ 75.00..... \$ 339.56..... \$ 414.56	2 ..... \$ 120.00..... \$ 339.56 ..... \$ 459.56	2..... \$ 652.00 ..... \$ 339.56..... \$ 991.56
3..... \$ 93.00..... \$ 405.56..... \$ 498.56	3 ..... \$ 150.00..... \$ 405.56 ..... \$ 555.56	3..... \$ 978.00 ..... \$ 405.56..... \$1,383.56
4..... \$ 124.00..... \$ 471.56..... \$ 595.56	4 ..... \$ 200.00..... \$ 471.56 ..... \$ 671.56	4..... \$1,304.00 ..... \$ 471.56..... \$1,775.56
5..... \$ 155.00..... \$ 537.56..... \$ 692.56	5 ..... \$ 250.00..... \$ 537.56 ..... \$ 787.56	5..... \$1,630.00 ..... \$ 537.56..... \$2,167.56
6..... \$ 186.00..... \$ 603.56..... \$ 789.56	6 ..... \$ 300.00..... \$ 603.56 ..... \$ 903.56	6..... \$1,956.00 ..... \$ 603.56..... \$2,559.56
7..... \$ 217.00..... \$ 669.56..... \$ 886.56	7 ..... \$ 350.00..... \$ 669.56 .. \$ 1,019.56	7..... \$2,282.00 ..... \$ 669.56..... \$2,951.56
8..... \$ 248.00..... \$ 735.56..... \$ 983.56	8 ..... \$ 400.00..... \$ 735.56 .. \$ 1,135.56	8..... \$2,608.00 ..... \$ 735.56..... \$3,343.56
9..... \$ 279.00..... \$ 801.56..... \$ 1,080.56	9 ..... \$ 450.00..... \$ 801.56 .. \$ 1,251.56	9..... \$2,934.00 ..... \$ 801.56..... \$3,735.56
10..... \$ 310.00..... \$ 867.56..... \$ 1,177.56	10 ..... \$ 500.00..... \$ 867.56 .. \$ 1,367.56	10..... \$3,260.00 ..... \$ 867.56..... \$4,127.56
11..... \$ 341.00..... \$ 933.56..... \$ 1,274.56	11 ..... \$ 550.00..... \$ 933.56 .. \$ 1,483.56	11..... \$3,586.00 ..... \$ 933.56..... \$4,519.56
12..... \$ 372.00..... \$ 999.56..... \$ 1,371.56	12 ..... \$ 600.00..... \$ 999.56 .. \$ 1,599.56	12..... \$3,912.00 ..... \$ 999.56..... \$4,911.56
13..... \$ 403.00..... \$ 1,065.56..... \$ 1,468.56	13 ..... \$ 650.00..... \$1,065.56 .. \$ 1,715.56	13..... \$4,238.00 ..... \$1,065.56..... \$5,303.56
14..... \$ 434.00..... \$ 1,131.56..... \$ 1,565.56	14 ..... \$ 700.00..... \$1,131.56 .. \$ 1,831.56	14..... \$4,564.00 ..... \$1,131.56..... \$5,695.56
15..... \$ 465.00..... \$ 1,197.56..... \$ 1,662.56	15 ..... \$ 750.00..... \$1,197.56 .. \$ 1,947.56	15..... \$4,890.00 ..... \$1,197.56..... \$6,087.56

For each Fall and Spring semester, a student may enroll for no more than 18 semester credit hours. Enrollment in more than 18 semester credit hours in a Fall or Spring semester requires authorization by the appropriate Dean.

\* All students are required to pay the following fees for each semester, regardless of length: Building Use Fee (\$44.00/hr), Student Service Fee (\$10.00/hr, \$150.00 maximum), Computer Fee (\$10.00/hr), Student Union Fee (\$41.56), Automated Fee (\$30.00), and Records Fee (\$10.00), Advising Fee (\$25.00), Library Fee (\$2.00/hr), International Education Fee (\$2.00/semester), Medical Services Fee (\$20.00), Student Recreation Fee (\$79.00).

## UTB Undergraduate Tuition and Fee Tables

Resident (In-District or Out-of-District) ...	Non-Resident (Foreign or Out-of-State)
Semester Tuition ..... Required ..... Total	Semester Tuition ..... Required .....
Credit hrs 94.00..... Fees*.....	Credit hrs370.00..... Fees*.....
.....per sch.....	.....per sch..... Total
1..... \$ 94.00..... \$ 229.56.....323.56	1 ..... \$ 370.00..... \$ 229.56 ..... \$ 599.56
2..... \$ 188.00..... \$ 251.56.....439.56	2 ..... \$ 740.00..... \$ 251.56 ..... \$ 991.56
3..... \$ 282.00..... \$ 273.56.....555.56	3 ..... \$ 1,110.00..... \$ 273.56 .. \$ 1,383.56
4..... \$ 376.00..... \$ 295.56.....671.56	4 ..... \$ 1,480.00..... \$ 295.56 .. \$ 1,775.56
5..... \$ 470.00..... \$ 317.56.....787.56	5 ..... \$ 1,850.00..... \$ 317.56 .. \$ 2,167.56
6..... \$ 564.00..... \$ 339.56.....903.56	6 ..... \$ 2,220.00..... \$ 339.56 .. \$ 2,559.56
7..... \$ 658.00..... \$ 361.56.....1,019.56	7 ..... \$ 2,590.00..... \$ 361.56 .. \$ 2,951.56
8..... \$ 752.00..... \$ 383.56.....1,135.56	8 ..... \$ 2,960.00..... \$ 383.56 .. \$ 3,343.56
9..... \$ 846.00..... \$ 405.56.....1,251.56	9 ..... \$ 3,330.00..... \$ 405.56 .. \$ 3,735.56
10..... \$ 940.00..... \$ 427.56.....1,367.56	10 .... \$ 3,700.00..... \$ 427.56 .. \$ 4,127.56
11..... \$1,034.00..... \$ 449.56.....1,483.56	11 .... \$ 4,070.00..... \$ 449.56 .. \$ 4,519.56
12..... \$1,128.00..... \$ 471.56.....1,599.56	12 .... \$ 4,440.00..... \$ 471.56 .. \$ 4,911.56
13..... \$1,222.00..... \$ 493.56.....1,715.56	13 .... \$ 4,810.00..... \$ 493.56 .. \$ 5,303.56
14..... \$1,316.00..... \$ 515.56.....1,831.56	14 .... \$ 5,180.00..... \$ 515.56 .. \$ 5,695.56
15..... \$1,410.00..... \$ 537.56.....1,947.56	15 .... \$ 5,550.00..... \$ 537.56 .. \$ 6,087.56

For each Fall and Spring Session, a student may enroll for no more than 18 semester credit hours. Enrollment in more than 18 semester credit hours in a Fall or Spring Session requires authorization by the appropriate Dean.

\* All students are required to pay the following fees for each semester, regardless of length: Student Service Fee (\$10.00/hr, \$150.00 maximum), Computer Fee (\$10.00/hr), Student Union Fee (\$41.56), Automated Fee (\$30.00), and Records Fee (\$10.00), Advising Fee (\$25.00), Library Fee (\$2.00/hr), International Education Fee (\$2.00/semester), Medical Services Fee (\$20.00), Student Recreation Fee (\$79.00)

Tuition rate includes Designated Tuition of \$44.00/sch.

Tuition rate is in accordance with §54.0512 of the *Texas Education Code*.

**Important: Tuition and Fee Tables for the May Session and for Summer 2006 will be available upon approval online at [www.utb.edu](http://www.utb.edu) and in the Summer 2006 Academic Course Schedule booklets.**

# REFUND POLICY

*Note: Refund policies are state mandated and strictly enforced.*

## TSC Lower, UTB Upper, University Plan and Graduate Courses

### Complete Withdrawal or Disenrollment

Students who completely withdraw or disenroll from all courses shall have their tuition and fees (except non-refundable fees) refunded according to the following schedule (not to include weekends nor university holidays):

Fall and Spring semesters

Prior to the first university class day of the semester	100%
During the (first) five university class days of the semester	80%
During the (second) five university class days of the semester	70%
During the (third) five university class days of the semester	50%
During the (fourth) five university class days of the semester	25%
After the 20 <sup>th</sup> university class day of the semester	0%

### Any Summer Session

Prior to the first university class day of the semester	100%
During the 1 <sup>st</sup> two university class days of the semester	80%
During the 2 <sup>nd</sup> two university class days of the semester	50%
After the fifth university class day of the semester	0%

Class days do not include University holidays or weekends.

Note: Financial aid students may have to repay funds to Title IV Financial Aid programs. Students must contact the Office of Student Financial Assistance in Tandy Hall 206 prior to withdrawing from all courses.

## Dropping a Course/s

### TSC Lower, UTB Upper, University Plan and Graduate Courses

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 fees refunded according to the following schedule (not to include weekends nor university holidays):

During the first 12 university class days of the semester	100%
On or after the 13th university class day of the semester	0%

Class days do not include University holidays or weekends.

## Refunds for Mini-Courses or Flex Entry Courses

Students who officially withdraw or drop mini courses or flex entry courses will have their tuition and specified mandatory fees refunded according to the start date and length of the course(s). Due to the variety of lengths of these courses offered at UTB/TSC, the Business Office must be consulted for the refund schedule. Note: National Writing Project refund policy will be configured when definite data exists. Contact the Office of Student Financial Assistance for the return of Title IV Funds policy for students who withdraw from all classes.

## 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, 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 date the student initiates the withdrawal or the date the institution determines the student officially or unofficially withdrew (stopped out) is used for calculating the percentage used in the formula for Return of Title IV funds. 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.

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.

Note: For additional information on withdrawals, Return of Title IV, and sample calculations, or see a Financial Aid Advisor.

### Failure to earn a passing grade

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% in time for that semester, the student may owe funds to the Title IV financial aid programs and/or the institution. The student is responsible for payment of any institutional charges and/or title IV funds resulting from this determination. UTB/TSC must return funds due to the federal programs within 30 days after the withdrawal determination is made. The student has 45 days from the date the institution notifies them in writing to make satisfactory payment arrangements with the institution. Failure to make satisfactory payment arrangements on or before the 45<sup>th</sup> 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
- 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.

### 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. Federal SEOG Grant
6. 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 30 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 30 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.

Note: Students completely withdrawing after the Official Record Date (ORD) should also refer to the Federal Financial Aid Satisfactory Academic Progress Standards.

# STUDENT SERVICES & CAMPUS LIFE

# STUDENT SERVICES

## Athletics

*Gymnasium, 1<sup>st</sup> floor*

882-8291

The Department of Intercollegiate Athletics provides student athletes with the opportunity to become part of intercollegiate athletics at the junior college level. UTB/TSC is a member of the National Junior College Athletic Association (NJCAA) and the Texas Junior College Athletic Conference (TJCAC), competing in men's baseball, women's volleyball and men's and women's golf. UTB/TSC has loans, grants, and scholarships consisting of tuition and fees, books, meals, and housing stipends available to its student athletes. Students are given the opportunity to attend tryouts for teams.

Club sports are also a part of the athletic program. Sports offered include men's soccer and men's volleyball. Club sports are implemented based upon the needs and requests of students.

## Counseling and Career Services

*Tandy Hall 205*

882-8292

*Extended office hours to 7:00 p.m. Monday through Thursday*

The Counseling Center offers an array of specialized services, through various components such as: ASPIRE/SSSP, CAMP, Career Services, Conflict Resolution, Disability Services, Project CIELO, International Student Services, Personal Counseling, STING Peer Mentoring Program, and Vocational Student Services.

### ASPIRE/SSSP

*North Hall 112*

882-8250

ASPIRE/Student Support Services Program is a federally funded program under the U.S. Department of Education. The primary goal of the program is to increase graduation and retention rates among traditionally underrepresented populations. Eligible students are first generation college students, students with a disability, and/or students from low-income families. The students enrolled in the program receive tutoring, counseling, mentoring and advising.

### CAMP

*Camille Lightner Center*

882-7871

College Assistance Migrant Program (C.A.M.P.) promotes higher-education opportunities for low-income, first-generation migrant students. Its primary goal is to encourage academic achievement and increase college retention through comprehensive university intervention services. The program goals are designed to provide-specific support services such as academic advising, personal counseling, career counseling, and peer mentoring

### Career Services and Placement

*Tandy Hall 205*

882-8292

Career Services and Placement provides students with assistance in selecting a major, career exploration, writing a resume, job interview strategies, and ultimately with job search and placement. Its primary goal is to assist students in selecting a major and career field and ultimately strives to assist students in seeking employment before, during, or after graduation. Career Services and Placement offers on-campus recruiters, workshops, career fairs and presentations. It also provides information on careers, job trends, and future demand occupations.

## Conflict Resolution

*Tandy Hall 205H*

882-7235

The conflict Resolution Center offers students confidential services that may help them solve their interpersonal conflicts in an objective and impartial environment. Through mediation, a process which promotes communication, the involved parties can explore alternatives for reaching a mutual agreement.

## Disability Services

*Camille Lightner Center*

882-7374

Students with disabilities play an active and vital role in campus life. The disability services counselor works with each student individually to arrange for accommodations, volunteer note takers, adaptive technology training, sign language interpreting, recorded texts, and referrals to campus and community resources. The assistive lab is available for student use and is equipped with special computers and software to address the student's needs. A testing service is made available for students requiring testing accommodations.

All services are elective and must be requested by the students. To request services, students must register with the Counselor/Coordinator of Disability Services. It is advisable to make this contact well before or immediately after the semester begins.

## International Student Services

*Tandy Hall 205*

882-8292

The International Student Services counselor assists international students in adjusting to their new environment and serves as a liaison between the foreign student, the University, and the community at large. Assistance is available regarding academic advisement, immigration, student employment, and referrals in the local community. Workshops are held during the semester to discuss a variety of issues and concerns common to all foreign students.

## Personal Counseling

*Tandy Hall 205*

882-8292

UTB/TSC offers a variety of counseling services to students. In a confidential setting, students may address personal concerns. Individual, group and couples counseling is available. The personal counselors also provide several workshops and groups on topics such as eating disorders, women's issues, men's issues, self-esteem, assertiveness, parenting, stress management, and depression. The counselors are available for consultations with students, faculty, and staff and crisis management.

## Project CIELO

*Tandy Hall 205*

882-8292

The C.I.E.L.O. program strives to increase retention through targeting academically "at-risk" students. The program provides intervention to students illustrating excessive absences, grades below passing standards, and/or unsatisfactory work assignments. C.I.E.L.O. provides confidential counseling with a personal counselor, a study skills assessment used to improve relevant study skills, a learning style assessment to assess a student's learning style: visual learner, auditory learner and/or kinesthetic learner to identify a student's studying strengths, and provides academic advising and registration assistance. Together, the student and the counselor develop a plan that will enable him/her to become more successful in college.



## STING Success Mentoring program

North Hall 116

882-7200

The STING Peer Mentor Program is a semester-long freshman mentor and support program which provides an introduction to college life, campus resources, and learning at UTB/TSC. The program facilitates and enhances an incoming freshman's transition from high school to college by assigning a peer mentor to an NCB 1000 lab section. In each lab, a mentor meets with students on a weekly basis to deliver a series of presentations and foster the individual's development into a successful college student. Outside of the lab, mentors are available to work with students on an individual basis during office hours.

## Vocational Students

Tandy Hall 205

882-8292

Students enrolled in vocational programs are eligible for day care and transportation assistance through funding provided by Carl Perkins. The vocational counselor also assists students with registration assistance, mentoring, career exploration, resume writing, and tutoring services.

## Dean of Students

Student Union 1.20

882-5141

The role of the Dean of Students is to ensure that individual and collective student issues are properly addressed. Students are encouraged to have the most enriching college experience possible and prepare them with the leadership skills for life during their student careers and beyond UTB/TSC. This can be accomplished by offering meaningful educational, social, cultural, wellness and leadership programs which encourage self-fulfilling goals achievement and improve self-esteem. The Dean of Students Office provides a comprehensive offering of services and programs, and works with the offices of Student Activities, Student Publications, Student Health Services, Student Housing and Residence Life, Student Government, clubs and organizations and the Chess Program. The Dean of Students Office directly coordinates:

- Orientation
- Multicultural Programs
- Welcome Week
- BUS pass program
- Student discipline
- Volunteer programs

Student input is an important element and is strongly encouraged. For more detailed information, visit our website at <http://www.sa.utb.edu/DOS/>.

## Orientation

Student Union 1.20

882-5115

Orientation is an informative and fun-filled day which will guide new students through the process of becoming a UTB/TSC student. Orientation is mandatory for all new students; a \$20 fee is assessed. Students are encouraged to bring family members to Orientation. For more information, contact the Dean of Students Office at the phone number above or visit the Dean of Students website at [www.sa.utb.edu](http://www.sa.utb.edu).

## Student Publications (*The Collegian*)

Student Union 1.28

882-5143

Hours: 8 a.m.-5 p.m. Monday-Friday

E-mail: [collegian@utb.edu](mailto:collegian@utb.edu)

Students produce The Collegian newspaper, The Collegian Online and The Collegian News broadcast in the Office of Student Publications. The office provides professional guidance, a printing budget and other basic needs for student journalists. The senior editorial positions are chosen each year from an eight-member Student Publications Board, which includes at least two faculty members. Student editors are given latitude to select and cover topics of news and exercise final oversight on content, imposing the same restrictions found in the professional world such as avoidance of libel, invasion of privacy or copyright infringement.

## Learning Assistance Center

North Hall 122

882-8208

Office hours: 8:00 a.m. to 7:00 p.m. Monday through Thursday

8:00 a.m. to 1:30 p.m. Friday

The Learning Assistance Center serves as an academic resource for students, staff, and faculty. In a proactive manner, it responds to the needs of the population it serves and is committed to helping the general student population succeed in a college environment. Learning specialists and peer tutors assist students in many areas of study with emphasis on reading, writing, mathematics, language acquisition, test-taking and study skills.

The following is a brief outline of support services provided for students enrolled in credit-based courses:

Classroom presentations and workshops

Computer Lab with lab assistants

Supplemental Instruction

Language Lab

- English as a second language
- Spanish
- French (when requested by instructor)
- American Sign Language
- Conversational English and Spanish

Tutoring (by appointment or walk-in)

- Mathematics, English and Science
- Reading
- Statistics
- Writing (Brainstorming, APA, MLA, etc.)
- History
- Anatomy & Physiology
- Government
- Chemistry
- Geography
- Accounting
- Medical Terminology
- THEA
- GRE (tutoring and computer-assisted instruction)
- Other subject areas by request

Occupational Technology

- Reading, Writing, and Math
- Professional development skill development

Workshops

- THEA

- Watson-Glaser Critical Thinking Appraisal
- Mathematics and Chemistry Review Sessions, Reading, Writing
- Memory Techniques, Learning and Study Skills
- Relieving Test-Taking Anxiety
- Critical thinking and critical reading
- Writing Research Papers, APA and MLA

## University Outreach

University Outreach is composed of several programs funded and supported by UTB and TSC, along with other affiliates.

The programs provide accessible, high quality, educational training and guidance to public school students and adults of the Lower Rio Grande Valley. It currently serves more than 1,200 participants in areas such as academics, tutorial, parental involvement, and economic self-sufficiency.

University Outreach advances economic and social development, enhances the quality of life, fosters respect for the community, provides for personal and career enrichment, and expands knowledge through academic and field trip experiences.

Through an integrated and comprehensive set of programs, individuals are identified and assisted in successfully completing high school and college requirements in preparation for their careers.

These programs include:

- Camp 2000: *Tandy 262 • 882-8243*
- Endowment Scholarship: *Tandy 206 • 882-8277*
- South Texas Engineering, Mathematics and Science (STEMS): *LHSB 1.816 • 882-5058*
- University Talent Search: *Tandy 262 • 882-8243*
- Upward Bound Classic: *Tandy 210 • 882-3846*
- Upward Bound Math & Science: *Camille Lightner Center • 882-7646*
- College Assistance Migrant Program (C.A.M.P.): *Camille Lightner Center • 882-7871*

### C.A.M.P. Services

- Promotes higher education opportunities for low-income, first-generation migrant students
- Encourage academic achievement and increase college retention through comprehensive university intervention services
- Provide academic advising
- Personal counseling
- Career counseling
- Peer mentoring

### Camp 2000 Services

- Parental workshops
- Job site visits
- Technology-based learning
- Community speakers
- Faculty workshops
- Career exploration

### Endowment Services

- Presentations to public and private schools within the Southmost Union Junior College District
- Encourage students to take academically challenging courses
- Provide financial support for college tuition for students who obtain A's and B's in grade-level or above college prep courses
- Provide a transitional incentive between the school district school and Texas Southmost College

### Mother/Daughter Program Services

- Positive self-image
- Career awareness
- Disseminate university standards
- Assistance with applications for admissions, financial aid & testing
- Improvement of academic skills
- Parental support

### STEMS Services

- Awareness and career development in Science, Mathematics, Engineering and Medicine
- Improve study and test-taking skills
- Increase the level of preparation for SAT/ACT
- Improve critical and analytical thinking skills

### University Talent Search Services

- Develop individualized education plans for participants
- Provide team-building and leadership training
- Expose students to the university community
- Provide academic and career related support
- Parental awareness and involvement
- Workshops and seminars to students, parents, and school personnel on the college admission and financial aid process

### Upward Bound Classic Services

- Academic- and career-related support to complete high school and enter post-secondary programs
- Assistance in completion of bachelor's degree
- Summer academic bridge
- On-campus social and cultural activities
- Parent support

### Upward Bound Math & Science Services

- Provide individual and specific tutoring sessions to all core curriculum subjects, cultural enrichment activities, and a parental involvement component
- Provide a six-week summer enrichment program
- Enroll students in dual/concurrent enrollment
- Assist students with high school graduation
- Assist students with the identification, selection and admission into the college of their choice
- Educate students on the college admissions and application process
- Facilitate students' exploration of career options
- Teach students test taking and study skills
- Teach students how to set goals and achieve them
- Facilitate students' personal growth and development
- Facilitate the development of communication and leadership skills

## Veterans' Benefits

*Tandy Hall 206*

*882-8980*

U.S. veterans who are interested in applying for any educational benefits must contact the Veterans Affairs department located at the Office of Student Financial 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 – Survivors’ and Dependents’ Educational Assistance Program
- Chapter 1606 – Montgomery GI Bill-Selected Reserve

If veterans apply for financial assistance, they are required to report expected benefits amount on their Free Application for Federal Student Aid (FAFSA).

Students receiving VA educational benefits must maintain the following cumulative Grade Point Averages to be making satisfactory progress:

Hours Attempted	Cumulative GPA	Minimal Last
1-30 Hours	1.60	2.00
31-59 Hours	1.75	2.00
60+	2.00	2.00

## Hazlewood 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 aentitled to an exemption, if they are residents of Texas.

## Student Health Services

*Cortez Hall*

882-8951

*For after-hour emergencies, call Campus Police at 882-8233*

Student Health Services provides the following services:

### Free Services

- Nurse Practitioner, Registered Nurse, and Medical Assistant
- Basic First Aid: Non-emergency and injury stabilization
- Immunizations: T.d. MMR, Hepatitis B, TB test,
- Medical referrals
- Health screenings
- Health insurance applications
- Condom distribution
- HIV/AIDS testing and counseling (all testing and counseling is strictly confidential)

### Fee for Services

Fees for these services are significantly lower than the fees charged in the medical community.

- Physical examinations/pap smear
- Family planning/birth control
- Diagnosis and treatment of minor illnesses and sexually transmitted diseases
- Pharmacy services
- Immunizations
- Flu Shots

### Education and Health Programs

- Alcohol/drug abuse
- Human sexuality/reproductive health
- Safe Sex Counseling
- HIV/AIDS Education
- Family Crisis Intervention including abuse and sexual assault

- Nutrition/weight control

Basic laboratory testing is also available. Fees for services are significantly lower than the fees charged in the medical community.

# INSTRUCTIONAL SUPPORT SERVICES

## Library

*Library*

882-8221

Hours: 7:30 a.m. to 10:00 p.m. Monday through Thursday

7:30 a.m. to 5:00 p.m. Friday

9:00 a.m. to 5:00 p.m. Saturday

12 noon-10:00 p.m. Sunday

*Hours subject to change during holidays and other special days*

The Arnulfo L. Oliveira Memorial Library provides information and access to materials needed to fulfill the teaching, scholarship, and service goals of the university. The library houses more than 130,000 titles and has a substantial collection of newspaper and periodical titles in print, on microfiche and microfilm and via online services.

The library has a Circulation Department, a Reference Department with a computer lab, a Technical Service Department, an Interlibrary Loan Department, The Hunter Room for archival and genealogical research, study rooms, study areas and carrels, and copying machines to accommodate students. The library is also a depository for state and NASA publications.

The library offers outstanding computerized searching in all subject fields through more than 50 subscription databases, selected Internet sites, newspapers and journals. The Reference Department also provides individual and group tours and demonstrations of library resources in English or Spanish. Through a cooperative computer arrangement, students, faculty and staff also have access to libraries at other institutions.

## Distance Education

*SETB 2.312*

882-6696

UTB/TSC provides education for learners who are unable to attend campus classes, or who prefer the advantage of learning where they work, in their homes and at other distant sites. Courses are provided through a variety of delivery systems. These include Interactive Video where two or more live classrooms may be connected via two-way closed circuit television. Or, some classes are delivered through broadcast television and may be watched at home either at scheduled broadcast times or with delayed videotape recordings.

The Office supporting faculty by providing design and development of new courseware for faculty and coordinates the delivery of instruction through a variety of media such as Interactive Video, broadcast TV programs and Internet-based instruction. Internet-based instruction is provided both at UTB/TSC and through the UT System supported TeleCampus program. Courses range from first-year English composition to complete masters’ degrees in Educational Technology and Business Administration.

Course schedules and other Distance Education information may be obtained through the UTB/TSC web site at [www.de.utb.edu](http://www.de.utb.edu), or by calling 882-7600 or toll free at 866-654-4555.

## **Information Resources**

*Library 211*

882-7453

The Information Resources Office supports and strengthens the institution's teaching, learning and research activities by providing faculty, staff and students with services and technologies that enable access to and use of information resources

## **Media Services**

*South Hall 125*

882-8963

The Media Services Office assists academic, administration and staff by serving as a resource for technical and creative expertise in the field of audio-visual technology, by providing production services in the areas of satellite teleconferences, videotaping services, audio reproduction and photography. Services are extended to furnish instructional audio-visual equipment and instructional videos.

Services for students include making transparencies at no charge, but students must provide transparency film; instructional equipment training for classroom presentation at no charge; video viewing rooms at no charge; and video and audio dubbing for a fee.

## **Scheduling and Course Inventory Office**

*Library 234*

882-6561

The Scheduling and Course Inventory Office schedules all Academic Affairs general-purpose classrooms and maintains an accurate course inventory. Duties include classroom inventory, faculty office inventory, produce course schedule reports, monitor course schedule enrollment to secure appropriate classrooms size, schedule special events, and manage all aspects of course inventory and reporting under the University's SIS.

## **CAMPUS LIFE**

### **Student Housing and Residence Life**

*The Village at Fort Brown*

548-8794

The mission of Student Housing and Residence Life is to promote a positive living and learning experience for the residents and housing staff at UTB/TSC. We will serve our students and UTB/TSC in a professional manner with high quality service, facilities, and programs that support our students' educational experience and the objectives of UTB/TSC. We offer:

- Clean, comfortable, affordable, safe and well maintained facilities;
- Competitively priced student housing;
- Developmental, social, and educational programs for professional and personal growth;
- Residential, educational, and workplace communities that reflect and value diversity;
- Support, training, and maintain a working professional staff of the highest caliber;
- Access to information and technology;
- Timely and quick responses to the needs of our students;
- Sincere appreciation for our students;
- An educational environment with learning communities and positive university experiences.

## **Intramurals/Recreation**

*Kinesiology Department, Gymnasium*

882-8290

Extended office hours to 7:00 p.m. Monday through Thursday.

A varied intramural program is provided to all students, faculty, and staff. Intramural tournaments are conducted in every individual, dual and team sport offered in the Kinesiology Department classes. There are no entry fees for participants and awards are given to first and second place winners. The intramural schedule is posted on signs around campus and listed in the calendar of events.

The Manuel Garza B. Gymnasium is open for student recreational use whenever there are no classes, intramurals, athletic department activities or special events scheduled in the facility. This includes the weight room, annex, and main gym floor. Recreation times vary, but generally are from 2:00 to 4:15 p.m. Monday through Thursday, from 7:45 a.m. to 2:45 p.m. Friday, and from 8:00 a.m. to 2:45 p.m. on Saturday during the Fall and Spring semesters.

Information on summer hours and additional recreational hours may be obtained by calling the Kinesiology Department.

Four tennis courts are available for recreational use whenever there are no classes, intramurals, athletic department activities or special events on the courts. The tennis courts are generally available from 2:00 to 11:00 p.m. daily.

## **Office of Student Activities**

*Student Union 2.28*

882-5111

The Office of Student Activities provides various opportunities to develop skills needed by students to succeed in college and in life by helping them identify and pursue their educational purpose, strengthen their character, overcome life's obstacles, and maximize their potential. More than 100 campus organizations are registered to give students the opportunity to develop leadership and organizational skills. The Campus Activities Board (CAB) coordinates various events such as Join A Club Day, Casino Night, Halloween Havoc, Posada, Mr. Amigo Ceremony and much more. The Office of Student Activities also sponsors recreational sports tournaments and leagues in various sports such as flag football, soccer, softball, basketball and more. Students are encouraged to take advantage of the programs offered. Students can view a calendar of events at the Student Activities link on the Student Affairs website at [www.sa.utb.edu](http://www.sa.utb.edu). For more information please call (956) 882-5111.

## **Student Government Association**

*Student Union 1.16*

882-5033

The Student Government Association (SGA) is the voice of the students at UTB/TSC. The SGA meets at least twice a month in general meetings that are open to the public. The organization is led by six executive officers and representatives by college/school and by class. Officers and representatives are elected annually in April for the next school year. Elections are also held in September for any positions that are not yet filled. Students are encouraged to participate by holding a position in the organization or attending meetings regularly.

## **Student Union Services**

*Student Union 1.19*

882-5144

The new Student Union and El Comedor Services are open for student use

from 7:30 a.m. to 8:30 p.m. Monday through Thursday and from 7:30 a.m. to 1:30 p.m. on Friday during the Fall and Spring semesters.

The TV Room is open to students during the Fall and Spring semesters during regular office hours. Stations available include ABC, CBS, NBC, PBS, XHAB, and channels on the Expanded Basic Cable.

## Student Organizations

Students are strongly encouraged to become active in all campus activities and to become part of the active student body by participating in student organizations. The following list represents the registered student organizations on campus.

### Departmental/Professional:

- Adult Education Club
- Advocates for Young Children
- Associate Degree Nursing Association (ADNA)
- Automotive/Diesel Mechanics Club
- Computer Technology Association (CTA)
- Criminal Justice Association
- Engineering Graphics Club
- English Advocates English Club
- Kinesiology Club
- Licensed Vocational Nursing Student Organization (LVNSO)
- Mathematicians Interested in Technology
- Music Club
- Society for Human Resource Management Club
- Student Council for Exceptional Children
- Student Film Club
- Students in Free Enterprise
- Young Masters Art Guild Art Club
- Accounting Society
- Brownsville Association for Education of Young Children (BAEYC)
- ASPIRE Club
- Behavioral Sciences Collegiate Organization
- Bilingual Student Leadership Association
- Chemical Agents
- Continuing Education Student Association
- Drafting and Engineering Club
- Gorgas Science Society
- Graduate Student Association
- Student Government Association
- Tip of Texas Nurses Association
- Vocational Nursing Student Organization

### Social Greek Organizations

- Los Hermanos Unidos Latino Fraternity
- Sigma Psi Delta Sorority
- Tau Kappa Gamma Fraternity

### Honorary:

- Alpha Chi
- Phi Theta Kappa

### National Professional Societies:

- Alpha Beta Chi – Education Society
- Alpha Kappa Psi – Professional Business Fraternity
- Kappa Delta Pi – International Education Honor Society
- HOSA – Health Occupation Student Association
- Phi Alpha Theta
- Pi Sigma Alpha

- Sigma Delta Pi

### Religious:

- Baha'i Club
- Baptist Student Union
- Chi Alpha
- Hearts on Fire
- Whatcha Looking For – Pentecostal Ministries
- Catholic Campus Ministry
- Lutheran Student Fellowship
- Re'Joy'ce in Jesus CF
- Wesley Foundation

### Special Interest:

- Border Cultures
- Club Cultural Latinoamericano
- Collegian Press Club
- Disability Awareness Club
- Gay/Lesbian Student Association
- Republican Club
- Scorpio Yearbook
- Tizatlán Mexican Folkloric Dance Company Ballet Folkorico Tizatlán
- Weightlifting Club
- Young Democrats
- Veteran's Club
- Alliance Francaise Student French Club
- ANIME Viewing Club
- Cinema Club
- Edelweiss German Club
- Guitar Connection
- International Student Organization
- Pre Law Organization
- Rotaract Club
- Student Activities Programming Board
- Scorpion Scholar Club
- Society of Hispanic Professional Engineers
- Society of University Translators and Interpreters
- STEMS Mentor Club
- Students Towards Excellence in Medicine
- Texas Musical Educators Association Chapter at UTB/TSC
- Toast Masters Club

### Sports:

- Tennis Club
- Martial Arts Club
- Lords and Ladies Fencing
- Athletic Booster Club
- Men's Volleyball Club
- Soccer Club

For more information, contact the Student Activities Office at 882-5143.

# SPECIAL PROGRAMS

## Patron of the Arts

Patron of the Arts features live musical concerts, art and sculpture exhibitions, and literary events. Internationally renowned performers and artists as well as talented area performers and artists are featured. Faculty and students also perform. An annual family membership is also available. For more information, contact the Fine Arts Department at 882-8247.

## Arts & Entertainment

The Fort Brown Memorial Center established the Arts and Entertainment Season, which will bring 6-8 events throughout the academic year at the Jacob Brown Auditorium. The season represents a full spectrum of entertainment – from ballet and modern dance to standup comedy to musical theatre to children’s theatre – from gifted local, national, and international performers. For more information, contact the Fort Brown Memorial Center at 882-7945.

## Rancho Del Cielo Biology Station Program

Rancho del Cielo is located about 70 miles south of Ciudad Victoria in Tamaulipas, Mexico. Situated in the Sierra Madre at an elevation of 3,750 feet, this area has for decades attracted scientists from all over the world.

They have often described this area as “unique,” a strong and accurate word. Rancho del Cielo is an enclave at the crossroads of many North and South American plant and animal species. The tropical and temperate mixture found there is believed to be a “relic” forest similar to those once covering North America 30-50 million years ago. It is an area of great diversity. Eight out of the 12 ecological zones of Mexico are represented within a radius of 12 kilometers.

## Special Populations

Through various state and federally funded programs, qualified vocational students may receive day care assistance, tutoring, special course work in basic skills, ESL classes and career development workshops. Students who may be eligible include economically or educationally disadvantaged minorities, single parents, displaced homemakers, displaced workers, handicapped students, limited English speakers and students seeking nontraditional career training.

For more information, visit with a vocational counselor at the Counseling Center.

## Tech Prep Program

Tech Prep is an educational process that blends the best of academic and vocational skills training education and produces workers who possess the skills needed for America to remain competitive in a global economy – workers who have both academic and technical “know-how” and are able to apply their learned skills in a the modern workplace of today and tomorrow. Tech Prep curriculum (developed collaboratively between public schools, colleges, business and industry) teaches students to think critically and perform specialized skills, but also fosters a desire for continuous and lifelong learning.

UTB and TSC programs implementing Tech Prep curriculum allows students earned credits toward a Certificate in eight skills areas, Certificates

in 12 programs of study and/or an Associate in Applied Science degree in 18 workforce programs.

Tech Prep students can earn up to 12 semester credit hours for work successfully completed in high school at no charge to the student. Students enrolled in the Tech Prep program at their high school will have a symbol “A” placed next to the courses appearing on the transcript they took in high school which may be applied toward meeting the requirements for the appropriate certificate or degree upon enrolling at UTB/TSC.

## “The Challenge for Excellence” TSC Endowment Scholarship Program

The TSC Endowment Scholarship is a program designed to establish scholarship funds for the students in the TSC district; this includes regionally accredited public and private schools in Brownsville, Los Fresnos, and Port Isabel. The “Challenge for Excellence” Award program is 48 semester credit hours which is spread out over four consecutive semesters excluding summer sessions.

To qualify for the Endowment Scholarship, the high school student must:

- attend an eligible high school in the qualifying districts for at least three years;
- graduate from an eligible high school in the qualifying districts;
- graduate from the Recommended Curriculum or the Distinguished Achievement Curriculum, as defined by the school district;
- graduate with a cumulative “B” average or better, and
- enroll in college-level courses.

For the student to receive the full 48 semester credit hours, the student must also:

- enroll immediately after high school graduation;
- attend TSC full-time (12 semester credit hours or more);
- maintain a minimum cumulative 3.0 (“B”) grade point average each semester, and
- progress through four consecutive semesters enrollment at UTB/TSC (excluding summer sessions).

When students graduate, high school counselors must send a completed Endowment Scholarship Form with the school’s official seal and signature to the Office of Student Financial Assistance.

# ACADEMIC INFORMATION

# GENERAL EDUCATION CORE CURRICULUM

(48 semester credit hours)

General education core curriculum requirements apply to all Associate in Arts, Associate in Applied Science and baccalaureate degrees.

## Communication • 9 hours

- 6 hours of Composition:  
ENGL 1301 (minimum grade C) and  
ENGL 1302 or ENGL 2311 (minimum grade C)
- 3 hours of Speech: SPCH 1315

## Mathematics • 3 hours

- Select from MATH 1314, MATH 1324, MATH 1332, or a higher-level math course (minimum grade C)

## Natural Sciences • 8 hours

- 8 hours of Natural and/or Physical Sciences

## Humanities/Visual and Performing Arts • 6 hours

- 3 hours of Literature
- 3 hours of Music Appreciation/Music Literature or Art Appreciation/Art History

## Social and Behavioral Sciences • 15 hours

- 6 hours of U.S. History: HIST 1301 and HIST 1302
- 6 hours of Political Science: GOVT 2301 and GOVT 2302
- 3 hours of Behavioral Science:  
Anthropology: ANTH 2351  
Business: BUSI 1301  
Economics: ECON 2301  
Geography: GEOG 1303  
Psychology: PSYC 2301  
Sociology: SOCI 1301 or SOCI 2319

## Modern Language • 6 hours

- 6 hours of the same modern language other than English at the 1000-level or higher

## Kinesiology • 1 hour

- 1 hour of any health/wellness or activity course

# CERTIFICATES

Students must obtain a certificate according to the requirements for graduation described in the catalog of the year in which they declared at UTB/TSC, or some later catalog. However, students must graduate within six years from the academic year of entrance or they must be placed under provision of a later catalog. Students may choose to graduate under a current catalog. Students wishing to obtain a certificate must complete an official Program of Study Declaration. Any declaration of major shall be made under current catalog requirements.

Declarations and changes of Program of Study and changes must be approved by an academic advisor. Information concerning Programs of Study may be obtained at the Academic Advising Center in Tandy Hall 214.

Certificates of Proficiency require completing the curriculum for one of the occupational and technical programs.

The Board of Trustees of Texas Southmost College grants certificates. Certificates of Proficiency require completion of the curriculum for one of the workforce education programs.

# ASSOCIATE DEGREES

The Board of Trustees of Texas Southmost College grants the following degrees:

- Associate in Applied Science
- Associate in Arts in Business Administration
- Associate in Arts in Social Work
- Associate in Arts in Spanish Translation
- Associate in Arts
- Associate in Fine Arts

*All course requirements for the associate degree programs listed above are established within the College, School, or Department in which the Program of Study falls. These requirements are listed elsewhere in this catalog by the various academic department. For detailed information, a student should contact the academic department responsible for administering the Program of Study.*

## Associate Degree Requirements

Students must obtain a degree according to the requirements for graduation described in the catalog of the year in which they declared at UTB/TSC, or some later catalog. However, students must graduate within six years from the academic year of entrance or they must be placed under the provision of a later catalog. Students may choose to graduate under a current catalog. Students wishing to obtain an associate degree must complete an official Program of Study Declaration. Any declaration of major shall be made under current catalog requirements.

Declarations of Program of Study and changes of Program of Study must be approved by the appropriate academic advisor. Information concerning programs of study and Program of Study declaration may be obtained at the Academic Advising Center in Tandy Hall 214.

To graduate, students must:

1. Satisfy admission requirements.
2. Satisfy the Texas Success Initiative (TSI) requirements.
3. *Have a cumulative 2.00 GPA in general education core curriculum requirements and in all other graduation requirements.*
4. Complete at least 24 semester credit hours in residence at UTB/TSC, including 12 of the last 18.
5. Have at least 18 hours of 2000 level courses or above.
6. Complete the requirements for one of the associate degrees listed in this catalog.

## Associate in Applied Science Degree

Associate in Applied Science degrees require completion of the prescribed curriculum for one of the degree programs.

## Associate in Arts in Business Administration Degree

The Associate in Arts in Business Administration degree program provides the first two years of a baccalaureate degree program in business. Students should verify with an advisor about the transferability of courses and refer to the School of Business for additional courses required for the baccalaureate degree.



## **Associate in Arts in Social Work Degree**

The Associate in Arts Degree in Social Work is designed to prepare students for paraprofessional employment in a social service agency and to provide the necessary foundation to continue studies towards a baccalaureate degree in Social Work.

## **Associate in Arts in Spanish Translation Degree**

The Associate in Arts in Spanish Translation Degree requires at least 62 semester credit hours, including the General Education Core Curriculum.

## **Associate in Arts Degree**

The Associate in Arts degree requires completion of at least 62 semester credit hours, including the General Education Core Curriculum.

## **Associate in Fine Arts Degree**

The Associate in Fine Arts degree requires completion of at least 62 semester credit hours of college credit including a General Education Foundation comprised of elements of the General Education Core Curriculum.

## **Subsequent Associate Degrees and Multiple Majors**

Students may receive only one Associate in Applied Science or Associate in Arts degree, although they may earn multiple majors in that degree. Students may receive an additional associate degree of a different type and major (e.g., A.A.S. students may earn an A.A. degree and A.A. degree students may earn an A.A.S. degree).

To earn an additional associate degree, a student shall:

- complete a minimum of 15 hours of credit at UTB/TSC beyond the awarding of the first degree, and
- complete all requirements for the additional degree(s), including grade point average requirements, elective courses, etc. as set forth in this catalog.

To earn an additional major in an associate degree, a student shall:

- complete a minimum of 15 hours of credit at UTB/TSC beyond the awarding of the first degree, and
- complete all requirements for the additional major(s) as set forth in this catalog.

## **Guarantee for Transfer Credit**

Texas Southmost College guarantees to its Associate of Arts graduates and other students who have met the requirements of a 60 credit hour transfer plan, the transferability of course credits to those Texas colleges or universities which are listed in the Texas Southmost College Course Selection Guides. If such courses are rejected by the college or the university, the student may take tuition-free alternate courses and course related fees at Texas Southmost College which are acceptable to the college or university.

Special conditions which apply to the guarantee are as follows:

1. Transferability means the acceptance of credits towards a specific major and degree. Courses must be identified by the receiving university as transferable and applicable in course Selection Guides dated 1994-95 or later;
2. Limitations of the total number of credits accepted in transfer,

grades required, relevant grade point average, and duration of transferability are subject to the limitations stated in the catalog of receiving institution; and

3. The guarantee applies to courses included in a written transfer or degree plan – which includes the institution to which the student will transfer, the baccalaureate major and degree sought, and the date such a decision was made – which must be filed with Texas Southmost College.

## **Guarantee for Job Competency**

If an Associate in Applied Science (A.A.S.) graduate is judged by his/her employer to be lacking in technical job skills identified as exit competencies for his/her specific degree program, the graduate will be provided up to nine tuition-free credit hours and course related fees of additional skill training by Texas Southmost College under the conditions of the guarantee policy.

Special conditions which apply to the guarantee are as follows:

1. The graduate must have earned the A.A.S. Degree beginning May, 1995 or thereafter in an occupational program identified in the Texas Southmost College catalog.
2. The graduate must have completed the A.A.S. Degree at Texas Southmost College (with a majority of the credits being earned at College) and must have completed the degree within a four-year time span.
3. Graduates must be employed full-time in an area directly related to the area of program concentration as certified by the Vice President for Academic Affairs.
4. Employment must commence within 12 months of graduation.
5. The employer must certify in writing that the employee is lacking entry-level skills identified by Texas Southmost College as the employee's program competencies and must specify the areas of deficiency within 90 days of the graduate's initial employment.
6. The employer, graduate, division dean, job placement counselor, and appropriate faculty member will develop a written educational plan for retraining.
7. Retraining will be limited to nine credit hours related to the identified skill deficiency and to those classes regularly scheduled during the period covered by the retraining plan.
8. All retraining must be completed within 12 months from the time the educational plan is agreed upon.
9. The guarantee does not imply that the graduate will pass any licensing or qualifying examination for a particular career.
10. Students sole remedy against Texas Southmost College and its employees for skill deficiencies shall be limited to nine credit hours of tuition-free education under conditions described above.
11. The program can be initiated through a written agreement with the office of the UTB/TSC President.

# BACCALAUREATE DEGREES

The University of Texas at Brownsville awards the following baccalaureate degrees:

- Bachelor of Applied Arts and Sciences
- Bachelor of Applied Technology
- Bachelor of Arts
- Bachelor of Arts in Interdisciplinary Studies
- Bachelor of Business Administration
- Bachelor of Science
- Bachelor of Science in Criminal Justice
- Bachelor of Science in Nursing

All course requirements for a baccalaureate degree in any of the disciplines are established within the College, School, or Department in which the discipline falls. These requirements are listed elsewhere in this catalog by the various Departments of UTB/TSC. For detailed information, a student should contact the Department in which he/she is majoring.

## Baccalaureate Degree Requirements

Specific requirements for each major field are listed in the catalog sections dealing with these majors.

It is the responsibility of students to be familiar with all the requirements for the degree.

1. A minimum of 120-124 semester credit hours including a minimum of 36 advanced hours is required, with an overall minimum grade point average of 2.00, on all non-developmental courses (including transfer work).
2. A minimum grade point average of 2.00 in the Core Curriculum, the major field and the minor field is required.
3. Students may meet the requirements for graduation in the catalog of the year in which they enter UTB/TSC, or some later catalog. However, students must graduate within eight years from the academic year of entrance or they must be placed under the provisions of a later catalog.
4. a. A major field of concentration requires a minimum of 30 semester credit hours, with at least 15 hours of advanced-level work.  
b. A minor field requires at least 18 semester credit hours with a minimum of nine semester hours of advanced-level work.  
c. Courses may not be used to satisfy a requirement for both a major and a minor or for two majors or for two minors.
5. The major-minor or broad-field major course distribution must follow the requirements set forth by the various departments, subject to any limitations and requirements noted under the baccalaureate degrees and these Graduation Requirements, or in published form issued by the various departments.
6. A minimum of 30 semester credit hours of credit must be completed in residence before a degree will be conferred. Twenty-four of the last 30 hours in the degree program must be completed in residence. At least 15 of advanced course work in the major field of study must be completed in residence.
7. Students must file an application for a degree on or before the date specified in the UTB/TSC academic calendar; applications must be filed at the Office of the Registrar at Tandy Hall 105.
8. A maximum of 45 semester credit hours of college credit will be accepted towards a baccalaureate degree by any combination of extension, examination and correspondence credit with an 18-hour

limit on correspondence credit.

Students graduating with their first baccalaureate degrees may be eligible for a tuition rebate. See "Tuition Rebate Program" for more information about this opportunity.

## Subsequent Baccalaureate Degrees

Students holding a baccalaureate degree may receive an additional baccalaureate degree of a different major from UTB/TSC. Such students continue to be classified as undergraduates and must:

- complete a minimum of 30 semester credit hours of credit at UTB/TSC (of which at least additional 21 must be for advanced courses, with at least 15 of the advanced hours in the major field) for each baccalaureate degree sought beyond the first;
- complete all requirements for the additional major(s) as set forth in this catalog; and
- complete all requirements for the additional degree(s), including grade point average requirements, elective courses, and advanced courses as set forth in this catalog.

Students earning a baccalaureate degree may also earn a minor in different fields of study by meeting all of the requirements for the major and minor fields. Courses may not be used to satisfy a requirement for both a major and a minor or for two majors and for two minors.

Additional major(s) and/or minor(s) may not be awarded to a baccalaureate degree previously earned.

## Teacher Certification

To be approved for the provisional or professional teacher's certificate or other administrative certificates, students must comply with the "State Board of Education Rules for Teacher Education." Current copies of those rules may be obtained from the Texas Education Agency or the UTB/TSC School of Education.

Graduates who seek certification as elementary or secondary teachers must have a minimum grade point average of 2.50.

For education programs leading to Teaching Certifications refer to the Programs of Study section of this catalog.

## MASTER'S DEGREES

- Master of Arts
- Master of Arts in Interdisciplinary Studies
- Master of Business Administration
- Master of Education
- Master of Science
- Master of Science in Interdisciplinary Studies
- Master of Public Policy and Management

For more information on master's degree programs, see the Graduate Catalog.

# ACADEMIC REGULATIONS

## Student Responsibility

Students are expected to be informed thoroughly about the regulations and the course requirements for degrees and to inquire in case of doubt.

It will not be UTB/TSC responsibility if complications arise because students fail to follow regulations and requirements. Regulations will not be waived nor exceptions to requirements made on a plea of ignorance of the regulation or requirement. Therefore, students should become familiar with all of the information related to their programs contained in this catalog and the Student Handbook.

Because procedural changes and changes in regulations and requirements may be made from time to time, students should work directly with their departmental advisor concerning course requirements and options, deficiencies, course sequencing, and special regulations. Requests to waive regulations and/or requirements should be directed in writing to the department chair and the Dean of the School or College, who will notify the student of the decision concerning the request.

All students by registering enter a School or College of UTB/TSC and, except in disciplinary matters, are responsible to the Dean of their School or College. Deans have jurisdiction over students' programs of study and degree requirements.

## Student Discipline

By enrolling, students neither lose the right nor escape responsibilities of citizenship. All students are expected to comply with state and federal laws, the Rules and Regulations of the Board of Regents of The University of Texas System, UTB/TSC regulations, and instructions issued by administrative officials in the course of their duties.

When students violate the prescribed codes of conduct, disciplinary action may be initiated through the Dean of Students office.

Information about the rules of conduct, due process procedures and disciplinary penalties is published in the University of Texas System Board of Regents' Rules and Regulations at Series 50101 and HOOP, §6.4.1 and 6.4.2. Copies of these documents are available in the Dean of Students office. Student disciplinary information is also published in the Student Handbook.

# ACADEMIC POLICIES

## Academic Adjustment

UTB/TSC is prepared to make appropriate academic adjustments and reasonable modifications to policies and practices in order to allow the full participation of students with disabilities in the same programs and activities available to non-disabled students. It is the responsibility of the student with a disability to initiate the request. The student may request course substitutions or modification of degree requirements by addressing a letter to the Disability Services Coordinator at the Counseling Center, to be referred to the Chairman of the Department involved. The letter should contain the student's name, address, phone number, ID number, major or minor, the specific substitution/modification request, and reason for the request. The request should document specific and pertinent disability information. The request must be received at least 14 days before the end of late registration for a decision to be given for that semester.

## Advanced Level Work

Courses numbered either 3000 or 4000 are called advanced or upper-division courses. Students may not enroll in any upper-division course until they have successfully completed all TSI requirements. Normally, students with less than 60 semester credit hours may enroll in 3000 or 4000 courses only when their schedules include enough lower level work to total at least 60 semester credit hours in addition to the upper level courses for which they wish to enroll. Approval of the Department Chair or Dean is required if the conditions above are not met for advanced level enrollment.

## Adds and Drops

A student may add or drop a course during the official Add and Drop period. After the Add and Drop period, a student may add a course for academic reasons only with permission of the appropriate Dean. The determination of the Dean is final.

After the Add/Drop period, a student may drop with a "W" from an academic course before the deadline. Students may drop their classes through Scorpion Online ([www.utb.edu](http://www.utb.edu)), the STAR Telephone System (982-5800), or in person at the Office of the Registrar in Tandy Hall 105. The student is responsible for ensuring that their request is processed by the withdrawal deadline specified. A student's financial assistance may be affected when withdrawing from a class. Students should be advised that the state legislature has capped the number of developmental hours the state will fund at 27 and the number of undergraduate credit hours at 170. Courses dropped after the twelfth class day count against those totals.

## Attendance and Absences

Students are expected to be diligent in their studies and regular in class attendance. Students are responsible for all class work and assignments. The number of absences permitted in any one course varies with instructor and course. Attendance requirements are printed in the course syllabus and announced by the instructor at the initial class meeting. On recommendation of the instructor concerned, students may at any time be dropped from courses for failure to meet the attendance requirements or other good cause. This may result in a "W" or an "F" on the student's permanent record.

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 assignment 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 the student has scheduled on that date that the student will be absent for a religious holy day or non-religious "excused absence."

A religious holy day means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code. 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.)

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 the notification acknowledged and dated by the instructor or by certified mail, return receipt requested, addressed to the instructor of each class.

## Auditing Courses

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. Students may not enter courses for audit until the seventh day after classes have begun. Those who wish to audit should contact the appropriate instructor for departmental approval. The fee for audit enrollment is \$50.00 per class. There is no charge for people 65 years and older. Audit fees are nonrefundable.

Audit students do not receive credit. An audit intention cannot be changed to credit nor can credit courses be changed to audit. Audit work cannot be used toward diploma or degree requirements. Enrollment as an auditor does not permit enrollees to take examinations, have tests or other papers checked by the instructor or participate in required oral recitations, etc.

## Cheating

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 expulsion. "Scholastic dishonesty includes but is not limited to cheating, plagiarism, collusion, the submission for credit for 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." (Board of Regents *Rules and Regulations*, Series 50101.)

Since scholastic dishonesty harms the individual, all students and the integrity of UTB/TSC, policies on scholastic dishonesty are strictly enforced.

## Classification of Students

Students are classified by the number of semester credit hours of university credit they have earned, to include developmental coursework.

- Freshman – credit for fewer than 30 semester hours.
- Sophomores – credit for 30-59 semester hours.
- Juniors – credit for 60-89 semester hours.
- Seniors – credit for 90 or more semester hours.
- Special (or Post Baccalaureate) Students – a bachelor's degree but enrolled in undergraduate courses.
- Graduate Students – a baccalaureate degree and accepted in a master's degree program.
- Special Graduate Students – a graduate degree and are continuing in a graduate program.

## Co-requisite

A co-requisite is a course which must be taken together with another course during the same enrollment period or session. All co-requisites are included with the course listings in this catalog.

## Course Load

Undergraduate course loads are defined in the table below:

	Fall	Spring	May	Summer I or II
Less Than Half	1-5	1-5		1-2
Half	6-8	6-8		3-4
Three Quarter	9-11	9-11		5
Full	12-18	12-18		6-8
*Overload	19+	19+	7+	9+

For each regular semester an undergraduate student may enroll for no more

than 18 semester credit hours. For each summer term an undergraduate student may enroll for no more than 8 semester credit hours. Enrollment in more than 18 semester hours in a regular semester or 8 in a single summer session requires authorization by the appropriate Dean of the student's college or school.

## 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 shows the credit hours. The last two digits are departmental designations.

- 0000 courses are at the developmental level – lower division
- 1000 courses are at the freshman level – lower division
- 2000 courses are at the sophomore level – lower division
- 3000 courses are at the junior level – upper division
- 4000 courses are at the senior level – upper division
- 5000 courses are at the graduate level (Students cannot receive credit in a 5000 level course if they already have credit for a comparable 4000-level course.)
- 6000 courses are at the graduate level

For example the catalog entry, SPAN 4301, means that the course is given at the senior level [4] and carries three hours of credit [3] per semester.

## Course Schedule

A Course Schedule booklet is published before Registration each Fall, Spring and Summer semester. Class changes from the schedule, such as reassignment of instructors, closing, consolidating, dividing, or equalizing teacher loads may be made for the convenience of UTB/TSC. Listings are subject to change without notice.

## Credit

The unit of credit (CR) for academic and technical courses is the semester hour. The total credit hour value (also referred to as "semester hour value", "semester credit hours" or "credit hours") of a course **usually** indicates the number of class hours it meets each week for one semester. During the long session, most courses meet three hours each week for three semester hours of credit. Courses requiring laboratory work meet additional hours at specified times.

## Final Examinations

Final examinations are held at the end of each semester. Examinations must be taken according to the published schedule unless prior approval has been obtained and alternative arrangements have been made. Approval will be granted only under rare circumstances. Students who miss an examination for reasons beyond their control should notify the instructor and/or the appropriate Department Chair immediately.

## Full-Time Undergraduate Student

Undergraduate students enrolled for at least 12 semester credit hours of credit during a regular semester or at least six semester credit hours of credit during a summer session are full-time students.

## Grade Inquiry

Final grades are available to students within 24 hours after all final exam grades have been submitted to the respective Dean's offices after the end of

each semester. Grade reports are not mailed to students. Students interested in obtaining their grades may log on to Scorpion Online (www.utb.edu) or call the STAR Telephone System (982-5800).

## Grades

The following grades are used to designate achievement in classwork. Their corresponding grade values are indicated.

Grade	Explanation	Grade Points Per Semester Hour
A	Excellent	4.00
B	Good	3.00
C	Average	2.00
D	Below Average	1.00 (Not used in graduate courses)
F	Failure	0.00
G	Must Repeat Course	Not used in computing GPA ( <i>Developmental courses only</i> )
I	Incomplete	Not used in computing GPA
P	Pass	Not used in computing GPA
Cr	Credit	Not used in computing GPA ( <i>Advanced Placement and CLEP credit only</i> )
NR	No Grade Reported	Not used in computing GPA ( <i>Office of the Registrar use only</i> )
S	Satisfactory	Not used in computing GPA ( <i>Non-course based remediation only</i> )
U	Unsatisfactory	Not used in computing GPA ( <i>Non-course based remediation only</i> )
W	Withdrawal	Not used in computing GPA
WC	Withdrawal due to Casualty	Not used in computing GPA
WM	Withdrawal Military	Not used in computing GPA

Grades are awarded in courses in which students are officially enrolled after the official record day. This deadline to withdraw is specified in the Academic Calendar for each enrollment period. After the deadline to drop with a grade of a "W" has passed, a student may not be given a "W" on the final grade sheet.

## Grade Point Averages (GPA)

Grade point averages are computed by dividing the total grade points earned by the total semester hours attempted. A sample calculation method:

Course	No.	Grade	Hours	Grade Points
English	2302	A	3 sem. hours	X 4 pts. per hour = 12
Mathematics	4316	B	3 sem. hours	X 3 pts. per hour = 9
History	3314	C	3 sem. hours	X 2 pts. per hour = 6
Chemistry	3403	D	4 sem. hours	X 1 pts. per hour = 4
Kinesiology	1101	F	1 sem. hour	X 0 pts. per hour = 0
<b>Total hours attempted</b>			<b>14 sem. hours</b>	
<b>Total grade points</b>			<b>31 points</b>	
<b>Total grade points</b>	÷	<b>Total semester hours attempted</b>	<b>=GPA</b>	
<b>31</b>	÷	<b>14</b>	<b>= 2.21</b>	

## Grade Change

If an error in computation, evaluation or recording warrants a grade change, the instructor may process a grade change form through his/her Department Chair. The change request form must have written justification by the instructor, recommendation of the Department Chair, and approval of the Dean.

## Graduation Application

Degrees are not awarded automatically upon completion of scholastic requirements. To be considered as a candidate for a degree, a student must submit a complete application packet for a degree to the Office of the Registrar by the appropriate deadline. Graduation application deadlines are: September 1 for December graduation, February 1 for May graduation and April 1 for August graduation.

Students who graduate with their first baccalaureate degree may be eligible for a tuition rebate. See "Tuition Rebate Program" for more information about this opportunity.

## Graduation Under a Specific Catalog

General and specific requirements for degrees may be altered in successive catalogs. Undergraduate students are bound by the requirements for graduation that are listed in the catalog in force the year at the time of his/her admission. However, baccalaureate students must graduate within eight years from commencement of collegiate work, and associate/certificate students must graduate within six years from the academic year of entrance, or be subject to degree requirements of subsequent catalogs.

Any changes in a Program of Study to comply with a later catalog must be approved by the appropriate Dean. The student who is required to or chooses to fulfill the requirements of a subsequent catalog must have his/her amended degree plan approved by the appropriate Dean.

## Grievances, Academic Grade Appeals

Course grade grievances must be initiated by contacting the instructor or individual with whom the grievance arose within 30 days. 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, Academic 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 are appealed in a timely manner to the Department Chair, the Dean, and the 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.

## Grievances, Non-Academic

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. Non-academic grievances are appealed in a timely manner to the Department Chair or Office Director, the Dean if appropriate, then to the Vice President for Academic Affairs, Vice President for Student Affairs, or Vice President for Business 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.

## Identification Cards

Student identification cards for semester credit hour students are issued by the Circulation Desk at the Library. Use of the Student ID Card is governed by the following conditions:

- The card remains the property of the institution and must be surrendered to any administrative official or Campus Police officer or guard of UTB/TSC on demand.
- The card must be presented for:
  - admission to any school- or faculty-sponsored activity,
  - admission to all athletic events,
  - voting in campus elections and referendums,
  - use of computer services,
  - use of the library,
  - disbursement of Financial Aid checks, and
  - any transaction at the Office of the Registrar.
- The card is nontransferable. Loss or mutilation must be reported to the Circulation Desk at the Library. A charge of \$10.00 will be made for replacement.
- ID Card photographs may be taken at any time during the library's regular hours. ID cards must be validated each semester the student is enrolled.

## Immunization Requirements

The following immunizations are required for all students who are enrolled in health-related courses which will involve direct patient contact in medical or dental care facilities or who come in contact with human biological fluids or tissue. Students 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. Students will be required to present a letter or other suitable written certification.

Students enrolled at TSC and UT System institutions will assume the full cost of the immunizations. Individual schools may require other immunizations. Proof that they have taken a polio vaccine is required for Students in the Emergency Medical Technology, Radiologic Technology, and Medical Laboratory Technology programs.

Inquiries concerning supplemental immunization requirements should be directed to Student Health Services. Certain exemptions are allowed from the immunization requirements. Students should contact the Office of Student Health Services for information.

## Incomplete Grades

A grade of "I" may be given when students have not completed the required course work within the allotted time of a regular semester or summer session if the instructor determines that the reasons for the work's being incomplete are valid and that the grade of "I" is justified. A written agreement

between the student and the instructor specifying the work to be made up and the deadline for its accomplishment must be filed in the office of the Department Chair at the time that the "I" is submitted. The work agreed upon must be satisfactorily completed and the "I" changed no later than the end of the next regular (Fall or Spring) semester from the date the "I" was received unless an extension is requested by the instructor, or the grade will automatically be recorded as "F" on the official transcript.

A student will NOT be given an "I" grade to allow:

- time to prepare coursework in addition to that assigned to the class;
- time to repeat the entire course; or
- opportunity to raise a grade.

Incomplete grades are not issued for student or faculty convenience; they may be issued only in the case of compelling, nonacademic circumstances beyond the student's control.

## Pass/Fail Option

Students enrolled in a Kinesiology activity course may take the course for the traditional letter grade (e.g. A, B, C, etc.) or may elect to take it on a Pass/Fail basis. To exercise the Pass/Fail option, students must petition to do so no later than the deadlines announced in the Academic Calendar. Petitions are made at the Office of the Registrar in Tandy Hall 105.

## Prerequisite

Prerequisites are specified requirements that must be met before students may enroll in a course. Specific prerequisites are listed in course listings.

## Quality of Work

While a grade of "D" is considered passing in a subject, an overall average of 2.00 is required for graduation. A grade of "C" or better may be required in other courses, departments or degree programs. For example, English and Math core curriculum requirements require a grade of "C" or better. Students must also make an average of 2.00 in both their major and minor fields.

## Registration

To attend classes, students must first register or enroll for the courses they wish to attend and pay all appropriate tuition and fees. Students must complete all admission procedures prior to registration. Information on registration dates and times is listed in the Academic Calendar which is listed on the printed course schedule. Information on registration procedures and deadlines may be obtained at the Academic Advising Center in Tandy Hall 214, the Go Center/Info Shop in Tandy Lobby, or the Office of the Registrar in Tandy Hall 105.

## Repeated Courses

When a course is repeated, only the last grade and hours earned are used to calculate the grade point average. (Graduate courses follow a different method of calculation.)

## Required Courses

All courses in students' programs of study are required courses and must be completed for the student to receive a degree or certificate. Most courses are sequenced from less advanced to more advanced courses and should be taken in the order suggested. Assistance with course selection and information on required courses and sequencing may be obtained in the

Academic Advising Center. In addition, students may be required to take certain developmental courses based on assessment scores or THEA scores before they are allowed to enroll in more advanced courses.

## Semester Credit Hour

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 most of the classes meet three periods, or their equivalent, each week, these classes carry three semester hours of credit. Two or three laboratory hours per week are usually required for one semester hour of laboratory credit.

## Sessions

The Texas Higher Education Coordinating Board (THECB) requires that classes that offer three semester hours for credit meet for a minimum 45 contact hours during a given session.

The Academic Year: The academic year is divided into two semesters – Fall and Spring semesters. Each semester meets for classes approximately 150 minutes per week for 15 weeks.

The Summer Session: The summer session is divided into two terms – Summer I and Summer II. Each session meets for classes approximately two hours per day for 23 class meetings.

The May Session: The May session is an intense session consisting of approximately three hours per day for 15 class meetings.

The Academic Calendar for 2005-06 is listed on page 6 of this catalog.

## Withdrawing From Classes

After the official record date, students may withdraw from classes and receive a “W” on their permanent records. This deadline to withdraw is specified in the Academic Calendar for each enrollment period. Students who do not withdraw before the deadline may not be given a “W” on the final grade sheet.

Students may withdraw from all of their classes through Scorpion Online ([www.utb.edu](http://www.utb.edu)), the STAR Telephone System (982-5800), or in person at the Office of the Registrar in Tandy Hall 105. The student is responsible for ensuring that their request is processed by the withdrawal deadline specified.

At the instructor’s discretion, and consistent with the policy stated on the course syllabus, an instructor may withdraw a student from class for non-attendance. An instructor-initiated withdrawal may result in a “W” or an “F” on the student’s permanent record.

# STANDARDS OF WORK

Policies regarding standards of student work differ for students in undergraduate programs.

## Academic Progress

### Cumulative GPA and Scholastic Standards

All grades earned at UTB and TSC are used to calculate the student’s Grade Point Average (GPA). In the case of a repeated course, the last grade recorded will be used in determining grade point average. The Scholastic Standards chart, based on cumulative GPA, indicates Good Standing, Conditional Progress, Scholastic Probation, and Scholastic Suspension.

## Cumulative GPA (All Hours Taken)

Total Hrs. Taken	Good Standing	Scholastic Progress	Conditional Probation	Scholastic Suspension
1-30	2.00 and above	1.60-1.99	Below 1.60	Below 1.60 & below 2.0 for current semester
31-59	2.00 and above	1.75-1.99	Below 1.75	Below 1.75 & below 2.0 for current semester
60+	2.00 and above	NA	Below 2.00	Below 2.00 & below 2.0 for current semester

## Good Standing

Students in Good Standing maintain a 2.00 and above GPA.

## Conditional Progress

Students making Conditional Progress maintain a minimum GPA for the number of hours taken. (Refer to Scholastic Standards chart.) Students planning to transfer to another college or university should consult that institution’s catalog to determine GPA requirements for admission. Conditional Progress also means that a student is proceeding in a satisfactory manner toward fulfilling degree or certificate requirements in a course of study.

## Scholastic Probation

Academic probation and suspension will be determined in the Fall or Spring semester on the basis of the cumulative GPA. Students whose cumulative GPA falls below the scholastic standards prescribed for Conditional Progress will be placed on Scholastic Probation for the next enrollment period.

Students whose cumulative GPA in subsequent enrollment periods is lower than required for Conditional Progress, but is at least the GPA required for probation, continue on probation. To be removed from probation, students must meet the required cumulative GPA for Conditional Progress.

## Scholastic Suspension

Students whose cumulative GPA falls below the scholastic standards prescribed for probation are suspended. Students placed on scholastic suspension may appeal to the Suspension Committee for permission to continue to enroll on a conditional basis. (See “Appeal of Scholastic Suspension” below.)

### First Scholastic Suspension

Students placed on suspension for the first time will not be allowed to re-enroll for the next enrollment period (one long semester or the next summer sessions).

### Second and Subsequent Scholastic Suspensions

Students placed on scholastic suspension for the second time will not be allowed to re-enroll for one year.

### Appeal of Scholastic Suspension

Students placed on scholastic suspension may appeal to the Suspension Committee at the Academic Advising Center for permission to enroll on a conditional basis. The appeals process has two parts, a written appeal and an appearance before the Suspension Committee.

## Written Appeal

The written appeal to the Suspension Committee must explain extenuating circumstances which kept the student from meeting required academic

standards. The written appeal must be submitted to the Suspension Committee before the late registration process begins for the semester in which the student seeks to enroll on a conditional basis.

## Appearance Before the Suspension Committee

The appearance before the Suspension Committee must be made before the end of the late registration process for the semester in which the student seeks to enroll on a conditional basis.

To schedule an appointment with the Suspension Committee, contact the Academic Advising Center in Tandy Hall 214.

# SCHOLASTIC HONORS

## Honor Student Recognition

Each semester, students with noteworthy scholastic achievement are recognized by publication of the President's List and the Dean's List.

**President's List:** Students who earn a 4.00 semester grade point average and complete a full-time course load (not including developmental coursework).

**Dean's List:** Students who earn a 3.50 to 3.99 semester grade point average and complete a full-time course load (not including developmental coursework).

**Phi Theta Kappa:** Candidates for membership must have completed 12 semester hours of Associate Degree work with a grade point average of 3.50, possess recognized qualities of leadership, and be recommended by a member of the faculty. Members must maintain a 3.25 grade point average after initiation. Membership is noted on students' official transcripts. Members are recognized at UTB/TSC awards ceremony and may wear the Phi Theta Kappa gold stole and tassel at Commencement. The purpose of the local Alpha Mu Chapter is to promote scholarship, develop leadership skills, and cultivate fellowship among qualified students.

**Alpha Chi:** Alpha Chi, a national college scholarship honor society founded in 1922, represents the highest academic honor on any member campus. The objectives are to promote and to recognize superior scholarship and those elements of character that make for effective service. Membership in Alpha Chi is limited to no more than 10 percent of the junior and senior classes in the academic divisions of colleges and universities. Students must have at least a 3.50 overall grade point average to be invited to become members of the Texas Alpha Omicron Chapter of Alpha Chi at UTB/TSC.

## Honors in Graduation

At the time of graduation, students earning a baccalaureate or associate degree will be recognized for sustained scholastic excellence by graduating with appropriate honors. Honors will be determined by a student's cumulative grade point average on all non-developmental undergraduate hours taken, including transfer hours. If courses have been repeated, the last grade recorded will be used in determining grade point average. Honors are as follows:

Summa Cum Laude:	3.90-4.00
Magna Cum Laude:	3.70-3.89
Cum Laude:	3.50-3.69



# PROGRAMS OF STUDY

# COLLEGE OF LIBERAL ARTS

Dr. Charles Dameron, Dean

South Hall 246 • 882-8253

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## Certificates and Degrees Granted

### Master of Arts

English, Spanish

### Master of Arts in Interdisciplinary Studies (*combination of the following*)

English, Fine Arts, Government, History, Sociology, Spanish

### Master of Public Policy and Management

#### Post-Baccalaureate Certificate

Diplomate in Hispanic Language and Culture

### Bachelor of Arts

Art, Communication, English, Government, History, Music, Psychology, Sociology, Spanish

### Bachelor of Science in Criminal Justice

Correctional Administration, Police Administration

### Associate in Arts

Social Work

### Associate in Fine Arts

Art, Music

### Associate in Arts in Spanish Translation

### Associate in Applied Science

Criminal Justice

### Certification

Certificate in Jazz Studies

---

## Undergraduate Departmental Courses

### Behavioral Sciences Department

Dr. Virginia V. Wood, Chair • South Hall 293 • 882-8225

ANTH Anthropology

PSYC Psychology

SOCI Sociology

SOCW Social Work

### Criminal Justice Department

Dr. Susan Ritter, Chair • South Hall 319 • 882-8993

CRIJ Criminal Justice

### English & Communication Department

William Harris, Chair • South Hall 204 • 882-8239

COMM Communications

DRAM Drama

ENGL English

SPCH Speech

### Fine Arts Department

Dr. Sue Zanne Urbis, Chair • Eidman Hall 107A • 882-8247

ARTS Art

MUAP Applied Music

MUSI Music

### Government Department

Dr. Charles Chapman, Chair • South Hall 276 • 882-8260

GOVT Government

INDS Interdisciplinary Studies

PHIL Philosophy

PPAM Public Policy and Management

### History Department

Dr. William Adams, Chair • South Hall 306 • 882-8260

HIST History

### Modern Languages Department

Cipriano Cardenas, Chair • South Hall 288 • 882-8246

ARABU Arabic

CHIN Chinese

FREN French

GERM German

INTG Interpreting

ITAL Italian

SPAN Spanish

TRSP Translation Studies

# COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

Dr. Emir José Macari, Dean

Dr. Eli E. Peña, Associate Dean

SETB 2.342 • 882-6701

## Certificates and Degrees Granted

### Master of Science

Biology, Mathematics, Physics

### Master of Science in Interdisciplinary Studies

Biology

### Bachelor of Applied Technology

Computer Information Systems Technology (Teacher Certification)

EC-12, Technical Application/Training

### Bachelor of Science

Biology, Chemistry, Computer Science (Networking and Systems Programming, Computer Vision and Digital Image Processing, Artificial Intelligence, Web Programming and E-Commerce), Mathematics, Engineering Technology (Electronics, Manufacturing, Mechanical) Engineering Physics (Computer Engineering, Electrical Engineering, Mechanical Engineering, Bioengineering), Physics

### Associate in Applied Science

Computer Information Systems (Computer Information Systems, E-Commerce and Web Services, Network Management), CAD Technology, Engineering Technology (Electronics, Manufacturing, Mechanical)

### Certificates

Air Conditioning and Refrigeration Technology

Auto Body Repair Technology

Automotive Mechanics Technology: Line Specialist, Repair Specialist, Parts Specialist

Building Trades Technology: Carpentry Specialization, Electrical Specialization and Plumbing Specialization

Cad Technology

Machine Shop Technology

Microcomputer Specialist

## Undergraduate Departmental Courses

### Biological Sciences Department

Dr. Luis V. Colom, Chair • LHSB 2.816A • 882-5040

BIOL Biology

### Chemistry and Environmental Sciences Department

Dr. Gene J. Paull, Chair • M1.114 • 882-6691

CHEM Chemistry

ESCI Environmental Sciences

GEOG Geography

GEOL Geology

ISCIU Scientific Inquiry

### Computer Sciences/Computer Information Systems Department

Dr. Mahmoud K. Quweider, Chair • SETB 1.550 • 882-6605

TCIS Computer Information Systems

COSC Computer Science

CIST Applied Technology (Computer Information Systems)

### Engineering Department

Dr. Manuel J. Blanco, Chair • SETB 1.450A • 882-6639

EECT Electrical, Electronic and Communications  
Engineering Technology/Technician

ELET Telecommunications/Electronic Engineering Technology

ENGR Engineering

ENGT Engineering Technology

INMT Industrial Manufacturing Technology

MEET Mechanical Engineering Technology

MFET Manufacturing Engineering Technology

### Industrial Technology Department

Pat Wade, Interim Chair • ITEC C303 • 982-0273

ABDR Auto Body Repair Technology

AUMT Automotive Mechanics Technology

HART Air Conditioning & Refrigeration Technology

MAIR Air Conditioning & Refrigeration Technology

CNBT Building Trades Technology

CRPT Building Trades Technology

ELPT Building Trades Technology

DFTG CAD Technology

MCHN Machine Shop Operations Technology

### Mathematics Department

Dr. Deloria Nanze-Davis, Chair • SETB 2.454 • 882-6636

MATH Mathematics

### Physics and Astronomy Department

Dr. Natalia Guevara, Chair • SETB 1.214 • 882-6779

BENG Bioengineering

PHYS Physics

PSCI Physical Science

# SCHOOL OF BUSINESS

Dr. Rafael Otero and Ms. Mary Sullivan, Interim Co-Deans

EDBC 2.504 • 882-5800

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## Certificates and Degrees Granted

### Master of Business Administration

Business Administration

### Post-Baccalaureate Certificate

Executive Management Certificate/Diplomado de Administración en Empresas

### Bachelor of Business Administration

Accounting, Finance, International Business, Management, Marketing

### Bachelor of Applied Arts and Sciences

Applied Business Technology

### Bachelor of Applied Technology

Workforce Leadership Supervision

### Business Minor

Business Administration

### Associate in Arts

Business Administration

### Associate in Applied Science

Accounting Technology, International Business, Legal Secretarial, Office Specialist, Paralegal Studies, Administrative Software Professional, Medical Office Specialist

### Certificate of Proficiency

Accounting Technology, International Business, Legal Assisting Specialist, Office Specialist, Clerical Specialist, Medical Billing Specialist, Medical Front Office Specialist, Software Application Specialist.

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## Departmental Courses

### Accounting Department

Carol Collinsworth, Chair • EDBC 2.542 • 882-3837

ACCT Accounting

BLAW Business Law

### Business Administration Department

Dr. Rafael Otero, Chair • EDBC 2.542 • 882-8915

Maggie Arriaga, Program Advisor • EDBC 1.402 • 882-7484

BMIS Management Information Systems

BUSI Business Administration

ECON Economics

FINA Finance

INTL International Business

MANA Management

MARK Marketing

### Business Technology Department

Mary Sullivan, Chair • EDBC 1.534 • 882-8211

Hilda Flores, Program Coordinator/Advisor • EDBC 1.402 • 882-7958

POFI Professional Office Information

POFT Professional Office Technology

ITSW Word Processing and Spreadsheets

### Accounting Technology Program

Mary Sullivan, Program Director • EDBC 1.534 • 882-8211

Hilda Flores, Program Coordinator/Advisor • EDBC 1.402 • 882-7958

ACNT Accounting Technology

BUSG Business Law-Technical

### International Business

Mary Sullivan, Program Director • EDBC 1.534 • 882-8211

Hilda Flores, Program Coordinator/Advisor • EDBC 1.402 • 882-7958

IBUS International Business

BMGT Business Management

MRKG Marketing- Technical

### Legal Assisting / Paralegal Studies

Pierre Kleff, Program Advisor

EDBC 1.512 • 882-8211

LGLA Legal Programs

POFL Professional Office Legal

### Medical Professional Technology

Sue Ebersole, Program Advisor

EDBC 1.510 • 882-8211

MDCA Medical Insurance

MRMT Medical Office Procedures

POFM Medical Coding/Medical Terms

### Student Advising Sessions

For information on advising sessions, please contact the School of Business Advising Center at 882-5804 or the Dean's Office at 882-5800.

**The School of Business requires that all students taking our upper level courses apply for Admission to Upper division and pay the required fee.**

# SCHOOL OF EDUCATION

Dr. Carl Stockton, Dean

Dr. Gayle Brogdon, Assistant Dean

Education Building • 882-7466

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## Certificates, Degrees and Programs

### Master of Education

Bilingual Education, Counseling and Guidance, Curriculum and Instruction, Early Childhood Education, Educational Administration, Educational Technology, English as a Second Language, Reading Specialist, Special Education/Educational Diagnostician

### Bachelor of Arts

Interdisciplinary Studies with Elementary Teacher Certification

### Bachelor of Science

Kinesiology

### Associate in Applied Science

Child Care and Development

### Certificate of Proficiency

Child Care and Development

### Teacher Certification Programs

Elementary Education: EC-4 ESL Generalist, EC-4 Bilingual Generalist  
Middle School (Grades 4-8): English Language Arts, Mathematics, Science

Secondary Education (Grades 8-12): Various Teaching Fields and Health Science Technology Education.

All Level (Grades PK-12), Art, Kinesiology, Music, Special Education (PK-12), Technology Application (EC-12).

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## Student Support Services

### Student Teaching Program

Dr. Gayle Brogdon, Assistant Dean/Certification Office • EDBC 1.102 • 882-5703

EDBI Bilingual Education/Spanish

EDCI Education – Curriculum & Instruction

EDEC Early Childhood Education

EDMG Education – Middle Grades

EDSC Secondary Education

SPED Special Education

### Teacher Certification/Certification Officer

Dr. Gayle Brogdon, Assistant Dean • EDBC 1.102 • 882-5706

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## Undergraduate Departmental Courses

### Curriculum and Instruction Department

Dr. Reynaldo Ramirez, Chair • EDBC 1.308 • 882-8979

BILS, EDBI Bilingual Education/Spanish

EDEC Early Childhood Education

EDLI Literacy

EDMG Education – Middle Grades

EDSC Secondary Education

EDSL English As A Second Language Education

EDTC Educational Technology

### School Specialties Department

Dr. Olivia Rivas, Chair • EDBC 2.208A • 882-7678

CDEC Child Care and Development

EDAD Educational Administration

EPSY Counseling and Guidance

SPED Special Education

### Child Care and Development Program

Marisela Nava, Center Manager • Raul J. Guerra Early Childhood Center • 882-8238

CDEC Child Care and Development

### Kinesiology Department

Dr. Zelma Mata, Chair • Gymnasium • 882-8290

KINE Kinesiology

### Alternative Certification Program

Dr. Gayle Brogdon, Assistant Dean/Certification Office • EDBC 1.102 • 882-5703

Elementary Education: EC-4 ESL Generalist, EC-4 Bilingual Generalist, Middle School (Grades 4-8): English Language Arts, Math, Science

Secondary Education (Grades 8-12) Various Teaching Fields: Special Education (PK-12)

All Level (Grades PK-12): Art, Kinesiology, Music, Special Education.

# SCHOOL OF HEALTH SCIENCES

Dr. Eldon L. Nelson, Dean

LHSB 2.402 • 882-5000

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## Certificates and Degrees Granted

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### Master of Science

Nursing

### Bachelor of Applied Technology

Health Services Technology

Health Sciences Technology-Education (Grades 8-12)

### Bachelor of Science

Nursing

### Associate in Applied Science

Diagnostic Medical Sonography, Emergency Medical Technology, Medical Laboratory Technology, Nursing, Radiologic Technology, Respiratory Therapy

### Certificate of Proficiency

Vocational Nursing

### Other Certificates

EMT Certificate, EMT Certificate I

EMSP Emergency Medical Technology

### Health Professions Skills – Core Curriculum Studies

Grant Olbeter, Coordinator • LHSB 2.214 • 882-5024

HPRS Health Professions Related Sciences

### Medical Laboratory Technology

Mattie Lozano, Program Director • LHSB 2.436 • 882-5047

MLAB Medical Laboratory Technology

PLAB Phlebotomy

### Radiologic Technology

Manuel Gavito, Program Director • LHSB 2.436 • 882-5013

RADR Radiologic Technology

### Respiratory Therapy

Betty Chong-Menard, Program Director • LHSB 2.204 • 882-5028

RSPT Respiratory Care

### Nursing Department

Dr. Katherine Dougherty, Chair • LHSB 2.720 • 882-5071

### Master of Science in Nursing

Dr. Eloisa Tamez, Program Director • LHSB 2.732 • 882-5070

NURS Nursing

### Bachelor of Science in Nursing

Dr. Katherine Dougherty, Program Director • LHSB 2.730 • 882-5071

NURS Nursing

### Associate Degree Nursing

Joe Lacher, Program Director • LHSB 2.726 • 882-5072

RNSG Associate Degree Nursing

### Vocational Nursing

Karen Fuss-Sommer, Program Director • LHSB 2.724 • 882-5073

VNSG Vocational Nursing

### Medical and Health Sciences Continuing Education

Rachel Wilson, Program Director • LHSB 2.202 • 882-5132/882-5130

• Fax 882-5197 • Continuing Education for Healthcare Professionals • cehealth@utb.edu

### Student Advising Sessions

For information on advising sessions, contact the Dean's Office at 882-5000.

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## Undergraduate Departmental Courses

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### Allied Health Department

Dr. John McCabe, Chair • LHSB 2.406 • 882-5010

### Bachelor of Applied Technology

Health Services Track

Dr. John McCabe, Program Director • LHSB 2.406 • 882-5010

HPRS Health Professions Related Sciences

MRIT Magnetic Resonance Imaging Technology

CTMT Computed Tomography

RSPT Respiratory Care

### Diagnostic Medical Sonography

Marti Flores, Program Director • LHSB 2.436 • 882-5014

DMSO Diagnostic Medical Sonography

### Emergency Medical Technology

Elizabeth Chavez, Program Director • LHSB 2.436 • 882-5015

# PROGRAMS OF STUDY

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### ***Minors***

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# ACCOUNTING TECHNOLOGY

Business Technology Department  
School of Business  
UTB-TSC

1  
CERT1.ACNT  
CERT1.ACNT.27  
Fall 2005

Certificate of Proficiency - Level One  
ACCOUNTING TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FIRST SEMESTER

		Hrs	Gr	Gr Pts	Sem
ACNT 1403	Introduction to Accounting I	4	†		
BMGT 1301	Supervision	3			
BMIS 1125	Fundamentals of Spreadsheets	1			
POFT 1301	Business English	3	†		
COSC 1310	Computer Literacy	3			

## SECOND SEMESTER

ACNT 1329	Payroll & Business Tax Accounting	3			
ACNT 1404	Introduction to Accounting II	4			
ACNT 1413	Computerized Accounting Applications	4			
MRKG 1311	Principles of Marketing	3			

## THIRD SEMESTER

BUSI 1301	Introduction to Business	3			
ACNT 1411	Introduction to Computerized Accounting	4			
ACNT 2380	Cooperative Education-Accounting**	3			
<i>Total number of credit hours required to complete program</i>		38			

† Grade of "C" or better is required for graduation.

\*\* Prerequisite: Consent of the Business Technology Co-op Coordinator

# AIR CONDITIONING AND REFRIGERATION

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

2  
CERT1.HART  
CERT1.HART.27  
Fall 2005

## Certificate - Level I AIR CONDITIONING AND REFRIGERATION TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
HART 1301	Basic Electricity for HVAC	3			
HART 1307	Refrigeration Principles	3			
HART 1303	Air Conditioning Control Principles	3			
MAIR 1349	Refrigerators, Freezers & Window Air Conditioners	3			

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
HART 1341	Residential Air Conditioning	3			
HART 1345	Gas & Electric Heating	3			
HART 2345	Air Conditioning Systems Design	3			
HART 2338	A.C. Installation/Startup	3			

THIRD SEMESTER		Hrs	Gr	Gr Pts	Sem
HART 2349	Heat Pumps	3			
HART 2301	Air Conditioning & Refrigeration Codes	3			
HART 1356	EPA Recovery Certification Preparation	3			
HART 2336	Troubleshooting <i>or</i>				
HART 2388	Internship	3			
Total credit hours required to complete program		36			
Total contact hours required to complete program		1120			

# AUTO BODY REPAIR

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

3  
CERT1.ABDR  
CERT1.ABDR.27  
Fall 2005

## Certificate - Level I AUTO BODY REPAIR TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FIRST SEMESTER

		Hrs	Gr	Gr Pts	Sem
ABDR 1541	Structural Analysis & Damage Repair I	5			
ABDR 1519	Basic Metal Repair	5			
ABDR 1411	Vehicle Measurement & Damage Repair Procedures	4			

### SECOND SEMESTER

ABDR 1453	Fiberglass Repair	4			
ABDR 1542	Structural Analysis & Damage Repair II	5			
ABDR 1431	Basic Refinishing	4			

### THIRD SEMESTER

ABDR 2549	Advanced Refinishing I	5			
ABDR 2255	Collision Repair Estimating	2			
ABDR 2257	Collision Repair Shop Management	2			
Total credit hours required to complete program		36			
Total contact hours required to complete program		1,056			

# AUTO MECHANICS LINE SPECIALIST

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

4  
CERT1.AUMT.LINE.SPEC  
CERT1.AUMT.LINE.SPEC.27  
Fall 2005

## Certificate - Level I AUTOMOTIVE TECHNOLOGY - LINE SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FALL SEMESTER

		Hrs	Gr	Gr Pts	Sem
AUMT 1253	Automotive Electrical Systems Theory	2			
AUMT 1249	Automotive Electronics Theory	2			
AUMT 1405	Introduction to Automotive Technology	4			
AUMT 2205	Automotive Engine Theory	2			
AUMT 2215	Automotive Engine Performance Analysis Theory I	2			

### SPRING SEMESTER

AUMT 1407	Automotive Electrical Systems	4			
AUMT 1213	Automotive Suspension & Steering Theory	2			
AUMT 2211	Automotive Electronic Controls	2			
AUMT 1257	Automotive Brake Systems Theory	2			
AUMT 2317	Automotive Engine Performance Analysis I <b>or</b>	3			
AUMT 1266	Practicum: Auto Mechanics				

### SUMMER SEMESTERS

AUMT 1310	Automotive Brake Systems	3			
AUMT 1316	Automotive Suspension & Steering Systems	3			
AUMT 2321	Auto Electrical Lighting & Accessories	3			
AUMT 2334	Auto Engine Performance Analysis II <b>or</b>	3			
AUMT 2388	Internship: Auto Mechanics				
Total credit hours required to complete program		36-37			

# AUTO MECHANICS PARTS SPECIALIST

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

5  
CERT1.AUMT.PART.SPEC  
CERT1.AUMT.PART.SPEC.27  
Fall 2005

## Certificate - Level I AUTOMOTIVE TECHNOLOGY - PARTS SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FALL SEMESTER

		Hrs	Gr	Gr Pts	Sem
AUMT 1253	Automotive Electrical Systems Theory	2			
AUMT 1249	Automotive Electronics Theory	2			
AUMT 1405	Introduction to Automotive Technology	4			
AUMT 2205	Automotive Engine Theory	2			
AUMT 2215	Automotive Engine Performance Analysis Theory I	2			

### SPRING SEMESTER

SPCH 1318	Interpersonal Communication	3			
VHPA 1301	Auto Parts Nomenclature	3			
VHPA 1441	Auto Parts Counter Sales	4			
AUMT 1266	Practicum	2			

### SUMMER SEMESTERS

VHPA 2331	Auto Parts Management	3			
VHPA 1391	Special Topics: Automotive Customer Service	3			
AUMT 2388	Internship: Auto Mechanics	3			
	Total credit hours required to complete program	33			

# AUTO MECHANICS REPAIR SPECIALIST

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

6  
CERT1.AUMT.REPA.SPEC  
CERT1.AUMT.REPA.SPEC.27  
Fall 2005

## Certificate - Level I AUTOMOTIVE TECHNOLOGY - REPAIR SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FALL SEMESTER

		Hrs	Gr	Gr Pts	Sem
AUMT 1253	Automotive Electrical Systems Theory	2			
AUMT 1249	Automotive Electronics Theory	2			
AUMT 1405	Introduction to Automotive Technology	4			
AUMT 2205	Automotive Engine Theory	2			
AUMT 2215	Automotive Engine Performance Analysis Theory I	2			

### SPRING SEMESTER

AUMT 2413	Automotive Drive Train and Axles	4			
AUMT 2323	Automotive Automatic Transmission & Transaxle Theory	3			
AUMT 1306	Automotive Engine Removal and Installation	3			
AUMT 1319	Automotive Engine Repair <b>or</b>	3			
AUMT 1266	Practicum: Auto Mechanic				

### SUMMER SEMESTERS

AUMT 1341	Automotive Heating and Air Conditioning Theory	3			
AUMT 1345	Automotive Heating and Air Conditioning	3			
AUMT 2325	Automotive Automatic Transmission & Transaxle	3			
AUMT 2328	Auto Service <b>or</b>	3			
AUMT 2388	Internship: Auto Mechanics				
	Total credit hours required to complete program	36-37			

# BUILDING TRADES - CARPENTRY SPECIALIZATION

Industrial Technology Department  
 College of Science, Mathematics and Technology  
 UTB-TSC  
 Certificate - Level I  
 Building Trades - Industrial Technology Department  
 BUILDING TRADES - CARPENTRY SPECIALIZATION

7  
 CERT1.CNBT.CON  
 CERT1.CNBT.CON.27  
 Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**FIRST SEMESTER**

		Hrs	Gr	Gr Pts	Sem
CNBT 1301	Introduction to Construction	3			
CNBT 1302	Mechanical, Plumbing, & Electrical	3			
CNBT 1305	Residential & Light Commercial Blueprint Reading	3			
CNBT 1311	Construction Methods and Materials	3			

**SECOND SEMESTER**

CRPT 1325	Forms and Foundations I	3			
CRPT 1323	Floor Systems	3			
CRPT 1315	Conventional Wall Systems	3			
CRPT 1311	Conventional Roof Systems	3			

**THIRD SEMESTER**

CRPT 1345	Conventional Interior Finish Systems	3			
CNBT 1346	Construction estimating I	3			
CRPT 1341	Conventional Exterior Finish Systems	3			
WDWK 1313	Cabinet Making <b>or</b>	3			
CNBT 1366	Practicum				
Total credit hours required to complete program		36			

# BUILDING TRADES - ELECTRICAL SPECIALIZATION

8  
 CERT1.CNBT.ELEC  
 CERT1.CNBT.ELEC.27  
 Fall 2005

Industrial Technology Department  
 College of Science, Mathematics and Technology  
 UTB-TSC  
 Certificate - Level I

Building Trades - Industrial Technology Department  
 BUILDING TRADES - ELECTRICAL SPECIALIZATION

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
CNBT 1301	Introduction to Construction	3			
CNBT 1302	Mechanical, Plumbing, & Electrical Systems	3			
CNBT 1305	Residential & Light Commercial Blueprint Reading	3			
CNBT 1311	Construction Methods and Materials	3			
SECOND SEMESTER					
ELPT 1349	Electrical Blueprint Reading	3			
ELPT 1311	Basic Electrical Theory	3			
ELPT 1325	National Electrical Code I	3			
ELPT 1329	Residential Wiring	3			
THIRD SEMESTER					
ELPT 1315	Electrical Calculations I	3			
ELPT 1345	Commercial Wiring	3			
ELTN 1343	Electrical Troubleshooting	3			
ELPT 2323	Transformers <b>or</b>	3			
ELPT 1364	Practicum				
Total credit hours required to complete program		36			



# BUILDING TRADES - PLUMBING SPECIALIZATION

Industrial Technology Department  
 College of Science, Mathematics and Technology  
 UTB-TSC  
 Certificate - Level I  
 Building Trades - Industrial Technology Department  
 BUILDING TRADES - PLUMBING SPECIALIZATION

9  
 CERT1.CNBT.PLUM  
 CERT1.CNBT.PLUM.27  
 Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**FIRST SEMESTER**

		Hrs	Gr	Gr Pts	Sem
CNBT 1301	Introduction to Construction	3			
CNBT 1302	Mechanical, Plumbing, & Electrical	3			
CNBT 1305	Residential & Light Commercial Blueprint Reading	3			
CNBT 1311	Construction Methods and Materials	3			
CNBT 1342	Building Codes & Inspections	3			

**SECOND SEMESTER**

PFPB 2437	Blueprint Reading for Plumbers	4			
PFPB 2409	Residential Construction Plumbing I	4			
PFPB 1421	Plumbing Maintenance & Repair	4			
PFPB 2408	Piping Standards & Materials	4			

**THIRD SEMESTER**

PFPB 1345	Commercial Construction & Fixture Setting	3			
PFPB 2301	Piping Fabrication & Installation I <i>or</i>	3			
CNBT 1366	Practicum				
Total credit hours required to complete program		37			

# CHILD CARE AND DEVELOPMENT

Child Care and Development Program  
School of Education  
UTB-TSC

10  
CERT1.CDEC  
CERT1.CDEC.27  
Fall 2005

Certificate of Proficiency -Level One  
CHILD CARE AND DEVELOPMENT

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
CDEC 1318	Nutrition, Health & Safety	3			
CDEC 1319	Child Guidance (Lab I)	3			
CDEC 1354	Child Growth & Development	3			
CDEC 1359	Children with Special Needs	3			

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
CDEC 1313	Curriculum Resources for Early Childhood Programs	3			
CDEC 1356	Emergent Literacy	3			
CDEC 1367	Practicum in Child Development (Field Experience)	3			
CDEC 1321	The Infant and Toddler	3			

FIRST SUMMER SESSION		Hrs	Gr	Gr Pts	Sem
CDEC 1357	Math & Science for Early Childhood (Field Experience)	3			
CDEC 2326	Administration of Programs for Children I	3			

SECOND SUMMER SESSION		Hrs	Gr	Gr Pts	Sem
CDEC 1358	Creative Arts for Early Childhood (Field Experience)	3			
CDEC 2328	Administration of Programs for Children II	3			
Total credit hours required to complete program		36			

# CLERICAL SPECIALIST

Business Technology Department  
School of Business  
UTB-TSC

11  
CERT1.CSPE  
CERT1.CSPE.27  
Fall 2005

Certificate of Proficiency-Level One

## CLERICAL SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
POFT 1329	Beginning Keyboarding	3			
POFT 1301	Business English	3	†		
POFT 1313	Professional Development for Office Personnel	3			
POFT 1319	Records & Information Management 1	3			
ITSW 1301	Introduction to Word Processing	3			
EXIT EXAM*	(MUST PASS EXIT EXAM)				
Total Credit Hours to complete program		15			
Total contact hours required to complete program		240			

† Grade of "C" or better is required for graduation.

\* Students must pass the departmental Exit Exam prior to graduation.

This degree plan is active for six years from the date indicated above. Noncompletion may require updating to an active degree plan. Developmental courses may be required based on assessment scores. ALL students must comply with THEA requirements.

# COMPUTER-AIDED DRAFTING TECHNOLOGY

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

13  
CERT1.DFTG  
CERT1.DFTG.27  
Fall 2005

## Certificate - Level I COMPUTER-AIDED DRAFTING (CAD) TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
DFTG	1405	Technical Drafting	4		
DFTG	1409	Basic CAD	4		
DFTG	2440	Solid Modeling/Design	4		

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
DFTG	1417	Architectural - Residential	4		
DFTG	2421	Topographical Drafting	4		
DFTG	2432	Advanced CAD	4		

SUMMER SEMESTER		Hrs	Gr	Gr Pts	Sem
DFTG	DFTG Elective *	3			
DFTG	DFTG Elective *	3			
	Competency Exam	0			
Total credit hours required to complete program		30			

\* Electives: DFTG 2310, 2317, 2323, 2328, 2348, 2350, ARCE 1352

"C" or better is required for **all** courses.

# EMERGENCY MEDICAL TECHNOLOGY

Allied Health Department  
School of Health Sciences  
UTB-TSC

14  
CERT1.EMSP  
CERT1.EMSP.27  
Fall 2005

## Certificate of Proficiency - Level One Emergency Medical Technology

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PREREQUISITES		Hrs	Gr	Gr Pts	Sem
EMSP 1019	CPR - Basic Life Support	0			
HPRS 2300	Pharmacology for Health Professions	3			
HPRS 1101	Introduction to Health Care Professions	1			

### FALL SEMESTER

HPRS 1204	Basic Health Profession Skills	2			
HPRS 1106	Medical Terminology	1			
EMSP 1401	Emergency Medical Technician - Basic	4			
EMSP 1266	Practicum/Field Experience - EMT/Tech I	2			
HPRS 1205	Medical Law/Ethics for Health Professions	2			

### SPRING SEMESTER

EMSP 1356	Patient Assessment and Airway Management	3			
EMSP 1267	Practicum/Field Experience - EMT/Tech II	2			
EMSP 1209	Emergency Medical Dispatching	2			
Total credit hours required to complete program		22			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans. Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

# INTERNATIONAL BUSINESS TECHNOLOGY

Business Technology Department  
School of Business  
UTB-TSC

15  
CERT1.IBUS  
CERT1.IBUS.27  
Fall 2005

## Certificate of Proficiency - Level One INTERNATIONAL BUSINESS TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
GEOG 1303	General World Geography	3			
IBUS 1305	Introduction to Business	3			
ACNT 1403	Introduction to Accounting I	4	†		
POFT 1329	Beginning Keyboarding <b>or</b>	3			
ITSW 1301	Introduction to Word Processing				
IBUS 1301	Principles of Exports	3			

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
ACNT 1404	Introduction to Accounting II	4			
MRKG 1311	Principles of Marketing	3			
IBUS 1302	Principles of Imports	3			
IBUS 2345	Import Customs Regulations	3			
POFT 1301	Business English	3	†		
THIRD SEMESTER		Hrs	Gr	Gr Pts	Sem
BMGT 1301	Supervision	3			
ITSW 1304	Introduction to Spreadsheets	3			
IBUS 2380	Cooperative Education International Business/ Trade/Commerce*	3			
Total credit hours required to complete program		41			
Total contact hours required to complete program		944			

† Grade of "C" or better is required for graduation.

\* Prerequisite: Consent of the Business Technology Co-op Coordinator.

# LEGAL ASSISTING SPECIALIST

Business Technology Department  
School of Business  
UTB-TSC

16  
CERT1.LGLA  
CERT1.LGLA.27  
Fall 2005

Certificate of Proficiency - Level One  
LEGAL ASSISTING SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FIRST SEMESTER

			Hrs	Gr	Gr Pts	Sem
LGLA	1307	Introduction to Law and the Legal Professions	3			
BUSG	2317	Business Law/Commercial	3			
POFL	1305	Legal Terminology	3			
LGLA	1355	Family Law	3			
POFT	1313	Professional Development for Office Personnel	3			

## SECOND SEMESTER

LGLA	1317	Law Office Technology	3			
LGLA	2309	Real Property	3			
LGLA	1344	Texas Civil Litigation	3			
LGLA	2303	Torts and Personal Injury Law	3			

## THIRD SEMESTER

LGLA	1353	Wills, Trusts, & Probate Administration	3			
LGLA	2307	Law Office Management	3			
LGLA	2313	Criminal Law and Procedure	3			
LGLA	2380	Cooperative Education-Paralegal/Legal Assistant*	3			
POFT	1192	Special Topics (Portfolio)**	1			
Total credit hours required to complete program			40			
Total contact hours required to complete program			928			

\* Prerequisite: Approval of Department Chair or Co-op Coordinator.

\*\* This course must be taken in the last semester; Department Approval Required.

# MACHINE SHOP OPERATIONS

Industrial Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

17  
CERT1.MCHN  
CERT1.MCHN.27  
Fall 2005

## Certificate - Level I MACHINE SHOP TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
MCHN 1332	Bench Work & Layout	3			
MCHN 1343	Machine Shop Math	3			
MCHN 1317	Machine Shop Blueprint Reading	3			
MCHN 1338	Machining I	3			

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
MCHN 1302	Machinist II	3			
MCHN 1305	Metals & Heat Treatment	3			
MCHN 1341	Basic Machine Shop II	3			
MCHN 1320	Precision Tools & Measurement	3			

THIRD SEMESTER		Hrs	Gr	Gr Pts	Sem
MCHN 1352	Intermediate Machining I	3			
MCHN 2303	Fundamentals of CNC Machine Controls	3			
MCHN 1354	Intermediate Machining II	3			
MCHN 2337	Advanced Milling Operation	3			
Total credit hours required to complete program		36			
Total contact hours required to complete program		1024			



# MEDICAL BILLING SPECIALIST

Business Technology Department  
School of Business  
UTB-TSC

18  
CERT1.MBS  
CERT1.MBS.27  
Fall 2005

Certificate of Proficiency - Level One  
MEDICAL BILLING SPECIALIST\*

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
MDCA 1443	Medical Insurance	4			
POFM 1453	Medical Coding	4			
POFM 1304	Introduction to Health Records	3			
POFM 1313	Medical Terminology I	3			
MRMT 1303	Medical Office Procedures**	3			
Total credit hours required to complete program		17			
Total contact hours required to complete program		272			

\* This program is designed for the working professional in a medical office. Department approval is required before declaring this major.

\*\* Capstone Course

This degree plan is active for six years from the date indicated above.

Noncompletion may require updating to an active degree plan.

Developmental courses may be recommended based on assessment scores.

Students cannot accumulate credit hours outside of the above specified curriculum without meeting THEA requirements.

# MEDICAL FRONT OFFICE SPECIALIST

Business Technology Department  
School of Business  
UTB-TSC

19  
CERT1.MFOS  
CERT1.MFOS.27  
Fall 2005

## Certificate of Proficiency - Level One MEDICAL FRONT OFFICE SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
POFT 1301	Business English	3	†		
ITSW 1301	Introduction to Word Processing	3			
POFM 1313	Medical Terminology I	3			
ITSW 1304	Introduction to Spreadsheets	3			
BMGT 1301	Supervision	3			

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
MRMT 1303	Medical Office Procedures	3			
MDCA 1443	Medical Insurance	4			
POFM 1304	Introduction to Health Records	3			
POFM 1453	Medical Coding	4			
POFM 2380	Cooperative Education-Medical*	3			
	Admin/Exec. Assistant and Secretary				
Total credit hours required to complete program		32			
Total contact hours required to complete program		800			

- † Grade of "C" or better is required for graduation.
- \* Prerequisite - Approval of departmental chair or co-op coordinator.

This degree plan is active for six years from the date indicated above.  
 Noncompletion may require updating to an active degree plan.  
 Developmental courses may be recommended based on assessment scores.  
 Students cannot accumulate credit hours outside of the above specified curriculum without meeting THEA requirements.

# MICROCOMPUTER SPECIALIST

Computer Information Systems Department  
College of Science, Mathematics and Technology  
UTB-TSC

20  
CERT1.CIS  
CERT1.CIS.27  
Fall 2005

## Certificate of Proficiency - Level One MICROCOMPUTER SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FIRST SEMESTER

			Hrs	Gr	Gr Pts	Sem
ITSC	1425	Personal Computer Hardware	4			
ITSC	1409	Integrated Software Applications I	4			
COSC	1310	Computer Literacy	3			
ITSC	1413	Internet/Web Page Development	4			

### SECOND SEMESTER

ITSE	2409	Introduction to Data Base Programming	4			
ITSE	1431	Introduction to Visual Basic Programming	4			
POFI	2431	Desktop Publishing for the Office	4			
		Elective *	4			
Total credit hours required to complete program			31			
Total contact hours required to complete program			592			

\* Approved Electives: ACNT 1403, ITSC 2435.

Upon completion of the required courses for the Certificate of Proficiency - Microcomputer Specialist and during the final semester of course work students will be required to take their final comprehensive evaluation in an Exit Exam.

# OFFICE SPECIALIST

Business Technology Department  
School of Business  
UTB-TSC

21  
CERT1.OFSC  
CERT1.OFSC.27  
Fall 2005

## Certificate of Proficiency - Level One OFFICE SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FIRST SEMESTER

			Hrs	Gr	Gr Pts	Sem
POFT	1329	Beginning Keyboarding	3			
POFT	1301	Business English	3	†		
POFT	1313	Professional Development for Office Personnel	3			
POFT	1331	Business Machine Applications	3			
ITSW	1301	Introduction to Word Processing	3			

### SECOND SEMESTER

POFT	2303	Speed and Accuracy Building	3			
POFT	1309	Administrative Office Procedures I	3			
ITSW	1304	Introduction to Spreadsheets	3			
ITSW	2331	Advanced Word Processing	3			
POFT	1319	Records & Information Management I	3			
EXIT	EXAM	(Student Must Pass Exit Exam)				
Total credit hours required to complete program			30			
Total contact hours required to complete program			480			

† Grade of "C" or better is required for graduation.

This degree plan is active for six years from the date indicated above.

Noncompletion may require updating to an active degree plan.

Students who are enrolled in certificate programs of 42 hours or less at a community or technical college are waived from THEA requirements.

To be waived, students cannot accumulate credit hours of any type outside of the above specified curriculum

Developmental courses may be recommended based on assessment scores.

# SOFTWARE APPLICATIONS SPECIALIST

Business Technology Department  
School of Business  
UTB-TSC

22  
CERT1.ADSP  
CERT1.ADSP.27  
Fall 2005

## Certificate of Proficiency - Level One SOFTWARE APPLICATIONS SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
POFT 1329	Beginning Keyboarding	3			
ITSW 1307	Introduction to Database (Microsoft Access)	3			
ITNW 1337	Introduction to Internet	3			
ITSW 1304	Introduction to Spreadsheets	3			
ITSW 1301	Introduction to Word Processing	3			

### SECOND SEMESTER

POFT 2303	Speed and Accuracy Building	3			
ITSW 1310	Introduction to Presentation Graphics Software	3			
ITSW 2331	Advanced Word Processing	3			
POFI 2331	Desktop Publishing for the Office	3			

### THIRD SEMESTER

ITSW 2431	Administrative Systems***	4			
	TOTAL Semester Credit Hours	31			
	Total number of contact hours	512			

\*\*\* Capstone course.

This degree plan is active for six years from the date indicated above.

Noncompletion may require updating to an active degree plan.

Developmental courses may be recommended based on assessment scores.

Students cannot accumulate credit hours outside of the above specified curriculum without meeting THEA requirements.

# EMERGENCY MEDICAL TECHNOLOGY

Allied Health Department  
School of Health Sciences  
UTB-TSC

23  
CERT2.EMSP  
Fall 2005

## Certificate of Proficiency -Level Two Emergency Medical Technology

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PREREQUISITES		Hrs	Gr	Gr Pts	Sem
EMSP 1019	CPR - Basic Life Support	0			
HPRS 2300	Pharmacology for Health Professions	3			
HPRS 1101	Introduction to Health Care Professions	1			

### FRESHMAN YEAR

#### FALL SEMESTER

HPRS 1204	Basic Health Profession Skills	2			
HPRS 1106	Medical Terminology	1			
EMSP 1401	Emergency Medical Technician - Basic	4			
EMSP 1266	Practicum/Field Experience - EMT/Tech I	2			
HPRS 1205	Medical Law/Ethics for Health Professions	2			
BIOL 2301	Human Anatomy and Physiology I	3			
BIOL 2101	Human Anatomy and Physiology I - Lab	1			

#### SPRING SEMESTER

EMSP 1356	Patient Assessment and Airway Management	3			
EMSP 1267	Practicum/Field Experience - EMT/Tech II	2			
EMSP 1209	Emergency Medical Dispatching	2			
BIOL 2302	Human Anatomy and Physiology II	3			
BIOL 2102	Human Anatomy and Physiology II- Lab	1			

#### FIRST SUMMER SEMESTER

EMSP 1208	Emergency Vehicle Operations	2			
EMSP 1149	Pre-Hospital Trauma Life Support	1			
EMSP 2135	Advanced Cardiac Life Support	1			

#### SECOND SUMMER SEMESTER

EMSP 2345	EMS Supervision/Management	3			
EMSP 1147	Pediatric Advanced Life Support	1			

### SOPHOMORE YEAR

#### FALL SEMESTER

EMSP 2444	Cardiology	4			
EMSP 2266	Practicum/Field Experience - EMT/Technician III	2			

#### SPRING SEMESTER

EMSP 2243	Assessment Based Management	2			
EMSP 2434	Medical Emergencies	4			
EMSP 2267	Practicum/Field Experience - EMT/Technician IV	2			
Total credit hours required to complete program		52			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans.

Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

**ELECTRONICS ENGINEERING TECHNOLOGY**

24  
CERT2.ELET  
Fall 2005

Engineering Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

Certificate of Proficiency - Level Two  
ELECTRONICS ENGINEERING TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**RESERVED FOR FUTURE USE**

**MANUFACTURING ENGINEERING TECHNOLOGY**

25  
CERT2. MFET  
Fall 2005

Engineering Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

Certificate of Proficiency - Level Two  
MANUFACTURING ENGINEERING TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**RESERVED FOR FUTURE USE**



**MECHANICAL ENGINEERING TECHNOLOGY**

26  
CERT2.MEET  
Fall 2005

Engineering Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC

Certificate of Proficiency - Level Two  
MECHANICAL ENGINEERING TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**RESERVED FOR FUTURE USE**

# VOCATIONAL NURSING

27  
CERT2.VNSG  
Fall 2005

Nursing Department  
School of Health Sciences  
UTB-TSC  
Certificate of Proficiency -Level II  
Vocational Nursing  
August to August Program

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PREREQUISITES		Hrs	Gr	Gr Pts	Sem
HPRS 1101	Introduction to Health Professions	1			
HPRS 1106	Medical Terminology	1			
HPRS 1204	Basic Health Professions Skills	2			
BIOL 2301	Anatomy and Physiology I	3	†		
BIOL 2302	Anatomy and Physiology II	3	†		

## FALL SEMESTER

VNSG 1304	Foundations of Nursing I	3			
VNSG 1231	Pharmacology	2			
VNSG 1226	Gerontology	2			
VNSG 1502	Applied Nursing Skills I	5			
VNSG 1227	Essentials of Medication Administration	2			
VNSG 1360	Clinical I-A	3			
VNSG 1160	Clinical I-B	1			

## SPRING SEMESTER

VNSG 1330	Maternal-Neonatal Nursing	3			
VNSG 1261	Clinical II	2			
VNSG 1334	Pediatrics	3			
VNSG 1262	Clinical III	2			
VNSG 1429	Medical-surgical Nursing I	4			
VNSG 2461	Clinical IV	4			

## FIRST SUMMER SEMESTER

VNSG 1432	Medical-surgical Nursing II	4			
VNSG 2462	Clinical V	4			

## SECOND SUMMER SEMESTER

VNSG 1238	Mental Illness	2			
VNSG 1119	Professional Development	1			
Total credit hours required to complete program		57			

† Minimum grade "B" required.

This degree plan is active for two years from date indicated above.

Students who are admitted to a vocational nursing program must make continuous satisfactory progress toward completion of their degree plans.

Continuous satisfactory progress means a minimum grade of "C" (75) must be obtained in each course required in the degree plan.

# VOCATIONAL NURSING

27  
CERT2.VNSG  
Fall 2005

Allied Health Department  
School of Health Sciences  
UTB-TSC  
Certificate of Proficiency -Level Two  
Vocational Nursing  
January to December Program

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## PREREQUISITES

		Hrs	Gr	Gr Pts	Sem
HPRS 1101	Introduction to Health Professions	1			
HPRS 1106	Medical Terminology	1			
HPRS 1204	Basic Health Professions Skills	2			
BIOL 2301	Anatomy and Physiology I	3	†		
BIOL 2302	Anatomy and Physiology II	3	†		

## SPRING SEMESTER

VNSG 1304	Foundations of Nursing I	3			
VNSG 1231	Pharmacology	2			
VNSG 1226	Gerontology	2			
VNSG 1502	Applied Nursing Skills I	5			
VNSG 1227	Essentials of Medication Administration	2			
VNSG 1360	Clinical I-A	3			
VNSG 1160	Clinical I-B	1			

## FIRST SUMMER SEMESTER

VNSG 1330	Maternal-Neonatal Nursing	3			
VNSG 1261	Clinical II	2			
VNSG 1238	Mental Illness	2			

## SECOND SUMMER SEMESTER

VNSG 1334	Pediatrics	3			
VNSG 1262	Clinical III	2			
VNSG 1119	Professional Development	1			

## FALL SEMESTER

VNSG 1429	Medical-surgical Nursing I	4			
VNSG 2461	Clinical IV	4			
VNSG 1432	Medical-surgical Nursing II	4			
VNSG 2462	Clinical V	4			
	Total credit hours required to complete program	57			

† Minimum grade "B" required.

This degree plan is active for two years from date indicated above.

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans.

Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

# ACCOUNTING TECHNOLOGY

28  
AAS.ACNT  
Fall 2005

Business Technology Department  
School of Business  
UTB-TSC

Associate in Applied Science  
ACCOUNTING TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FIRST SEMESTER			Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†			
ACNT 1403	Introduction to Accounting I	4	†			
BMGT 1301	Supervision	3				
BMIS 1125	Fundamentals of Spreadsheets	1				
POFT 1301	Business English	3	†			
COSC 1310	Computer Literacy	3				

## SECOND SEMESTER

ENGL 1302	Composition II	3	†		
ACNT 1329	Payroll & Business Tax Accounting	3			
ACNT 1404	Introduction to Accounting II	4			
ACNT 1413	Computerized Accounting Applications	4			
MRKG 1311	Principles of Marketing	3			

## SOPHOMORE YEAR

### FIRST SEMESTER

BUSI 1301	Introduction to Business	3			
ACNT 1411	Introduction to Computerized Accounting	4			
MATH 1332	Math for Liberal Arts <b>or</b> MATH 1314 College Algebra	3	†		
ACCT 2401	Principles of Accounting I	4			
ACNT 1331	Federal Income Tax: Individual	3			

### SECOND SEMESTER

SPCH 1315	Applied Communication	3			
PSYC 2301	Introduction to Psychology	3			
BUSG 2317	Business Law/Commercial	3			
ECON 2301	Macroeconomics	3			
ACNT 2380	Cooperative Education-Accounting ‡	3			
TOTAL Semester Credit Hours		66			
Total number of contact hours		1344			

† Grade of "C" or better is required for graduation.

‡ Prerequisite: Consent of the Business Technology Co-op Coordinator.

This degree plan is active for six years from the date indicated above.  
Noncompletion may require updating to an active degree plan.  
Developmental courses may be required based on assessment scores.  
ALL students must comply with THEA requirements.

# ADMINISTRATIVE SOFTWARE PROFESSIONAL

29  
AAS.ADSP  
Fall 2005

Business Technology Department  
School of Business  
UTB-TSC

Associate in Applied Science  
ADMINISTRATIVE SOFTWARE PROFESSIONAL

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FIRST SEMESTER			Hrs	Gr	Gr Pts	Sem
ITSW 1301	Introduction to Word Processing		3			
POFT 1301	Business English		3	†		
POFT 1313	Professional Development for Office Personnel		3			
PSYC 2301	Introduction to Psychology		3			
POFT 1329	Beginning Keyboarding		3			

### SECOND SEMESTER

ITSW 2331	Advanced Word Processing		3			
POFT 1309	Administrative Office Procedures I		3			
POFT 1319	Records & Information Management I		3			
ITNW 1337	Introduction to Internet		3			
POFT 2312	Business Correspondence & Communication		3			
POFI 2331	Desktop Publishing for the Office		3			

## SOPHOMORE YEAR

### FIRST SEMESTER

ENGL 1301	Composition I		3	†		
ITSW 1304	Introduction to Spreadsheets		3			
ITSW 1310	Introduction to Presentation Graphics		3			
ITSW 1307	Introduction to Database (Microsoft Access)		3			
POFT 2303	Speed and Accuracy Building		3			

### SECOND SEMESTER

MATH 1332	Math for Liberal Arts or MATH 1314 College Algebra		3	†		
SPCH 1315	Applied Communication <i>or</i> SPCH 1318 Interpersonal Communication		3			
ITSW 2334	Advanced Spreadsheets		3			
	Approved Elective (Humanities)		3			
POFT 2380	Cooperative Education*		3			
POFT 2431	Administrative Systems**		4			
TOTAL Semester Credit Hours			67			
Total number of contact hours			1376			

† Grade of "C" or better is required for graduation

\* Prerequisite: Approval of Department Chair or Co-op Coordinator

\*\* Capstone course

This degree plan is active for six years from the date indicated above.  
Noncompletion may require updating to an active degree plan.  
Developmental courses may be required based on assessment scores.  
ALL students must comply with THEA requirements.  
A Student Portfolio must be submitted and approved prior to graduation.

# ART

College of Liberal Arts  
University of Texas at Brownsville and Texas Southmost College  
Associate in Fine Arts  
ART

30  
AFA.ARTS  
Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## GENERAL EDUCATION CORE - 31/32 HOURS

COMMUNICATION REQUIREMENTS - 9 hours		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <i>or</i> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3			

### MATH or SCIENCE REQUIREMENT - 3/4 hours Select *one* of the following:

MATH 1314	College Algebra		†		
MATH 1324	Business Algebra				
MATH 1332	Math for Liberal Arts <i>or</i> higher-level MATH				
	Any 4-hour SCIENCE course				

### SOCIAL SCIENCE REQUIREMENTS - 12 hours

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

### KINESIOLOGY REQUIREMENT - 1 hour

KINE 11__	Any activity/health/fitness/wellness course	1			
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### MODERN LANGUAGE REQUIREMENTS - 6 hours

Six hours of same modern language, other than English at the 1000 level or higher. Music Majors/Minors must take <i>FRENCH and GERMAN</i> . Spanish Majors/Minors must begin with <i>SPAN 2321 and SPAN 2322</i> .					
		3			
		3			

## FINE ARTS REQUIREMENTS - Art Courses - 30 HOURS

The Department recommends the use of the Art Minor to fulfill these 30 hours.					
		3			
		3			
		3			
		3			
		3			
		3			
		3			
		3			
		3			
		3			

### ELECTIVES - 0/1 HOURS *Recommended: COSC 1310 or other Computer Science Course*

	TOTAL Semester Credit Hours	<b>62</b>			

† Grade must be C or better

# BUSINESS

31  
AA.BUSI  
Fall 2005

Business Administration Department  
School of Business  
UTB-TSC  
Associate in Arts - BUSINESS

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### GENERAL EDUCATION CORE - 48 HOURS

#### COMMUNICATION REQUIREMENTS - 9 hours

		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II	3	†		
SPCH 1315	Applied Communication	3			

#### MATH or SCIENCE REQUIREMENT - 3 hours

MATH 1314	College Algebra	3	†		
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#### NATURAL SCIENCE REQUIREMENT - 8 hours

Select any two 4-hour science courses (3 hrs. lecture, 1 hr. lab)					
		4			
		4			

#### HUMANITIES REQUIREMENTS - 6 hours

	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation    ARTS 1303 Art History    or MUSI 1306 Music Appreciation    MUSI 1308 Music Literature	3			

#### SOCIAL SCIENCE REQUIREMENTS - 12 hours

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

#### BEHAVIORAL SCIENCE REQUIREMENT - 3 hours

ECON 2301	Macroeconomics	3	†		
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#### KINESIOLOGY REQUIREMENT - 1 hour

KINE 11__	Any activity/health/fitness/wellness course	1			
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#### MODERN LANGUAGE REQUIREMENTS - 6 hours

Six hours of same modern language, other than English at the 1000 level or higher. Music Majors/Minors must take <i>FRENCH and GERMAN</i> . Spanish Majors/Minors must begin with <i>SPAN 2321 and SPAN 2322</i> .					
		3			
		3			

#### BUS. ADMIN. LOWER DIVISION CORE REQUIREMENTS - 16 HOURS

BUSI 1301	Introduction to Business	3	†		
ACCT 2401	Principles of Accounting I	4	†		
ACCT 2402	Principles of Accounting II	4	†		
ECON 2302	Microeconomics	3	†		
BMISU 1125	Fundamentals of Spreadsheets	1	†		
BMISU 1135	Fundamentals of Access for Windows	1	†		
TOTAL Semester Credit Hours		64			

† Grade must be C or better.

# CHILD CARE AND DEVELOPMENT

32  
AAS.CDEC  
Fall 2005

School Specialties Department  
School of Education  
UTB-TSC

Associate in Applied Science

## CHILD CARE AND DEVELOPMENT

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
CDEC 1318	Nutrition, Health & Safety	3			
CDEC 1319	Child Guidance (Lab I)	3			
CDEC 1354	Child Growth & Development	3			
CDEC 1356	Emergent Literacy for Early Childhood	3			
COSC 1310	Computer Literacy	3			

#### SECOND SEMESTER

CDEC 1313	Curriculum Resources for Early Childhood Programs	3			
CDEC 1367	Practicum in Child Development (Field Experience)	3			
CDEC 1321	The Infant and the Toddler	3			
ENGL 1301	Composition I	3	†		

#### FIRST SUMMER SESSION

CDEC 1357	Math & Science for Early Childhood (Field Experience)	3			
CDEC 2326	Administration of Programs for Children I	3			

#### SECOND SUMMER SESSION

CDEC 1358	Creative Arts for Early Childhood (Field Experience)	3			
CDEC 2328	Administration of Programs for Children II	3			

### SOPHOMORE YEAR

#### FIRST SEMESTER

CDEC 1359	Children with Special Needs	3			
CDEC 2587	Internship-Early Childhood Providers	5			
SPCH 1315	Applied Communication	3			
GOVT 2301	American Government I	3			

#### SECOND SEMESTER

CDEC 1396	Special Topics in Admin. of Programs for Children	3			
CDEC 2341	The School Age Child	3			
PSYC 2308	Child Psychology	3			
MATH 1314	College Algebra, <b>or</b>				
MATH 1332	Math for Liberal Arts, <b>or</b>				
MATH 1324	Business Algebra	3	†		
TOTAL Semester Credit Hours		65			

† Grade must be C or better



# COMPUTER INFORMATION SYSTEMS

33  
AAS.CIS  
Fall 2005

Computer Sciences/Computer Information Systems Department  
College of Science, Mathematics and Technology  
UTB-TSC

Associate in Applied Science  
COMPUTER INFORMATION SYSTEMS

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
COSC 1310	Computer Literacy <b>or</b> COSC 1336 Programming Fundamentals I	3			
ENGL 1301	Composition I	3	†		
	Humanities/Fine Arts Elective	3			
MATH 1314	College Algebra (or higher mathematics elective)	3	†		

SECOND SEMESTER		Hrs	Gr	Gr Pts	Sem
COSC 1336	Programming Fundamentals I	3			
ITSC 1413	Internet/Web Page Development	4			
ITSE 1425	Personal Computer Hardware	4			
ENGL 1302	Composition II	3	†		

SUMMER SESSSIONS		Hrs	Gr	Gr Pts	Sem
ITSC 1409	Integrated Software Applications I	4			
ITSE 2409	Introduction to Data Base Programming	4	†		
	ECON 1303 Consumer Economics ECON 2301 Macroeconomics PSYC 2301 Intro to Psychology <b>or</b> SOCI 1301 Intro to Sociology	3			

THIRD SEMESTER		Hrs	Gr	Gr Pts	Sem
	SPCH 1315, SPCH 1321, or SPCH 1318	3			
ITNW 2409	Network Administration for Intranet	4			
	CIS Elective <sup>1</sup>	4			
	CIS Elective <sup>1</sup>	4			

FOURTH SEMESTER		Hrs	Gr	Gr Pts	Sem
	CIS Elective <sup>1</sup>	4			
	CIS Elective <sup>1</sup>	4			
	CIS Elective <sup>1</sup>	4			
ITSW 2365	Practicum - Data Processing Technology	3			
<b>TOTAL Semester Credit Hours</b>		<b>67</b>			

† Grade must be C or better

<sup>1</sup> Choose courses from one of the following tracks:

**CIS Track**

- ITSC 1409 Integrated Software Applications I
- ITSC 1403 Introduction to Visual Basic Programming
- ITSE 2449 Advanced Visual Basic Programming
- POFI 2431 Desktop Publishing for the Office
- IMED 2309 Internet Commerce
- Network Management Track**
- ITNW 2459 Web Server and Support & Maintenance
- COSC 1437 Programming Fundamentals II
- ITSC 1421 PC Operating Systems-Windows
- ITSC 1407 Unix Operating System I
- ITNW 1492 Special Topic in Computer Systems  
Networking and Telecommunications

**E-Commerce and Web Services Track**

- COSC 1437 Programming Fundamentals II
- IMED 2309 Internet Commerce
- ITNW 2434 Adv. Web Page Programming
- IMED 2441 Advanced Digital Video
- ITNW 2459 Web Server Support and  
Maintenance

Upon completion of the required courses for the AAS in Computer Information Systems and during the final semester of course work students will be required to take their final comprehensive evaluation in an Exit Exam.

# CRIMINAL JUSTICE

Criminal Justice Department  
College of Liberal Arts  
UTB-TSC

Associate in Applied Science  
CRIMINAL JUSTICE

34  
AAS.CRIJ  
Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## GENERAL EDUCATION CORE - 37 HOURS

COMMUNICATION REQUIREMENTS - 9 hours		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <b>or</b>	3	†		
ENGL 2311	Technical & Business Writing		†		
SPCH 1315	Applied Communication	3			

## MATH or SCIENCE REQUIREMENT - 3 hours

MATH 1314	College Algebra <b>or</b>	3	†		
MATH 1332	Math For Liberal Arts		†		

## HUMANITIES REQUIREMENTS - 6 hours

ENGL _____	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation    ARTS 1303 Art History <b>or</b> MUSI 1306 Music Appreciation    MUSI 1308 Music Literature	3			

## SOCIAL SCIENCE REQUIREMENTS - 12 hours

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

## BEHAVIORAL SCIENCE REQUIREMENT - 6 hours

SOCI 1301	Introduction to Sociology	3			
PSYC 2301	Introduction to Psychology	3			

## KINESIOLOGY REQUIREMENT - 1 hour

KINE 11__	Any activity/health/fitness/wellness course	1			
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## CRIMINAL JUSTICE REQUIREMENTS - 21 HOURS

CRIJ 1301	Introduction to Criminal Justice ** CJSA 1322	3			
CRIJ 1310	Fundamentals of Criminal Law	3			
CRIJ 2313	Correctional Systems & Practices	3			
CRIJ 1313	Juvenile Justice System	3			
CRIJ 2328	Police Systems & Practices	3			
CJSA 2388	Criminal Justice External Learning	3			
CRIJ _____	Elective *	3			

## ADDITIONAL REQUIREMENTS - 3 HOURS

COSC 1310	Computer Literacy	3			
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## ELECTIVES - 3 HOURS

		3			
TOTAL Semester Credit Hours		<b>64</b>			

† Grade must be C or better

\* Possible elective: CRIJ 1307/CJSA 1312 Crime in America \*\*

\*\* Student seeking Bachelor degree in Criminal Justice who has credit for CJSA 1312 and/or CJSA 1322 must meet departmental approval (which may include assessment).

# DIAGNOSTIC MEDICAL SONOGRAPHY

35  
AAS.DMSO  
Fall 2005

Allied Health Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science

## DIAGNOSTIC MEDICAL SONOGRAPHY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### PREREQUISITES

		Hrs	Gr	Gr Pts	Sem
PHYS 1301	General Physics I	3			
PHYS 1101	General Physics I - Lab	1			
BIOL 2301	Human Anatomy & Physiology I	3			
BIOL 2101	Human Anatomy & Physiology I - Lab	1			
BIOL 2302	Human Anatomy & Physiology II	3			
BIOL 2102	Human Anatomy & Physiology II - Lab	1			
MATH 1314	College Algebra	3			

### SPRING

SPCH 1315	Applied Communication	3			
HPRS 1101	Introduction to Health Professions	1			
HPRS 1106	Medical Terminology	1			
DMSO 1441	Ultrasound I	4			
DMSO 2405	Sonography of Obstetrics and Gynecology	4			

### FIRST SUMMER SESSION

DMSO 2253	Sonography of Superficial Structures	2			
DMSO 1166	Practicum	1			

### SECOND SUMMER SESSION

PSYC 2301	Introduction to Psychology	3			
	Elective - Humanities	3			
DMSO 1167	Practicum	1			

### FALL

ENGL 1301	Composition I	3			
DMSO 1302	Basic Ultrasound Physics	3			
DMSO 2441	Sonography of Abdominopelvic Pathology	4			
DMSO 2342	Sonography of High Risk Obstetrics	3			
DMSO 1267	Practicum	2			

### SPRING

	Computer Elective TCIS or COSC	3			
DMSO 1342	Intermediate Ultrasound Physics	3			
DMSO 1355	Pathophysiology	3			
DMSO 2366	Practicum	3			

### SUMMER SESSION

DMSO 2245	Advanced Sonography Practices	2			
DMSO 2343	Advanced Ultrasound Physics	3			
	Total credit hours required to complete program	70			
	Total contact hours required to complete program	2206			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans. Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

# COMPUTER-AIDED DRAFTING TECHNOLOGY

36  
AAS.DFTG  
Fall 2005

Computer Sciences Department  
College of Science, Mathematics and Technology  
UTB-TSC  
Associate in Applied Science  
COMPUTER-AIDED DRAFTING TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FALL SEMESTER		Hrs	Gr	Gr Pts	Sem
DFTG 1405	Technical Drafting	4			
DFTG 1409	Basic CAD	4			
DFTG 2440	Solid Modeling/Design	4			

SPRING SEMESTER		Hrs	Gr	Gr Pts	Sem
DFTG 1417	Architectural - Residential	4			
DFTG 2421	Topographical Drafting	4			
DFTG 2432	Advanced CAD	4			

SUMMER SESSSION		Hrs	Gr	Gr Pts	Sem
DFTG *	DFTG Elective	3			
DFTG *	DFTG Elective	3			
	Competency Exam	0			

## SOPHOMORE YEAR

FALL SEMESTER		Hrs	Gr	Gr Pts	Sem
DFTG 1491	Special Topics - CAD	4			
ENGL 1301	Composition I	3			
MATH 1314	College Algebra	3			
COSC 1310	Computer Literacy	3			

SPRING SEMESTER		Hrs	Gr	Gr Pts	Sem
MATH 1412	Pre-Calculus	4			
ARTS 1301	Art Appreciation or MUSI 1306 Music Appreciation	3			
SPCH 1315	Applied Communication	3			
**	Social/Behavioral Science Elective	3			

SUMMER SESSSION		Hrs	Gr	Gr Pts	Sem
DFTG 2386	Internship	3			
DFTG *	DFTG Elective	3			
TOTAL Semester Credit Hours		<b>62</b>			

Electives - choose from:

- \* DFTG 2310, 2317, 2323, 2328, 2348, 2350, ARCE 1352
- \*\* ECON 2301, GEOG 1303, PSYC 2301, or SOCI 1301

"C" or better is required for all courses *except* SPCH 1315, ARTS 1301 and Social/Behavioral Science elective.

# EMERGENCY MEDICAL TECHNOLOGY

37  
AAS.EMSP  
Fall 2005

Allied Health Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science  
EMERGENCY MEDICAL TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PRE-PROGRAM COURSES		Hrs	Gr	Gr Pts	Sem
EMSP 1019	CPR - Basic Life Support	0			
HPRS 2300	Pharmacology for Health Professions	3			
HPRS 1101	Introduction to Health Care Professions	1			

## FRESHMAN YEAR

### FALL SEMESTER

HPRS 1204	Basic Health Profession Skills	2			
HPRS 1106	Medical Terminology	1			
EMSP 1401	Emergency Medical Technician - Basic	4			
EMSP 1266	Practicum/Field Experience - EMT/Tech I	2			
HPRS 1205	Medical Law/Ethics for Health Professions	2			
BIOL 2301	Human Anatomy and Physiology I	3			
BIOL 2101	Human Anatomy and Physiology I - Lab	1			

### SPRING SEMESTER

ENGL 1301	Composition I	3			
EMSP 1356	Patient Assessment and Airway Management	3			
EMSP 1267	Practicum/Field Experience - EMT/Tech II	2			
EMSP 1209	Emergency Medical Dispatching	2			
BIOL 2302	Human Anatomy and Physiology II	3			
BIOL 2102	Human Anatomy and Physiology II- Lab	1			

### FIRST SUMMER SEMESTER

EMSP 1208	Emergency Vehicle Operations	2			
EMSP 1149	Pre-Hospital Trauma Life Support	1			
SPCH 1315	Applied Communication	3			
EMSP 2135	Advanced Cardiac Life Support	1			

### SECOND SUMMER SEMESTER

EMSP 2345	EMS Supervision/Management	3			
COSC 1310	Computer Literacy	3			
EMSP 1147	Pediatric Advanced Life Support	1			

## SOPHOMORE YEAR

### FALL SEMESTER

EMSP 2444	Cardiology	4			
EMSP 2266	Practicum/Field Experience - EMT/Technician III	2			
MATH 1314	College Algebra	3			
PSYC 2301	Introduction to Psychology	3			

### SPRING SEMESTER

EMSP 2243	Assessment Based Management	2			
EMSP 2434	Medical Emergencies	4			
EMSP 2267	Practicum/Field Experience - EMT/Technician IV	2			
	Elective - Humanities (Literature, Art, Music, Philosophy)	3			
	<b>TOTAL Semester Credit Hours</b>	<b>70</b>			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans. Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

**ENGINEERING TECHNOLOGY-ELECTRONICS**

Engineering Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC  
Associate in Applied Science

38  
AAS.ELET  
Fall 2005

ENGINEERING TECHNOLOGY - ELECTRONICS

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

RESERVED FOR FUTURE USE

**ENGINEERING TECHNOLOGY - MANUFACTURING**

Engineering Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC  
Associate in Applied Science

39  
AAS.MFET  
Fall 2005

ENGINEERING TECHNOLOGY - MANUFACTURING

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**RESERVED FOR FUTURE USE**

**ENGINEERING TECHNOLOGY - MECHANICAL**

Engineering Technology Department  
College of Science, Mathematics and Technology  
UTB-TSC  
Associate in Applied Science

40  
AAS.MEET  
Fall 2005

ENGINEERING TECHNOLOGY - MECHANICAL

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

RESERVED FOR FUTURE USE



**ASSOCIATE IN ARTS - GENERAL**

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE

Student \_\_\_\_\_  
Signature \_\_\_\_\_  
Advisor - Counselor \_\_\_\_\_

ID# \_\_\_\_\_  
Date \_\_\_\_\_  
Date \_\_\_\_\_

<b>COMMUNICATION REQUIREMENT - 9 hours</b>		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <b>or</b> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3	‡		

**<sup>1</sup> MATH REQUIREMENT - 3 hours †**

MATH 1314	College Algebra <b>or</b>				
MATH 1332	Math for Liberal Arts <b>or</b>				
MATH 1324	Business Algebra <b>or</b>				
	any higher level Math course				

**<sup>1</sup> SCIENCE REQUIREMENT - 8 hours**

Select two 4-hour Science courses (3 hours lecture, 1 hour lab)					
		3,1			
		3,1			

**<sup>1, 2</sup> HUMANITIES REQUIREMENT - 6 hours**

ENGL 23	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation, ARTS 1303 Art History Survey I, MUSI 1306 Music Appreciation, <b>or</b> MUSI 1308 Music Literature	3			

**<sup>1</sup> SOCIAL SCIENCE REQUIREMENT - 12 hours**

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

**<sup>1</sup> BEHAVIORAL SCIENCE REQUIREMENT - 3 hours**

ANTH 2351	Cultural Anthropology				
BUSI 1301	Introduction to Business				
ECON 2301	Macroeconomics				
GEOG 1303	General World Geography				
PSYC 2301	Introduction to Psychology				
SOCI 1301	Introduction to Sociology				
SOCI 2319	The Mexican American Experience				

**<sup>3</sup> KINESIOLOGY REQUIREMENT - 1 hour**

KINE 11	Any activity/health/fitness/wellness course	1			
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**<sup>1</sup> MODERN LANGUAGE REQUIREMENT - 6 hours**

Six hours of same modern language, other than English at the 1000 level <i>or</i> higher. Music Majors/Minors must take FRENCH <i>and</i> GERMAN. Selection of Spanish, Bilingual Education and/or Translation Studies in Spanish requires SPAN 2321 and SPAN 2322.					
		3			
		3			

**<sup>1</sup> ELECTIVES (Depending on Major) - 14 hours** <sup>4</sup> Elective Choices

TOTAL Semester Credit Hours		<b>62</b>			

<sup>1</sup> **Dual Language Certification** within the Associate in Arts Degree (General) requires the completion of 15 semester credit hours of coursework in Spanish. Courses for dual language certification include: SPAN 2321, SPAN 2322, and three other courses (9 semester credit hours) from the following areas: Mathematics, Science, Humanities, Social Sciences, Behavioral Sciences and Electives. Student should check with Course Schedules and/or academic advising for courses offered in Spanish for dual language certification.

<sup>2</sup> MUSIU 2313 Teaching Fine Arts in the Elementary School is required for Elementary Teacher Certification programs.

<sup>3</sup> KINEU 2255 Health & Motor Development for EC-4 is required for Elementary Teacher Certification programs.

<sup>4</sup> Required for Teacher Certification (see reverse side)

≈ THEA Requirement (or other State-approved test) - Student must pass all three sections of State-approved test to graduate with this degree and to be admitted to upper level (3000-4000) classes.

≈ Student must graduate within six years from the academic year of entrance or may be placed under the provisions of a later catalog.

† Grade must be C or better.

‡ Grade of B or better required for admission to Teacher Education Program

SCIENCE CHOICES: (8 Hours)

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BIOL	1306	Biological Principles I
BIOL	1106	Biological Principles I (Laboratory)
BIOL	1307	Biological Principles II
BIOL	1107	Biological Principles II (Laboratory)
BIOL	2301	Anatomy and Physiology I
BIOL	2101	Anatomy and Physiology I (Laboratory)
BIOL	2302	Anatomy and Physiology II
BIOL	2102	Anatomy and Physiology II (Laboratory)
CHEM	1305	Introductory Chemistry I
CHEM	1105	Introductory Chemistry I (Laboratory)
CHEM	1307	Introductory Chemistry II
CHEM	1107	Introductory Chemistry II (Laboratory)
CHEM	1311	General Chemistry I
CHEM	1111	General Chemistry I (Laboratory)
CHEM	1312	General Chemistry II
CHEM	1112	General Chemistry II (Laboratory)
GEOL	1301	Principles of Earth Sciences
GEOL	1101	Principles of Earth Sciences (Laboratory)
GEOL	1303	Physical Geology
GEOL	1103	Physical Geology (Laboratory)
GEOL	1304	Historical Geology
GEOL	1104	Historical Geology (Laboratory)
GEOL	1347	Meteorology
GEOL	1147	Meteorology (Laboratory)
ISCIU	1410	Scientific Inquiry I
ISCIU	1411	Scientific Inquiry II
PHYS	1301	General Physics I
PHYS	1101	General Physics I (Laboratory)
PHYS	1302	General Physics II
PHYS	1102	General Physics II (Laboratory)
PHYS	1310	Conceptual Physics
PHYS	1110	Conceptual Physics (Laboratory)
PHYS	1401	College Physics I
PHYS	1402	College Physics II
PHYS	1411	Introduction to Astronomy

MODERN LANGUAGE CHOICES: (6 Hours)

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SPAN	1313	Elementary Spanish I	
SPAN	1314	Elementary Spanish II	
SPAN	1373	Basic Spanish for Bilinguals I	
SPAN	1374	Basic Spanish for Bilinguals II	
SPAN	2311	Intermediate Spanish I	
SPAN	2312	Intermediate Spanish II	
SPAN	2321	Hispanic Language and Culture I	(Required of Spanish and Education Majors)
SPAN	2322	Hispanic Language and Culture II	(Required of Spanish and Education Majors)
FREN	1311	Elementary French I	
FREN	1312	Elementary French II	
FREN	2311	Intermediate French I	
FREN	2312	Intermediate French II	
GERM	1311	Elementary German I	
GERM	1312	Elementary German II	
GERM	2311	Intermediate German I	
GERM	2312	Intermediate German II	
CHIN	1311	Beginning Chinese I	
CHIN	1312	Beginning Chinese II	
ARABu	1311	Arabic I	
ARABu	1312	Arabic II	

<sup>4</sup> Required Choices for Teacher Certification

EDCIU	2101	School and Society	Required of Education Majors-may be used as Elective
EDCI	4203	Technology and the School Curriculum	Required of Education Majors-may be used as Elective

**ASSOCIATE OF ARTS IN TEACHING**  
**4th - 8th (Science, Math, English Language Arts/Reading)**

42  
AAT.MG  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE

Student \_\_\_\_\_

ID# \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Advisor - Counselor \_\_\_\_\_

Date \_\_\_\_\_

<b>COMMUNICATION REQUIREMENT - 9 hours</b>		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <b>or</b> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3	‡		

<b>† MATH REQUIREMENT - 3 hours †</b>		<b>3</b>			
MATH 1314	College Algebra <b>or</b>				
MATH 1332	Math for Liberal Arts <b>or</b>				
MATH 1324	Business Algebra <b>or</b>				
	any higher level Math course				

<b>† SCIENCE REQUIREMENT - 8 hours</b>					
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)					
		3,1			
		3,1			

<b>† HUMANITIES REQUIREMENT - 6 hours</b>					
ENGL 23	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation, ARTS 1303 Art History MUSI 1306 Music Appreciation, <b>or</b> MUSI 1308 Music Literature	3			

<b>† SOCIAL SCIENCE REQUIREMENT - 12 hours</b>					
HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

<b>† BEHAVIORAL SCIENCE REQUIREMENT - 3 hours</b>		<b>3</b>			
ANTH 2351	Cultural Anthropology				
BUSI 1301	Introduction to Business				
ECON 2301	Macroeconomics				
GEOG 1303	General World Geography				
PSYC 2301	Introduction to Psychology				
SOCI 1301	Introduction to Sociology				
SOCI 2319	The Mexican American Experience				

<b>KINESIOLOGY REQUIREMENT - 1 hour</b>					
KINE 11	Lifetime Fitness or any one hour activity class	1			

<b>† MODERN LANGUAGE REQUIREMENT - 6 hours</b>					
Six hours of same modern language, other than English at the 1000 level <b>or</b> higher. Music Majors/Minors must take FRENCH <b>and</b> GERMAN. Selection of Spanish, Bilingual Education and/or Translation Studies in Spanish requires SPAN 2321 and SPAN 2322.					
		3			
		3			

<b>† PROGRAM REQUIREMENTS - 16 hours</b>					
EDUC 1301	Introduction to the Teaching Profession	3			
EDUC 2301	Introduction to Special Populations	3			
MATH 3335	Contemporary Math I	3			
MATH 3336	Contemporary Math II	3			
PSCI 4210	Physical Science for Teachers I	2			
PSCI 4220	Physical Science for Teachers II	2			
TOTAL Semester Credit Hours		<b>64</b>			

† **Dual Language Certification** within the Associate of Arts Degree (General) requires the completion of 15 semester credit hours of coursework in Spanish. Courses for dual language certification include: SPAN 2321, SPAN 2322, and three other courses (9 semester credit hours) from the following areas: Mathematics, Science Humanities, Social Sciences, Behavior Sciences and Electives. Student should check with course schedules and/ or Academic Advising for courses offered in Spanish for Dual Language Certification.

≈ THEA Requirement (or other State-approved test) - Student must pass all three sections of State-approved test to graduate with this degree to be admitted to upper level (3000-4000) classes.

≈ Student must graduate within six years from the academic year of entrance or may be placed under the provisions of a later catalog.

† Grade must be C or better.

‡ Grade of B or better required for admission to Teacher Education Program.

**ASSOCIATE OF ARTS IN TEACHING**  
**8th - 12th Science, Math, History, Social Studies, Spanish (6-12) and English Language Arts/Reading**

43  
AAT.SC  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE

Student \_\_\_\_\_

ID# \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Advisor - Counselor \_\_\_\_\_

Date \_\_\_\_\_

<b>COMMUNICATION REQUIREMENT - 9 hours</b>		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <i>or</i> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3	‡		
<b>1 MATH REQUIREMENT - 3 hours †</b>		<b>3</b>			
MATH 1314	College Algebra <i>or</i>				
MATH 1332	Math for Liberal Arts <i>or</i>				
MATH 1324	Business Algebra <i>or</i>				
	any higher level Math course				
<b>1 SCIENCE REQUIREMENT - 8 hours</b>					
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)					
		3,1			
		3,1			
<b>1 HUMANITIES REQUIREMENT - 6 hours</b>					
ENGL 23	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation, ARTS 1303 Art History MUSI 1306 Music Appreciation, <i>or</i> MUSI 1308 Music Literature	3			
<b>1 SOCIAL SCIENCE REQUIREMENT - 12 hours</b>					
HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			
<b>1 BEHAVIORAL SCIENCE REQUIREMENT - 3 hours</b>		<b>3</b>			
ANTH 2351	Cultural Anthropology				
BUSI 1301	Introduction to Business				
ECON 2301	Macroeconomics				
GEOG 1303	General World Geography				
PSYC 2301	Introduction to Psychology ( <b>Required for Sec. History</b> )				
SOCI 1301	Introduction to Sociology				
SOCI 2319	The Mexican American Experience				
<b>KINESIOLOGY REQUIREMENT - 1 hour</b>					
KINE 11	Lifetime Fitness or any one hour activity class	1			
<b>1 MODERN LANGUAGE REQUIREMENT - 6 hours</b>					
Six hours of same modern language, other than English at the 1000 level <i>or</i> higher. Music Majors/Minors must take FRENCH <i>and</i> GERMAN. Selection of Spanish, Bilingual Education and/or Translation Studies in Spanish requires SPAN 2321 and SPAN 2322.					
		3			
		3			
<b>PROGRAM REQUIREMENTS - 6 hours</b>					
EDUC 1301	Introduction to the Teaching Profession	3			
EDUC 2301	Introduction to Special Populations	3			
<b>1 ELECTIVES - 12 hours from Academic Content Electives</b>					
		3			
		3			
		3			
		3			
	<b>TOTAL Semester Credit Hours</b>	<b>66</b>			

<sup>1</sup> **Dual Language Certification** within the Associate of Arts Degree (General) requires the completion of 15 semester credit hours of coursework in Spanish. Courses for dual language certification include: SPAN 2321, SPAN 2322, and three other courses(9 semester credit hours) from the following areas:Mathematics, Science Humanities, Social Sciences, Behavior Sciences and Electives. Student should check with course schedules and/ or Academic Advising for courses offered in Spanish for Dual Language Certification.

≈ THEA Requirement (or other State-approved test) - Student must pass all three sections of State-approved test to graduate with this degree and to be admitted to upper level (3000-4000) classes.

≈ Student must graduate within six years from the academic year of entrance or may be placed under the provisions of a later catalog.

† Grade must be C or better.

‡ Grade of B or better required for admission to Teacher Education Program.

**ASSOCIATE OF ARTS IN TEACHING  
All Level Kinesiology**

44  
AAT.KINE  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE

Student \_\_\_\_\_

ID# \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Advisor - Counselor \_\_\_\_\_

Date \_\_\_\_\_

<b>COMMUNICATION REQUIREMENT - 9 hours</b>		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <b>or</b> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3	‡		

<b>1 MATH REQUIREMENT - 3 hours †</b>		<b>3</b>			
MATH 1314	College Algebra <b>or</b>				
MATH 1332	Math for Liberal Arts <b>or</b>				
MATH 1324	Business Algebra <b>or</b>				
	any higher level Math course				

<b>1 SCIENCE REQUIREMENT - 8 hours</b>					
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)					
BIOL 2301/2101	Anatomy & Physiology I/Lab	3,1			
BIOL 2302/2102	Anatomy & Physiology II/Lab <b>or</b> BIOL 1307/1107	3,1			

<b>1 HUMANITIES REQUIREMENT - 6 hours</b>					
ENGL 23	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation, ARTS 1303 Art History MUSI 1306 Music Appreciation, <b>or</b> MUSI 1308 Music Literature	3			

<b>1 SOCIAL SCIENCE REQUIREMENT - 12 hours</b>					
HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

<b>1 BEHAVIORAL SCIENCE REQUIREMENT - 3 hours</b>		<b>3</b>			
ANTH 2351	Cultural Anthropology				
BUSI 1301	Introduction to Business				
ECON 2301	Macroeconomics				
GEOG 1303	General World Geography				
PSYC 2301	Introduction to Psychology				
SOCI 1301	Introduction to Sociology				
SOCI 2319	The Mexican American Experience				

<b>2 KINESIOLOGY REQUIREMENT - 1 hour</b>					
KINE 11	Any activity/health/fitness/wellness course	1			

<b>1 MODERN LANGUAGE REQUIREMENT - 6 hours</b>					
Six hours of same modern language, other than English at the 1000 level <b>or</b> higher. Music Majors/Minors must take FRENCH <b>and</b> GERMAN. Selection of Spanish, Bilingual Education and/or Translation Studies in Spanish requires SPAN 2321 and SPAN 2322.					
		3			
		3			

<b>PROGRAM REQUIREMENTS - 6 hours</b>					
EDUC 1301	Introduction to the Teaching Profession	3			
EDUC 2301	Introduction to Special Populations	3			

<b>1 ELECTIVES - 12 hours from Academic Content Electives</b>					
		3			
		3			
		3			
		3			
<b>TOTAL Semester Credit Hours</b>		<b>66</b>			

<sup>1</sup> **Dual Language Certification** within the Associate of Arts Degree (General) requires the completion of 15 semester credit hours of coursework in Spanish. Courses for dual language certification include: SPAN 2321, SPAN 2322, and three other courses(9 semester credit hours) from the following areas:Mathematics, Science Humanities, Social Sciences, Behavior Sciences and Electives. Student should check with course schedules and/ or Academic Advising for courses offered in Spanish for Dual Language Certification.

<sup>2</sup> KINEU 2255 Health & Motor Development for EC-4 is required for Elementary Teacher Certification programs.

≈ THEA Requirement (or other State-approved test) - Student must pass all three sections of State-approved test to graduate with this degree and to be admitted to upper level (3000-4000) classes.

≈ Student must graduate within six years from the academic year of entrance or may be placed under the provisions of a later catalog.

† Grade must be C or better.

‡ Grade of B or better required for admission to Teacher Education Program.

**ASSOCIATE OF ARTS IN TEACHING EC-4  
School of Education**

45  
AAT.EC-4  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE

Student \_\_\_\_\_

ID# \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Advisor - Counselor \_\_\_\_\_

Date \_\_\_\_\_

**COMMUNICATION REQUIREMENT - 9 hours**

		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <b>or</b> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3	‡		

**<sup>1</sup> MATH REQUIREMENT - 3 hours †**

MATH 1314	College Algebra <b>or</b>				
MATH 1332	Math for Liberal Arts <b>or</b>				
MATH 1324	Business Algebra <b>or</b>				
	any higher level Math course				

**<sup>1</sup> SCIENCE REQUIREMENT - 8 hours**

Select two 4-hour Science courses (3 hours lecture, 1 hour lab)					
		3,1			
		3,1			

**<sup>1</sup> HUMANITIES REQUIREMENT - 6 hours**

	Literature (ENGL 2000 Level)	3			
MUSIU 2313	Teaching Fine Arts in the Elementary School	3			

**<sup>1</sup> SOCIAL SCIENCE REQUIREMENT - 12 hours**

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

**<sup>1</sup> BEHAVIORAL SCIENCE REQUIREMENT - 3 hours**

ANTH 2351	Cultural Anthropology				
BUSI 1301	Introduction to Business				
ECON 2301	Macroeconomics				
GEOG 1303	General World Geography				
PSYC 2301	Introduction to Psychology				
SOCI 1301	Introduction to Sociology				
SOCI 2319	The Mexican American Experience				

**<sup>2</sup> KINESIOLOGY REQUIREMENT - 1 hour**

KINE 11	Lifetime Fitness or any one hour activity class	1			
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**<sup>1</sup> MODERN LANGUAGE REQUIREMENT - 6 hours**

Six hours of same modern language, other than English at the 1000 level <i>or</i> higher. Music Majors/Minors must take FRENCH <i>and</i> GERMAN. Selection of Spanish, Bilingual Education and/or Translation Studies in Spanish requires SPAN 2321 and SPAN 2322.					
		3			
		3			

**<sup>1</sup> ELECTIVES - 16 hours**

EDUC 1301	Introduction to the Teaching Profession	3			
EDUC 2301	Introduction to Special Populations	3			
MATH 3335	Contemporary Math I	3			
MATH 3336	Contemporary Math II	3			
PSCI 4210	Physical Science for Teachers I	2			
PSCI 4220	Physical Science for Teachers II	2			
TOTAL Semester Credit Hours		<b>64</b>			

<sup>1</sup> **Dual Language Certification** within the Associate in Arts Degree (General) requires the completion of 15 semester credit hours of coursework in Spanish. Courses for dual language certification include: SPAN 2321, SPAN 2322, and three other courses (9 semester credit hours) from the following areas: Mathematics, Science Humanities, Social Sciences, Behavior Sciences and Electives. Student should check with course schedules and/ or Academic Advising for courses offered in Spanish for Dual Language Certification.

≈ THEA Requirement (or other State-approved test) - Student must pass all three sections of State-approved test to graduate with this degree and to be admitted to upper level (3000-4000) classes.

≈ Student must graduate within six years from the academic year of entrance or may be placed under the provisions of a later catalog.

† Grade must be C or better.

‡ Grade of B or better required for admission to Teacher Education Program.

<sup>2</sup> KINEU 2255 Health & Motor Development for EC-4 is required for Elementary Teacher Certification Programs.

# INTERNATIONAL BUSINESS

Business Technology Department  
 School of Business  
 UTB-TSC  
 Associate in Applied Science  
 INTERNATIONAL BUSINESS

46  
 AAS.IBUS  
 Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
GEOG 1303	General World Geography	3			
IBUS 1305	Introduction to International Business & Trade	3			
ACNT 1403	Introduction to Accounting I	4	†		
POFT 1329	Beginning Keyboarding or	3			
ITSW 1301	Introduction to Word Processing				
IBUS 1301	Principles of Exports	3			

### SECOND SEMESTER

ENGL 1301	Composition I	3	†		
ACNT 1404	Introduction to Accounting II	4			
MRKG 1311	Principles of Marketing	3			
IBUS 1302	Principles of Imports	3			
POFT 1301	Business English	3	†		

## SOPHOMORE YEAR

### FIRST SEMESTER

ENGL 1302	Composition II	3	†		
BMGT 1301	Supervision	3			
ECON 2301	Macroeconomics	3			
ITSW 1304	Introduction to Spreadsheets	3			
SPAN 1373	Basic Spanish for Bilinguals I or	3			
SPAN 1313	Elementary Spanish I				
SPCH 1315	Applied Communication	3			

### SECOND SEMESTER

MATH 1332	Math for Liberal Arts or MATH 1314 College Algebra	3	†		
IBUS 2345	Import Customs Regulations	3			
BUSG 2317	Business Law/Commercial	3			
IBUS 2339	International Banking and Finance	3			
SPAN 2317	Business Spanish	3			
IBUS 2380	Cooperative Education International Business/ Trade/ Commerce*	3			
	TOTAL Semester Credit Hours	68			
	Total Contact Hours	1376			

† Grade of "C" or better is required for graduation.

\* Prerequisite: Consent of the Business Technology Co-op Coordinator.

This degree plan is active for six years from the date indicated above.

Noncompletion may require updating to an active degree plan.

Developmental courses may be required based on assessment scores.

ALL students must comply with THEA requirements.

# LEGAL SECRETARIAL SCIENCE

Business Technology Department  
School of Business  
UTB-TSC

Associate in Applied Science

LEGAL SECRETARIAL SCIENCE

47  
AAS.LGLA  
Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ITSW 1301	Introduction to Word Processing	3			
LGLA 1355	Family Law	3			
POFT 1301	Business English	3	†		
POFL 1305	Legal Terminology	3			
POFT 1313	Professional Development for Office Personnel	3			

## SECOND SEMESTER

BUSG 2317	Business Law/Commercial	3			
LGLA 1317	Law Office Technology	3			
ITSW 2331	Advanced Word Processing	3			
POFT 1309	Administrative Office Procedures I	3			
ACNT 1391	Special Topics: Acting for office Professionals	3			

## SOPHOMORE YEAR

### FIRST SEMESTER

LGLA 2307	Law Office Management	3			
LGLA 1353	Wills, Trusts & Probate Administration	3			
PSYC 2301	Introduction to Psychology	3			
LGLA 1344	Texas Civil Litigation	3			
LGLA 2309	Real Property	3			
SPCH 1315	Applied Communication	3			

### SECOND SEMESTER

GOVT 2301	American Government I	3			
MATH 1332	Math for Liberal Arts or MATH 1314 College Algebra	3	†		
POFT 1192	** Special Topics (Portfolio)	1			
POFT 1319	Records & Information Management I	3			
POFT 2381	* Cooperative Education	3			
^	^ Business Technology Elective	3			
TOTAL Semester Credit Hours		67			
Total Contact Hours		1360			

† Grade of "C" or better is required for graduation.

\* Prerequisite: Approval of Department Chair or co-op Coordinator.

\*\* This course must be taken in the last semester; Department Approval Required.

^ Select one of the following Business Technology courses: POFT 2331 - Desktop Publishing, ITSW 1304 - Introduction to Spreadsheets, ITSW 1310 - Presentation Media Software, or ITSW 1307 - Introduction to Database.

This degree plan is active for six years from the date indicated above.

Noncompletion may require updating to an active degree plan. Developmental courses may be required based on assessment scores.

ALL students must comply with THEA requirements.

A Student Portfolio must be submitted and approved prior to graduation.



# MEDICAL LABORATORY TECHNOLOGY

48  
AAS.MLAB  
Fall 2005

Allied Health Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science

## MEDICAL LABORATORY TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PREREQUISITES			Hrs	Gr	Gr Pts	Sem
BIOL 2301	Human Anatomy & Physiology I		3			
BIOL 2101	Human Anatomy & Physiology I - Lab		1			
BIOL 2302	Human Anatomy & Physiology II		3			
BIOL 2102	Human Anatomy & Physiology II - Lab		1			
HPRS 1204	Basic Health Profession Skills		2			
HPRS 1101	Introduction to Health Professions		1			
HPRS 1106	Medical Terminology		1			

### FRESHMAN YEAR

FIRST SEMESTER			Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I		3			
MATH 1314	College Algebra or MATH 1332 Math for Liberal Arts		3			
MLAB 1201	Introduction to Clinical Lab		2			
MLAB 1211	Urinalysis and Body Fluids		2			
PLAB 1223	Phlebotomy		2			

### SECOND SEMESTER

CHEM 1305	Introduction to Chemistry I <b>and</b>	}	3			
CHEM 1105	Introduction to Chemistry I - Lab or		1			
CHEM 1311	General Chemistry I <b>and</b>	}				
CHEM 1111	General Chemistry I - Lab					
MLAB 1335	Immunology/Serology		3			
MLAB 2534	Clinical Microbiology		5			
MLAB 1331	Parasitology and Mucology		3			

### FIRST SUMMER SESSION

MLAB 1415	Hematology	4			
MLAB 1227	Coagulation	2			

### SECOND SUMMER SESSION

MLAB 1166	Practicum	1			
	Humanities Course (choose from Art, Music, Modern Language or any 2000 English)	3			

### SOPHOMORE YEAR

#### FIRST SEMESTER

MLAB 2501	Clinical Chemistry	5			
MLAB 2431	Immunoematology	4			
MLAB 1167	Practicum	1			

#### SECOND SEMESTER

SPCH 1318	Interpersonal Communication	3			
	Social/Behavioral Science Course Choose from SOCI 1301, PSYC 2301, PSYC 2314, PSYC 3324	3			
COSC 1310	Computer Literacy	3			
MLAB 2166	Practicum	1			
MLAB 2167	Practicum	1			
MLAB 2132	Seminar in Medical Laboratory Technology	1			
	<b>TOTAL Semester Credit Hours</b>	<b>71</b>			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans. Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

# MEDICAL OFFICE SPECIALIST

Business Technology Department  
 School of Business  
 UTB-TSC  
 Associate in Applied Science  
 MEDICAL OFFICE SPECIALIST

49  
 AAS.MDSP  
 Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
PSYC 2301	Introduction to Psychology <b>or</b>	3			
PHIL 1301	Introduction to Philosophy				
POFT 1301	Business English	3	†		
ITSW 1301	Introduction to Word Processing	3			
BIOL 2301/2101	Human Anatomy and Physiology I and Laboratory I <b>or</b>	3, 1			
BIOL 1307/1107	General Biology II and Laboratory II				
POFM 1313	Medical Terminology	3			

### SECOND SEMESTER

MRMT 1303	Medical Office Procedures	3			
MDCA 1443	Medical Insurance	4			
ITSW 2331	Advanced Word Processing	3			
ITSW 1304	Introduction to Spreadsheets	3			
POFM 1304	Introduction to Health Records	3			

## SOPHOMORE YEAR

### FIRST SEMESTER

ENGL 1301	Composition I	3	†		
BMGT 1301	Supervision	3			
ITSW 1310	Introduction to Presentation Graphics Software	3			
MATH 1332	Math for Liberal Arts <b>or</b> MATH 1314 College Algebra	3	†		
POFM 1453	Medical Coding	4			

### SECOND SEMESTER

MRMT 1307	Medical Transcription Fundamentals	3			
GOVT 2301	American Government I	3			
SPCH 1315	Applied Communication <b>or</b> SPCH 1318 Interpersonal Comm.	3			
POFT 2312	Business Correspondence & Communicatoin	3			
POFM 2380	Cooperative Education - Med.* Admin/Exec Asst. and Secy.	3			
POFT 1192	Special Topics (Portfolio) **	1			
TOTAL Semester Credit Hours		64			
Total Contact Hours		1344			

- † Grade of "C" or better is required for graduation.
- \* Prerequisite: Approval of Department Chair or Co-op Coordinator.
- \*\* This course must be taken in the last semester. Departmental Approval Required.

# ASSOCIATE IN FINE ARTS - MUSIC

College of Liberal Arts  
University of Texas at Brownsville and Texas Southmost College  
Associate in Fine Arts

50  
AFA.MUSI  
Fall 2005

## MUSIC

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### GENERAL EDUCATION CORE - 31/32 HOURS

<b>COMMUNICATION REQUIREMENTS - 9 hours</b>		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <i>or</i> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3			

### MATH or SCIENCE REQUIREMENT - 3-4 hours *Select one* of the following:

MATH 1314	College Algebra		†		
MATH 1332	Math for Liberal Arts		†		
MATH 1324	Business Algebra <i>or</i> higher-level MATH		†		
	Any 4-hour SCIENCE course				

### SOCIAL SCIENCE REQUIREMENTS - 12 hours

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

### KINESIOLOGY REQUIREMENT - 1 hour

KINE 11__	Any activity/health/fitness/wellness course	1			
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### MODERN LANGUAGE REQUIREMENTS - 6 hours

FREN 1311	French I	3			
GERM 1311	German I	3			

### FINE ARTS REQUIREMENTS - Music Courses - 30 HOURS

The Department recommends the use of the Music Minor to fulfill these 30 hours.


### ELECTIVES - 0/1 HOURS *Recommended: COSC 1310 or other Computer Science course*

	<b>TOTAL Semester Credit Hours</b>	<b>62</b>			

† Grade must be C or better

# ASSOCIATE DEGREE NURSING

51  
AAS.RNSG  
Fall 2005

Nursing Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science  
ASSOCIATE DEGREE NURSING

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FIRST SUMMER SEMESTER

BIOL 2301/2101	Anatomy and Physiology I	3,1	†		
MATH 1314	College Algebra <b>or</b> MATH 1332 Math for Liberal Arts	3	†		

## SECOND SUMMER SEMESTER

BIOL 2302/2102	Anatomy and Physiology II	3,1	†		
PSYC 2301	Introduction to Psychology	3	†		

## FALL SEMESTER

RNSG 1108	Dosage Calculations for Nursing	1			
RNSG 1205	Nursing Skills	2			
RNSG 1215	Health Assessment	2			
RNSG 1413	Foundations for Nursing Practices	4			
RNSG 1260	Clinical: Nursing RN: Foundations for Nursing Prac.	2			

## SPRING SEMESTER

RNSG 1301	Pharmacology	3			
RNSG 1210	Introduction to Community-Based Nursing	2			
RNSG 1231	Principles of Clinical Decision Making	2			
RNSG 1247	Concepts in Decision Making II	2			
RNSG 2260	Clinical: Nursing RN: Decision Making	2			
PSYC 2314	Lifespan Development	3	†		

## SUMMER SEMESTERS

BIOL 2321/2121	Microbiology	3,1	†		
RNSG 2213	Mental Health-Nursing	2			
RNSG 2163	Clinical: Nursing RN: Mental Health Nursing	1			

## FALL SEMESTER

ENGL 1301	Composition I	3	†		
SPCH 1318	Interpersonal Communications	3	†		
RNSG 1251	Care of the Childbearing Family	2			
RNSG 2161	Clinical: Nursing RN: Care of the Childbearing Family	1			
RNSG 2201	Care of Children and Families	2			
RNSG 2162	Clinical: Nursing RN: Care of Children and Families	1			

## SPRING SEMESTER

RNSG 2441	Advanced Concepts of Clinical Decision Making	4			
RNSG 2360	Clinical: Nursing RN: Care of the Client with Complex Health Care Needs	3			
RNSG 2121	Management of Client Care	1			
RNSG 2166	Practicum	1			
	Art, Music, Philosophy, Modern Language or Literature	3	†		
	<b>TOTAL Semester Credit Hours</b>	<b>70</b>			

† Grade must be C or better

# ASSOCIATE DEGREE NURSING - LVN ADVANCED PLACEMENT

51a  
AAS.RNSG.AP  
Fall 2005

Nursing Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science  
ASSOCIATE DEGREE NURSING  
LVN Advanced Placement

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

Admission Prerequisites		Hrs	Gr	Gr Pts	Sem
BIOL 2301	Anatomy and Physiology I	3	†		
BIOL 2101	Anatomy and Physiology I Lab	1	†		
BIOL 2302	Anatomy and Physiology II	3	†		
BIOL 2102	Anatomy and Physiology II Lab	1	†		
MATH 1332	Math for Liberal Arts	3	†		
PSYC 2301	Introduction to Psychology	3	†		

FIRST SEMESTER  
FIRST SUMMER SESSION

BIOL 2321	Microbiology	3	†		
BIOL 2121	Microbiology Lab	1	†		

SECOND SUMMER SESSION

ENGL 1301	Composition I	3	†		
PSYC 2314	Lifespan Development	3			

SECOND SEMESTER  
FALL

RNSG 1210	Introduction to Community-Based Nursing	2			
RNSG 2307 §	Transition to Nursing Practice	3			
RNSG 2461 §	Clinical: Nursing RN: Transition to Nursing Practice	4			
SPCH 1318	Interpersonal Communications	3	†		

THIRD SEMESTER  
SPRING

RNSG 2414	Care of Client with Complex Health Care Needs	4			
RNSG 2360	Clinical: Nursing RN: Care of Client with Complex Health Care Needs	3			
RNSG 2121	Management of Client Care	1			
RNSG 2166	Practicum (Capstone)	1			
	Humanities (Art, Music, Philosophy, Foreign Language, or Literature)	3	†		
	<b>TOTAL Semester Credit Hours</b>	<b>68</b>			

† Grade must be C or better

§ Upon satisfactory completion of RNSG 2307 and RNSG 2461 the LVN Transition student will receive 20 semester credit hours for first and second level generic nursing courses not listed above. (Total hours for A.A.S. program = 68 SCH.)

# OFFICE SPECIALIST

52  
AAS.OFSA  
Fall 2005

Business Technology Department  
School of Business  
UTB-TSC

## Associate in Applied Science - OFFICE SPECIALIST

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
POFT 1329	Beginning Keyboarding	3			
POFT 1301	Business English	3	†		
POFT 1313	Professional Development for Office Personnel	3			
POFT 1331	Business Machine Applications	3			
ITSW 1301	Introduction to Word Processing	3			

### SECOND SEMESTER

POFT 1309	Administrative Office Procedures I	3			
POFT 1319	Records & Information Management I	3			
POFT 2303	Speed and Accuracy Building	3			
ITSW 1304	Introduction to Spreadsheet	3			
ITSW 2331	Advanced Word Processing	3			

### SOPHOMORE YEAR

#### FIRST SEMESTER

ENGL 1301	Composition I	3	†		
PSYC 2301	Introduction to Psychology	3			
SPCH 1315	Applied Communication	3			
SPAN 1313	Elementary Spanish I <i>or</i> SPAN 1373 Basic Span. for Bilinguals	3			
POFT 2380	Cooperative Education*	3			

#### SECOND SEMESTER

ACNT 1391	Special Topics (Acct. for Office Professionals)	3			
POFT 2312	Business Correspondence and Communication	3			
MATH 1332	Math for Liberal Arts <i>or</i> Math 1314 College Algebra	3	†		
SPAN 2317	Business Spanish	3			
POFT 2381	Cooperative Education*	3			
POFT 1192	Special Topics (Portfolio)**	1			
TOTAL Semester Credit Hours		61			
Total Contact Hours		1552			

† Grade of "C" or better is required for graduation.

\* Prerequisite: Approval of Department Chair or co-op Coordinator.

\*\* This course must be taken in the last semester; Department Approval Required.

This degree plan is active for six years from the date indicated above. Noncompletion may require updating to an active degree plan. Developmental courses may be required based on assessment scores. ALL students must comply with THEA requirements. A Student Portfolio must be submitted and approved prior to graduation.

# PARALEGAL STUDIES

53  
AAS.PLGLA  
Fall 2005

Business Technology Department  
School of Business  
UTB-TSC  
Associate in Applied Science  
PARALEGAL STUDIES

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

## FRESHMAN YEAR

FIRST SEMESTER		Hrs	Gr	Gr Pts	Sem
LGLA 1307	Introduction to Law and the Legal Professions	3			
LGLA 1355	Family Law	3			
BUSG 2317	Business Law/Commercial	3			
POFT 1313	Professional Development for Office Personnel	3			
SPCH 1315	Applied Communication	3			
POFL 1305	Legal Terminology	3			

## SECOND SEMESTER

LGLA 2309	Real Property	3			
LGLA 1344	Texas Civil Litigation	3			
LGLA 1317	Law Office Technology	3			
LGLA 2303	Torts and Personal Injury Law	3			
ENGL 1301	Composition I	3	†		

## SOPHOMORE YEAR

### FIRST SEMESTER

LGLA 2307	Law Office Management	3			
LGLA 1353	Wills, Trusts & Probate Administration	3			
LGLA 1303	Legal Research	3			
LGLA 2333	Advanced Legal Document Preparation	3			
GOVT 2301	American Government I	3			
LGLA 2313	Criminal Law and Procedure	3			

### SECOND SEMESTER

MATH 1332	Math for Liberal Arts or MATH 1314 College Algebra	3	†		
LGLA 1305	Legal Writing	3			
PSYC 2301	Introduction to Psychology <b>or</b>	3			
SOCI 1301	Sociology				
**	LGLA Elective **	3			
LGLA 2380	Cooperative Education - Paralegal/Legal Assistant	3			
POFT 1192	Special Topics (Portfolio)***	1			
	TOTAL Semester Credit Hours	67			
	Total Contact Hours	1360			

† Grade of "C" or better is required for graduation.

\* Prerequisite: Approval of Department Chair or co-op Coordinator.

\*\* May select from courses such as LGLA 1343 - Bankruptcy, LGLA 1359 - Immigration Law, LGLA 2337 - Mediation, or LGLA 1349 - Constitutional Law.

\*\*\* This course must be taken in the last semester; Department Approval Required.

This degree plan is active for six years from the date indicated above.

Noncompletion may require updating to an active degree plan.

Developmental courses may be required based on assessment scores.

ALL students must comply with THEA requirements.

A Student Portfolio must be submitted and approved prior to graduation.

# RADIOLOGIC TECHNOLOGY

54  
AAS.RADR  
Fall 2005

Allied Health Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science  
RADIOLOGIC TECHNOLOGY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PREREQUISITES			Hrs	Gr	Gr Pts	Sem
BIOL 2301	Human Anatomy & Physiology I		3			
BIOL 2101	Human Anatomy & Physiology I - Lab		1			
BIOL 2302	Human Anatomy & Physiology II		3			
BIOL 2102	Human Anatomy & Physiology II - Lab		1			
HPRS 1101	Introduction to Health Professions		1			
HPRS 1106	Medical Terminology		1			
HPRS 1204	Basic Health Profession Skills		2			

## FIRST YEAR

### SPRING

RADR 1411	Basic Radiographic Procedures		4			
RADR 1201	Introduction to Radiography		2			
RADR 1213	Principles of Radiographic Imaging I		2			
ENGL 1301	Composition I		3			
MATH 1314	College Algebra		3			

### FIRST SUMMER SESSION

RADR 1166	Practicum I		1			
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### SECOND SUMMER SESSION

RADR 1167	Practicum II		1			
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### FALL

RADR 2305	Principles of Radiographic Imaging II		3			
RADR 2309	Radiographic Imaging Equipment		3			
RADR 2217	Radiographic Pathology		2			
RADR 1267	Practicum III		2			
SPCH 1315	Applied Communication		3			

## SECOND YEAR

### SPRING

RADR 2331	Advanced Radiographic Procedures		3			
RADR 2313	Radiation Biology and Protection		3			
RADR 2266	Practicum IV		2			
COSC 1310	Computer Literacy		3			
	Elective - Humanities (Literature, Art, Music, Philosophy)		3			

### FIRST SUMMER SESSION

RADR 2166	Practicum V		1			
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### SECOND SUMMER SESSION

RADR 2167	Practicum VI		1			
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### FALL

RADR 2267	Practicum VII		2			
RADR 2335	Radiologic Technology Seminar		3			
RADR 2233	Advanced Medical Imaging		2			
PSYC 2301	Introduction to Psychology		3			
<b>TOTAL Semester Credit Hours</b>			<b>67</b>			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans. Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.



# RESPIRATORY THERAPY

55  
AAS.RSPT  
Fall 2005

Allied Health Department  
School of Health Sciences  
UTB-TSC  
Associate in Applied Science  
RESPIRATORY THERAPY

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

PREREQUISITES		Hrs	Gr	Gr Pts	Sem
BIOL 2301	Human Anatomy & Physiology I	3			
BIOL 2101	Human Anatomy & Physiology I - Lab	1			
BIOL 2302	Human Anatomy & Physiology II	3			
BIOL 2102	Human Anatomy & Physiology II - Lab	1			
HPRS 1204	Basic Health Profession Skills	2			
HPRS 1101	Introduction to Health Professions	1			
HPRS 1106	Medical Terminology	1			

## FIRST YEAR

### FALL

RSPT 1315	Basic Respiratory Care Procedures I	3			
RSPT 2201	Cardiopulmonary Assessment	2			
MATH 1314	College Algebra <i>or</i> MATH 1332 Math for Liberal Arts	3			
CHEM 1305/1105	* Introduction to Chemistry/Lab <i>or</i> higher	(3,1)			
BIOL 2321/2121	* Microbiology and Microbiology Lab				
PHYS 1301/1101	* General Physics	(3,1)			

\* Choose **two** of three (Chemistry, Microbiology or Physics)

### SPRING

RSPT 1316	Basic Respiratory Care Procedures II	3			
RSPT 2305	Pulmonary Diagnostics	3			
RSPT 2310	Cardiopulmonary Disease	3			
RSPT 1260	Clinical I	2			
HPRS 2300	Pharmacology for Health Professions	3			

### SUMMER

RSPT 1137	Basic Disrhythmia Interpretation	1			
RSPT 2135	Pediatric Advanced Life Support	1			
RSPT 2139	Advanced Cardiac Life Support	1			
RSPT 1161	Clinical II	1			

## SECOND YEAR

### FALL

RSPT 2314	Mechanical Ventilation	3			
RSPT 2353	Neonatal/Pediatric Cardiopulmonary Care	3			
RSPT 2262	Clinical III	2			
HPRS 1205	Medical Law/Ethics for Health Professionals <i>or</i> HPRS 3302	2			
PSYC 2301	Introduction to Psychology	3			

### SPRING

	Humanities Elective	3			
RSPT 2230	Examination Preparation	2			
RSPT 1241	Respiratory Home Care/Rehabilitation	2			
RSPT 2363	Clinical IV	3			
ENGL 1301	Composition I	3			
	<b>TOTAL Semester Credit Hours</b>	<b>72</b>			

### ADVANCED LEVEL CERTIFICATION (These courses are not required for AAS.RSPT)

RSPT 4358	Advanced Respiratory Patient Assessment (Fall)	3			
RSPT 4319	Mech. Ventilation of Neonatal/Peds Patient (Spring)	3			
RSPT 3333	Respiratory Care Case Management (Fall)	3			
RSPT 4333	Issues and Trends in Respiratory Care (Spring)	3			
RSPT 4325	Clinical Simulations in Respiratory Care (Spring)	3			

Students who are admitted to an Allied Health program must make continuous satisfactory progress toward completion of their degree plans. Continuous satisfactory progress means a minimum grade of "C" must be obtained in each course required in the degree plan.

**SOCIAL WORK**  
College of Liberal Arts  
UTB-TSC  
Associate in Arts  
SOCIAL WORK

56  
AA.SOCW  
Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

**GENERAL EDUCATION CORE - 48 HOURS**

COMMUNICATION REQUIREMENTS - 9 hours		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <i>or</i> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3			

**MATH REQUIREMENT - 3 hours †** Choose **one** of the following:

MATH 1314	College Algebra				
MATH 1332	Math for Liberal Arts				
MATH 1324	Business Algebra				
	any higher level Math course				

**SCIENCE REQUIREMENT - 8 hours**

Select two 4-hour Science courses (3 hours lecture, 1 hour lab) <b>Biology Recommended</b>					
		3,1			
		3,1			

**HUMANITIES REQUIREMENT - 6 hours**

	Literature (ENGL 2000 level)	3			
	ARTS 1301 Art Appreciation    ARTS 1303 Art History <i>or</i> MUSI 1306 Music Appreciation    MUSI 1308 Music Literature	3			

**SOCIAL SCIENCE REQUIREMENT - 12 hours**

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

**BEHAVIORAL SCIENCE REQUIREMENT - 3 hours**

PSYC 2301	Introduction to Psychology	3			
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**KINESIOLOGY REQUIREMENT - 1 hour**

KINE 11__	Any activity/health/fitness/wellness course	1			
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**MODERN LANGUAGE REQUIREMENT - 6 hours**

Six hours of same modern language, other than English at the 1000 level <i>or</i> higher. Music Majors/Minors must take FRENCH <i>and</i> GERMAN. Selection of Spanish and/or Translation Studies in Spanish requires SPAN 2321 and SPAN 2322.					
		3			
		3			

**SOCIAL WORK MAJOR REQUIREMENTS - 9 HOURS**

SOCI 1301	Introduction to Sociology	3			
SOCW 2361	Introduction to Social Welfare	3			
SOCW 2362	Social Welfare Institution and Legislation	3			

**ELECTIVES - 6 HOURS ‡**

		3			
		3			
	<b>TOTAL Semester Credit Hours</b>	<b>63</b>			

† Grade must be C or better

‡ Recommended: COSC 1310 or other COSC course, or

SOCI 2317 Statistics - if student plans to continue for a Bachelor of Arts in Sociology

# SPANISH TRANSLATION

College of Liberal Arts  
UTB-TSC  
Associate in Arts

## SPANISH TRANSLATION

57  
AA.SPAN  
Fall 2005

Student \_\_\_\_\_ ID# \_\_\_\_\_  
 Student Signature \_\_\_\_\_ Email \_\_\_\_\_  
 Academic Advisor \_\_\_\_\_ Date \_\_\_\_\_

### GENERAL EDUCATION CORE - 48 HOURS

COMMUNICATION REQUIREMENTS - 9 hours		Hrs	Gr	Gr Pts	Sem
ENGL 1301	Composition I	3	†		
ENGL 1302	Composition II <b>or</b> ENGL 2311 Technical & Business Writing	3	†		
SPCH 1315	Applied Communication	3			

### MATH REQUIREMENT - 3 hours † Choose **one** of the following:

MATH 1314	College Algebra <b>or</b>				
MATH 1332	Math for Liberal Arts <b>or</b>				
MATH 1324	Business Algebra <b>or</b>				
	any higher level Math course				

### SCIENCE REQUIREMENT - 8 hours

Select two 4-hour Science courses (3 hours lecture, 1 hour lab)					
		3,1			
		3,1			

### HUMANITIES REQUIREMENT - 6 hours

	Literature (ENGL 2000 Level)	3			
	ARTS 1301 Art Appreciation    ARTS 1303 Art History <b>or</b> MUSI 1306 Music Appreciation    MUSI 1308 Music Literature	3			

### SOCIAL SCIENCE REQUIREMENT - 12 hours

HIST 1301	United States to 1877	3			
HIST 1302	United States Since 1877	3			
GOVT 2301	American Government I	3			
GOVT 2302	American Government II	3			

### BEHAVIORAL SCIENCE REQUIREMENT - 3 hours

ANTH 2351	Cultural Anthropology				
BUSI 1301	Introduction to Business				
ECON 2301	Macroeconomics				
GEOG 1303	General World Geography				
PSYC 2301	Introduction to Psychology				
SOCI 1301	Introduction to Sociology				
SOCI 2319	The Mexican American Experience				

### KINESIOLOGY REQUIREMENT - 1 hour

KINE 11	Any activity/health/fitness/wellness course	1			
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### MODERN LANGUAGE REQUIREMENT - 6 hours

SPAN 2321	Hispanic Language and Culture I	3			
SPAN 2322	Hispanic Language and Culture II	3			

### SPANISH REQUIREMENTS - 15 HOURS

SPAN 2316	Spanish for Specific Purposes	3			
SPAN 2317	Business Spanish	3			
TRSP/SPAN 3332	Introduction to Spanish/English Translation	3			
TRSP/SPAN 3333	Introduction to English/Spanish Translation	3			
TRSP/SPAN	Advanced Elective ‡	3			
<b>TOTAL Semester Credit Hours</b>		<b>63</b>			

† Grade must be C or better

‡ TRSP 3335 Recommended for students planning to Minor in Spanish Translation

# BAAS - APPLIED BUSINESS TECHNOLOGY

58  
BAAS.APBT  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF BUSINESS

## Bachelor of Applied Arts and Sciences (B.A.A.S.) Degree

## Applied Business Technology Major Academic Year 2005 - 2006

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			A.A.S. TECHNICAL DEGREE	Min. 24 HOURS		
	HRS	GR	SEM				
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>						
ENGL 1301 Composition I	3	†					
ENGL 1302 Composition II	3	†					
SPCH 1315 Applied Communication	3						
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours</b>						
MATH 1314 College Algebra	3	†					
Or any higher level Math course							
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>LOWER DIVISION DEVELOPMENT SEQUENCE</b>	<b>13-15 HOURS</b>		
Select two 4-hour Science courses (3 hrs. lecture, 1 hr. lab)				ACCT 2401 Principles of Accounting I	4	†	
				BUSIU 2341 Statistics	3	†	
	3,1			ECON 2302 Microeconomics	3	†	
	3,1			BMISU 1125 Fundamentals of Spreadsheets <b>or</b> ITSW 1304 Introduction to Spreadsheets	1 or 3	†	
				BMISU 1135 Fundamentals of Access for Windows	1	†	
				BMISU 1185 Fundamentals of Project Management	1	†	
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>PROFESSIONAL DEVELOPMENT SEQUENCE</b>	<b>12 HOURS</b>		
Literature (ENGL 2000 level)	3			ENGL 3322 Business Communication	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b> MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			BUSI 3335 Organizational Communications	3		
				BMIS 3351 Information Systems in Organizations	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			BLAW 3337 Business Law I	3		
HIST 1301 United States to 1877	3						
HIST 1302 United States since 1877	3			<b>BLOCKS – CHOOSE ONE OF THE FOLLOWING</b>	<b>15 HOURS</b>		
GOVT 2301 American Government I	3			<b>BLOCK A - Accounting</b>			
GOVT 2302 American Government II	3			ACCT 3321 Intermediate Accounting I			**
				ACCT 3322 Intermediate Accounting II			**
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>Select 9 hours from:</b>			
ECON 2301 Macroeconomics	3	†		ACCT 3323 Income Tax Procedures			**
				ACCT 3324 Cost Management			**
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			ACCT 3325 Government & Not-for-Profit Accounting			**
KINE 11_____ (any activity/health/fitness/wellness)	1			ACCT 4321 Advanced Accounting II			**
				ACCT 4324 Auditing			**
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			<b>BLOCK B - Management</b>			
Six hours of same modern language, other than English.				MANA 3361 Principles of Management			
	3			MANA 3362 Human Resource Management			
	3			<b>Select 9 hours from:</b>			
				INTL 4361 International Management			**
				MANA 4364 Organizational Theory & Behavior			**
				MANA 4366 Small Business Management			**
				MANA 4367 Topics in Management			**
				<b>BLOCK C - Marketing</b>			
				MARK 3371 Principles of Marketing			**
				MARK 3372 Consumer Behavior			**
				<b>Select 9 hours from:</b>			
				INTL 4371 International Marketing			**
				MARK 4372 Promotion Management			**
				MARK 4378 Marketing Research			**
				MARK 4377 Topics in Marketing			**
				<b>BLOCK D - Finance</b>			**
				FINA 3380 Managerial Finance			**
				FINA 3381 Money and Banking <b>or</b> FINA 4385 Financial Institutions and Markets			**
				<b>Select 9 hours from:</b>			
				FINA 3382 Investment Principles			**
				FINA 4380 Intermediate Managerial Finance			**
				FINA 4389 Commercial Banking			**
				FINA 4387 Topics in Finance			**

Source: Academic Advising Center – Rev. 8-4-05

**BAAS - APPLIED BUSINESS TECHNOLOGY**

58  
BAAS.APBT  
Fall 2005

				INTL 4381 International Finance & Economics		**	
				<b>BLOCK E – Business Management Information Systems</b>			
				BMIS 3301 Web Programming with Java		**	
				BMIS 3302 Database Information Systems		**	
				<b>Select 9 hours from:</b>			
				BMIS 3303 E-Commerce Strategies		**	
				BMIS 4303 Web Systems Development		**	
				BMIS 4304 Systems Analysis for E-Business		**	
				<b>BLOCK F – International Business</b>			
				INTL 4361 International Management		**	
				BMIS 4367 Topics in E-commerce		**	
				INTL 4371 International Marketing		**	
				<b>Select 9 hours from:</b>			
				INTL 3331 International Law		**	
				INTL 3391 Multimodal Transportation		**	
				INTL 3392 Supply Chain Management		**	
				INTL 4381 International Finance & Economics		**	
				INTL 4393 Topics in Intl. Business		**	
				<b>UPPER DIVISION ELECTIVES (Any)</b>		<b>12 Hours</b>	
					3		
					3		
					3		
					3		
†	Grade must be C or better.			TOTAL CREDIT HOURS FOR GRADUATION	124-126		
				TOTAL ADVANCED HOURS (minimum)	36		

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or six hours from completion.)

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts  
Major ART No Minor**

**Non-Teacher Certification  
Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor  Signature _____ Academic Advisor	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			ART MAJOR REQUIREMENTS	75 HOURS		
	HRS	GR	SEM	ART Core Requirements	21 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ARTS 1304 Art History Survey II	3		
ENGL 1301 Composition I	3	†		ARTS 1311 Two Dimensional Design	3		
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3	†		ARTS 1312 Three Dimensional Design	3		
SPCH 1315 Applied Communication	3			ARTS 1316 Drawing I	3		
				ARTS 1317 Drawing II	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			ARTS 4301 Senior Experience in Art	3		
MATH 1314 College Algebra				ARTS 4393 Senior Exhibit	3		
MATH 1332 Math for Liberal Arts				<i>Choose from the following:</i>			
MATH 1324 Business Algebra				ARTS 2313 Computer Imaging I			<b>9 hours</b>
or any higher level Math course				ARTS 2316 Painting I			
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			ARTS 2333 Printmaking I			
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)				ARTS 2356 Photography I			
	3,1			ARTS 2326 Sculpture I			
	3,1			ARTS 2346 Ceramics I			
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<i>Choose from the following:</i>			<b>9 hours</b>
Literature (ENGL 2000 level)	3			ARTS 2314 Computer Imaging II			
ARTS 1303 Art History Survey I	3			ARTS 2317 Painting II			
				ARTS 2334 Printmaking II			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ARTS 2357 Photography II			
HIST 1301 United States to 1877	3			ARTS 2327 Sculpture II			
HIST 1302 United States since 1877	3			ARTS 2347 Ceramics II			
GOVT 2301 American Government I	3			<i>Choose from the following:</i>			<b>6 - 12 hours</b>
GOVT 2302 American Government II	3			ARTS 3303 Italian Renaissance Art (1400-1650)			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ARTS 3338 Creative and Critical Thinking in Art			
ANTH 2351 Cultural Anthropology				ARTS 3352 Contemporary Art			
BUSI 1301 Introduction to Business				ARTS 3382 19 <sup>TH</sup> Century Euro. Art Hist. (1789-1900)			
ECON 2301 Macroeconomics				ARTS 4353 American Art			
GEOG 1303 General World Geography				ARTS 4354 Latin American Art & Literature			
PSYC 2301 Introduction to Psychology				ARTS 4355 Span Medieval, Renaissance & Baroque			
SOCI 1301 Introduction to Sociology				ARTS 4387 Far Eastern Art History			
SOCI 2319 The Mexican American Experience				<i>Choose from the following:</i>			<b>24 - 30 hours</b>
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			ARTS 3314 Individual Problems ^			
KINE 11_____ (any activity/health/fitness/wellness)	1			ARTS 3321 Advanced Painting ^			
				ARTS 3323 Advanced Drawing ^			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			ARTS 3326 Advanced Sculpture ^			
Six hours of same modern language, other than English.				ARTS 3371 Advanced Ceramics ^			
	3			ARTS 4331 Advanced Computer Imaging ^			
	3			ARTS 4334 Advanced Printmaking ^			
				ARTS 4359 Advanced Photography ^			
<b>ELECTIVES **</b>	<b>3 HOURS</b>			ARTS 4391 Studio Art General ^			
	3			ARTS 4337 Internship in Art Studio ^			
				* May be used for credit in only one area			
				^ May be repeated four times for credit			
† Grade must be C or better				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>126</b>		
** 3-hrs. Vocational/technical courses may apply to these electives				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

# BIOLOGY

60  
BS.BIOL  
Fall 2005

## THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY

**Bachelor of Science**  
**Major BIOLOGY**

**Minor / Concentration \_\_\_\_\_ /No Minor**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor _____	Room Number _____	Telephone Number _____
		Signature _____		
		Academic Advisor _____	Date _____	

**Student Name** \_\_\_\_\_ **ID #** \_\_\_\_\_

**E-mail** \_\_\_\_\_ **Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	37 HOURS		
	HRS	GR	SEM	<b>Upper Division Hours (3000 and 4000 levels)</b>	<b>29 hours</b>		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Core Courses for the Major</b>	<b>25 hours</b>		
ENGL 1301 Composition I	3	†		BIOL 1306 General Biology I	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		BIOL 1106 General Biology Laboratory I	1		
SPCH 1315 Applied Communications	3			BIOL 1307 General Biology II	3		
				BIOL 1107 General Biology I Laboratory II	1		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			BIOL 3301 Advanced Physiology	3		
MATH 2413 Calculus I <i>or</i>				BIOL 3101 Advanced Physiology Laboratory	1		
MATH 1342 Elementary Statistics				BIOL 3303 Genetics	3		
				BIOL 3103 Genetics Laboratory	1		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			BIOL 3309 Ecology	3		
CHEM 1311 & CHEM 1111 General Chemistry I & Lab	3,1			BIOL 3109 Ecology Laboratory	1		
CHEM 1312 & CHEM 1112 General Chemistry II & Lab	3,1			BIOL 3312 Cell Biology	3		
				BIOL 3112 Cell Biology Laboratory	1		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			BIOL 4100 Biology Seminar	1		
Literature (ENGL 2000 level)	3						
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>							
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3						
				<b>BIOLOGY ELECTIVES (Must be Advanced)</b>	<b>12 hours</b>		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			BIOL _____ Advanced	3,1		
HIST 1301 United States to 1877	3			BIOL _____ Advanced	3,1		
HIST 1302 United States since 1877	3			BIOL _____ Advanced	3,1		
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3						
				<b>SUPPORT COURSES</b>	<b>16 HOURS</b>		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			CHEM 2323/2123 Organic Chemistry I (Lab Required)	3,1		
ANTH 2351 Cultural Anthropology				CHEM 2325/2125 Organic Chemistry II (Lab Required)	3,1		
BUSI 1301 Introduction to Business				PHYS 1301/1101 General Physics I (Lab Required)	3,1		
ECON 2301 Macroeconomics				PHYS 1302/1102 General Physics II (Lab required) <i>or</i>	3,1		
GEOG 1303 General World Geography				GEOL 1303/1103 Physical Geology <i>or</i>			
PSYC 2301 Introduction to Psychology				GEOL 1304/1104 Historical Geology <i>or</i>			
SOCI 1301 Introduction to Sociology				ESCI 1301/1101 Intro. To Environmental Science <i>or</i>			
SOCI 2319 The Mexican American Experience				GEOL/GEOG 4440 Geographic Information Systems			
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>MINOR or CONCENTRATION or NO MINOR ELECTIVES</b>	<b>16-20 HOURS</b>		
KINE 11__ (any activity/health/fitness/wellness)	1			(9 hours must be advanced)			
				This section can consist of a minor or a concentration (Biomedical, Neuroscience, General Biology or Conservation/Ecology) or no minor.			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				Advanced	3	
Six hours of same modern language, other than English.					Advanced	3	
	3				Advanced	3	
	3						
<b>FREE ELECTIVES ‡</b>	<b>3-7 HOURS</b>						
COSC 1310 (or higher level COSC course – Recommended)	3						
† Grade must be C or better				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
‡ 3-hrs. Vocational/technical courses may apply to these electives				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

Source: Academic Advising Center Rev.3-31-05

# BUSINESS - ACCOUNTING

61  
BBA.ACCT  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF BUSINESS

Bachelor of Business Administration

Major: **ACCOUNTING**

Academic Year 2005-2006

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			BUSINESS ADMINISTRATION LOWER DIVISION CORE	20 HOURS		
	HRS	GR	SEM	ACCT 2401 Principles of Accounting I	4	†	
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ACCT 2402 Principles of Accounting II	4	†	
ENGL 1301 Composition I	3	†		BMISU 1125 Fundamentals of Spreadsheets	1	†	
ENGL 1302 Composition II	3	†		BMISU 1135 Fundamentals of Access for Windows	1	†	
SPCH 1315 Applied Communication	3			BMISU 1185 Fundamentals of Project Management	1	†	
				BUSI 1301 Introduction to Business	3	†	
				BUSIU 2341 Statistics	3	†	
<b>MATH REQUIREMENT</b>	<b>3 hours</b>			ECON 2302 Microeconomics	3	†	
MATH 1314 College Algebra	3	†					
				<b>BUSINESS ADMINISTRATION UPPER DIVISION CORE **</b>	<b>36 HOURS</b>		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			BLAW 3337 Business Law I	3		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				BUSI 3343 Decision Analysis	3	**	
				ACCT 4331 Accounting Report Writing	3		
	3,1			ENGL 3322 Business Communication	3		
	3,1			MANA 3361 Principles of Management	3		
				MARK 3371 Principles of Marketing	3	**	
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			ACCT 3351 Information Systems in Organizations	3		
Literature (ENGL 2000 level)	3			FINA 3380 Managerial Finance	3	**	
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				MANA 3363 Production Management	3	**	
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MANA 4350 Business Ethics	3		
				INTL 4361 International Management	3	**	
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			BUSI 4369 Business Policy	3	**	
HIST 1301 United States to 1877	3						
HIST 1302 United States Since 1877	3			<b>ACCOUNTING MAJOR</b>	<b>21 HOURS</b>		
GOVT 2301 American Government I	3			ACCT 3321 Intermediate Accounting I	3	**	
GOVT 2302 American Government II	3			ACCT 3322 Intermediate Accounting II	3	**	
				ACCT 3323 Income Tax Procedures	3	**	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ACCT 3324 Cost Management	3	**	
ECON 2301 Macroeconomics	3	†		ACCT 3325 Governmental & Not-for-Profit Accounting	3	**	
				ACCT 4321 Advanced Accounting II	3	**	
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			ACCT 4324 Auditing	3	**	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1						
				<b>ACCOUNTING ELECTIVE – Select one of the following:</b>	<b>3 HOURS</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			ACCT 4323 Contemporary Accounting Theory		**	
Six hours of same modern language, other than English.				ACCT 4327 Advanced Managerial Accounting		**	
	3			ACCT 4328 Auditing Seminar		**	
	3			ACCT 4329 Advanced Income Tax Procedures		**	
				<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>128</b>		
				<b>TOTAL ADVANCED (Minimum)</b>	<b>36</b>		

† Grade must be C or better. For graduation, a student must have a 2.5 overall GPA, a 2.5 GPA in the area of concentration, and a 2.5 upper division core GPA.

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or 6 hrs. from completion.)

Source: Academic Advising Center - Rev. 8-4-05



# BUSINESS - FINANCE

62  
BBA.FINA  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF BUSINESS

Bachelor of Business Administration

Major: **FINANCE**

Academic Year **2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			BUSINESS ADMINISTRATION LOWER DIVISION CORE	20 HOURS		
	HRS	GR	SEM				
<b>COMMUNICATION REQUIREMENT</b>	9 hours			ACCT 2401 or ACCT 2301 Principles of Accounting I *	4/3	†	
ENGL 1301 Composition I	3	†		ACCT 2402 or ACCT 2302 Principles of Accounting II *	4/3	†	
ENGL 1302 Composition II	3	†		BMISU 1125 Fundamentals of Spreadsheets	1	†	
SPCH 1315 Applied Communication	3			BMISU 1135 Fundamentals of Access for Windows	1	†	
				BMISU 1185 Fundamentals of Project Management	1	†	
				BUSI 1301 Introduction to Business	3	†	
				BUSIU 2341 Statistics	3	†	
<b>MATH REQUIREMENT</b>	3 hours			ECON 2302 Microeconomics	3	†	
MATH 1314 College Algebra	3	†					
				<b>BUSINESS ADMINISTRATION UPPER DIVISION CORE **</b>	<b>36 HOURS</b>		
<b>SCIENCE REQUIREMENT</b>	8 hours			BLAW 3337 Business Law I	3		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				BUSI 3343 Decision Analysis	3	**	
	3,1			BUSI 3335 Organizational Communications	3		
	3,1			ENGL 3322 Business Communication	3		
				MANA 3361 Principles of Management	3		
<b>HUMANITIES REQUIREMENT</b>	6 hours			MARK 3371 Principles of Marketing	3	**	
Literature (ENGL 2000 level)	3			BMIS/ ACCT 3351 Information Systems in Organizations	3		
ARTS 1301 Art Appreciation    ARTS 1303 Art History <i>or</i>				FINA 3380 Managerial Finance	3	**	
MUSI 1306 Music Appreciation    MUSI 1308 Music Literature	3			MANA 3363 Production Management	3	**	
				MANA 4350 Business Ethics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			INTL 4361 International Management	3	**	
HIST 1301 United States to 1877	3			BUSI 4369 Business Policy	3	**	
HIST 1302 United States Since 1877	3						
GOVT 2301 American Government I	3			<b>FINANCE MAJOR</b>	<b>18 HOURS</b>		
GOVT 2302 American Government II	3			FINA 3381 Money & Banking or FINA 4385 Financial Institutions & Markets	3	**	
				FINA 3382 Investment Principles	3	**	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours			FINA 4380 Intermediate Managerial Finance	3	**	
ECON 2301 Macroeconomics	3	†		INTL 4381 International Finance & Economics	3	**	
				FINA 4387 Topics in Finance	3	**	
<b>KINESIOLOGY REQUIREMENT</b>	1 hour			FINA 4389 Commercial Banking	3	**	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1						
				<b>OTHER REQUIREMENTS – Electives ***</b>	<b>3 HOURS</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours				3		
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>125</b>		
				<b>TOTAL ADVANCED (Minimum)</b>	<b>36</b>		

† Grade must be C or better. For graduation, a student must have a 2.5 overall GPA, a 2.5 GPA in the area of concentration, and a 2.5 upper division core GPA.

\* Students taking 3-hr course will have to satisfy total number of program hours by taking any business elective.

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or 6 hrs. from completion.)

\*\*\* 3-hrs. Vocational/technical courses may apply to these electives.

Source: Academic Advising Center - Rev. 8-4-05

# BUSINESS - INTERNATIONAL BUSINESS

63  
BBA.INTL  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF BUSINESS

Bachelor of Business Administration  
Major: **INTERNATIONAL BUSINESS**

Academic Year 2005-2006

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			BUSINESS ADMINISTRATION LOWER DIVISION CORE	20 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ACCT 2401 or ACCT 2301 Principles of Accounting I *	4/3	†	
ENGL 1301 Composition I	3	†		ACCT 2402 or ACCT 2302 Principles of Accounting II *	4/3	†	
ENGL 1302 Composition II	3	†		BMISU 1125 Fundamentals of Spreadsheets	1	†	
SPCH 1315 Applied Communication	3			BMISU 1135 Fundamentals of Access for Windows	1	†	
				BMISU 1185 Fundamentals of Project Management	1	†	
				BUSI 1301 Introduction to Business	3	†	
				BUSIU 2341 Statistics	3	†	
<b>MATH REQUIREMENT</b>	<b>3 hours</b>			ECON 2302 Microeconomics	3	†	
MATH 1314 College Algebra	3	†					
				<b>BUSINESS ADMINISTRATION UPPER DIVISION CORE **</b>	<b>36 HOURS</b>		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			BLAW 3337 Business Law I	3		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)	3,1			BUSI 3343 Decision Analysis	3	**	
	3,1			BUSI 3335 Organizational Communications	3		
				ENGL 3322 Business Communication	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			MANA 3361 Principles of Management	3		
Literature (ENGL 2000 level)	3			MARK 3371 Principles of Marketing	3	**	
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				BMIS/ ACCT 3351 Information Systems in Organizations	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			FINA 3380 Managerial Finance	3	**	
				MANA 3363 Production Management	3	**	
				MANA 4350 Business Ethics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			INTL 4361 International Management	3	**	
HIST 1301 United States to 1877	3			BUSI 4369 Business Policy	3	**	
HIST 1302 United States Since 1877	3						
GOVT 2301 American Government I	3			<b>INTERNATIONAL BUSINESS MAJOR</b>	<b>18 HOURS</b>		
GOVT 2302 American Government II	3			INTL 3331 International Law	3	**	
				INTL 3391 Multimodal Transportation	3	**	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			INTL 3392 Supply Chain Management	3	**	
ECON 2301 Macroeconomics	3	†		INTL 4371 International Marketing	3	**	
				INTL 4381 International Finance and Economics	3	**	
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			INTL 4393 Topics in International Business	3	**	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1						
				<b>OTHER REQUIREMENTS – Electives ***</b>	<b>3 HOURS</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				3		
Six hours of same modern language, other than English.							
	3			<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>125</b>		
	3			<b>TOTAL ADVANCED (Minimum)</b>	<b>36</b>		

† Grade must be C or better. For graduation, a student must have a 2.5 overall GPA, a 2.5 GPA in the area of concentration, and a 2.5 upper division core GPA.

\* Students taking 3-hr course will have to satisfy total number of program hours by taking any business elective.

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or 6 hrs. from completion.)

\*\*\* 3-hrs. Vocational/technical courses may apply to these electives.

Source: Academic Advising Center - Rev. 8-4-05

# BUSINESS - MANAGEMENT

64  
BBA.MANA  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF BUSINESS

Bachelor of Business Administration

**Major: MANAGEMENT**

**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			BUSINESS ADMINISTRATION LOWER DIVISION CORE	20 HOURS		
	HRS	GR	SEM	ACCT 2401 or ACCT 2301 Principles of Accounting I *	4/3	†	
<b>COMMUNICATION REQUIREMENT</b>	9 hours			ACCT 2402 or ACCT 2302 Principles of Accounting II *	4/3	†	
ENGL 1301 Composition I	3	†		BMISU 1125 Fundamentals of Spreadsheets	1	†	
ENGL 1302 Composition II	3	†		BMISU 1135 Fundamentals of Access for Windows	1	†	
SPCH 1315 Applied Communication	3			BMISU 1185 Fundamental of Project Management	1	†	
				BUSI 1301 Introduction to Business	3	†	
				BUSIU 2341 Statistics	3	†	
<b>MATH REQUIREMENT</b>	3 hours			ECON 2302 Microeconomics	3	†	
MATH 1314 College Algebra	3	†					
				<b>BUSINESS ADMINISTRATION UPPER DIVISION CORE **</b>	<b>36 HOURS</b>		
<b>SCIENCE REQUIREMENT</b>	8 hours			BLAW 3337 Business Law I	3		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				BUSI 3343 Decision Analysis	3	**	
	3,1			BUSI 3335 Organizational Communications	3		
	3,1			ENGL 3322 Business Communication	3		
				MANA 3361 Principles of Management	3		
<b>HUMANITIES REQUIREMENT</b>	6 hours			MARK 3371 Principles of Marketing	3	**	
Literature (ENGL 2000 level)	3			BMISU/ ACCT 3351 Information Systems in Organizations	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				FINA 3380 Managerial Finance	3	**	
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MANA 3363 Production Management	3	**	
				MANA 4350 Business Ethics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			INTL 4361 International Management	3	**	
HIST 1301 United States to 1877	3			BUSI 4369 Business Policy	3	**	
HIST 1302 United States Since 1877	3						
GOVT 2301 American Government I	3			<b>MANAGEMENT MAJOR</b>	<b>18 HOURS</b>		
GOVT 2302 American Government II	3			INTL 3331 International Law	3	**	
				MANA 3362 Human Resource Management	3	**	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours			MANA 4360 Organizational Theory & Behavior	3	**	
ECON 2301 Macroeconomics	3	†		MANA 4366 Small Business Management	3	**	
				MANA 4367 Topics in Management	3	**	
				<b>Select 3 hours from the following list:</b>			
				INTL 3392 Supply Chain Management		**	
				ACCT 3324 Cost Management		**	
<b>KINESIOLOGY REQUIREMENT</b>	1 hour			MARK 4372 Promotion Management		**	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1			MANA 4367 Topics in Management (Different Topic)		**	
				<b>OTHER REQUIREMENTS – Electives ***</b>	<b>3 HOURS</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours				3		
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>125</b>		
				<b>TOTAL ADVANCED (Minimum)</b>	<b>36</b>		

† Grade must be C or better. For graduation, a student must have a 2.5 overall GPA, a 2.5 GPA in the area of concentration, and a 2.5 upper division core GPA.

\* Students taking 3-hr course will have to satisfy total number of program hours by taking any business elective.

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or 6 hrs. from completion.)

\*\*\* 3-hrs. Vocational/technical courses may apply to these electives.

Source: Academic Advising Center - Rev. 8-4-05

# BUSINESS - MARKETING

65  
BBA.MARK  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF BUSINESS

Bachelor of Business Administration

**Major: MARKETING**

**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			BUSINESS ADMINISTRATION LOWER DIVISION CORE	20 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
				ACCT 2401 or ACCT 2301 Principles of Accounting I *	4/3		†
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ACCT 2402 or ACCT 2302 Principles of Accounting II *	4/3		†
ENGL 1301 Composition I	3		†	BMISU 1125 Fundamentals of Spreadsheets	1		†
ENGL 1302 Composition II	3		†	BMISU 1135 Fundamentals of Access for Windows	1		†
SPCH 1315 Applied Communication	3			BMISU 1185 Fundamentals of Project Management	1		†
				BUSI 1301 Introduction to Business	3		†
				BUSIU 2341 Statistics	3		†
<b>MATH REQUIREMENT</b>	<b>3 hours</b>			ECON 2302 Microeconomics	3		†
MATH 1314 College Algebra	3		†				
				<b>BUSINESS ADMINISTRATION UPPER DIVISION CORE **</b>	<b>36 HOURS</b>		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			BLAW 3337 Business Law I	3		**
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				BUSI 3343 Decision Analysis	3		**
	3,1			BUSI 3335 Organizational Communications	3		
	3,1			ENGL 3322 Business Communication	3		
				MANA 3361 Principles of Management	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			MARK 3371 Principles of Marketing	3		**
Literature (ENGL 2000 level)	3			BMIS/ ACCT 3351 Information Systems in Organizations	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				FINA 3380 Managerial Finance	3		**
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MANA 3363 Production Management	3		**
				MANA 4350 Business Ethics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			INTL 4361 International Management	3		**
HIST 1301 United States to 1877	3			BUSI 4369 Business Policy	3		**
HIST 1302 United States Since 1877	3						
GOVT 2301 American Government I	3			<b>MARKETING MAJOR</b>	<b>18 HOURS</b>		
GOVT 2302 American Government II	3			INTL 4371 International Marketing	3		**
				MARK 3372 Consumer Behavior	3		**
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MARK 4371 Sales Management and Personal Selling	3		**
ECON 2301 Macroeconomics	3		†	MARK 4372 Promotion Management	3		**
				MARK 4377 Topics in Marketing	3		**
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			MARK 4378 Marketing Research	3		**
KINE 1 ____ (One hour of activity/health/wellness/ fitness)	1						
				<b>OTHER REQUIREMENTS – Electives ***</b>	<b>3 HOURS</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				3		
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL SEMESTER CREDIT HOURS</b>	<b>125</b>		
				<b>TOTAL ADVANCED (Minimum)</b>	<b>36</b>		

† Grade must be C or better. For graduation, a student must have a 2.5 overall GPA, a 2.5 GPA in the area of concentration, and a 2.5 upper division core GPA.

\* Students taking 3-hr course will have to satisfy total number of program hours by taking any business elective.

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or 6 hrs. from completion.)

\*\*\* 3-hrs. Vocational/technical courses may apply to these electives.

Source: Academic Advising Center - Rev. 8-4-05

# CHEMISTRY

66  
BS.CHEM  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY

**Bachelor of Science**  
**Major CHEMISTRY**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor _____	Room Number _____	Telephone Number _____
		Signature _____		
		Academic Advisor _____	Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	41 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>CORE COURSES FOR THE CHEMISTRY MAJOR</b>	<b>31 hours</b>		
ENGL 1301 Composition I	3	†		CHEM 2123 Organic Chemistry Laboratory I	1		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		CHEM 2323 Organic Chemistry I	3		
SPCH 1315 Applied Communication	3			CHEM 2125 Organic Chemistry Laboratory II	1		
				CHEM 2325 Organic Chemistry II	3		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			CHEM 3301 Inorganic Chemistry	3		
MATH 1412 Pre-Calculus	4	†		CHEM 3105 Analytical Laboratory	1		
				CHEM 3305 Analytical Chemistry	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			CHEM 3110 Physical Chemistry Laboratory I	1		
CHEM 1311 & CHEM 1111 General Chemistry I & Lab	3,1			CHEM 3310 Physical Chemistry I	3		
CHEM 1312 & CHEM 1112 General Chemistry II & Lab	3,1			CHEM 3112 Physical Chemistry Laboratory II	1		
				CHEM 3312 Physical Chemistry II	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			CHEM 4110 Chemical Seminar	1		
Literature (ENGL 2000 level)	3			CHEM 4105 Instrumental Methods Lab	1		
ARTS 1301 Art Appreciation <i>or</i> ARTS 1303 Art History				CHEM 4305 Instrumental Methods of Analysis	3		
MUSI 1306 Music Appreciation <i>or</i> MUSI 1308 Music Literature	3			CHEM 4320 Chemistry Problems	3		
				<b>CHEMISTRY ELECTIVES – CHOOSE FROM:</b>	<b>10 hours</b>		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			CHEM 3303 Biochemistry I			
HIST 1301 United States to 1877	3			CHEM 3103 Biochemistry Laboratory I			
HIST 1302 United States since 1877	3			CHEM 4306 Environmental Sciences			
GOVT 2301 American Government I	3			CHEM 4325 Chemistry Internship			
GOVT 2302 American Government II	3			CHEM 4304 Selected Topics in Biochemistry			
				CHEM 4104 Selected Topics in Biochemistry Laboratory			
				CHEM 4312 Selected Topics in Physical Chemistry			
				CHEM 4112 Selected Topics in Physical Chemistry Laboratory			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			CHEM 4323 Selected Topics in Organic Chemistry			
				CHEM 4123 Selected Topics in Organic chemistry laboratory			
ANTH 2351 Cultural Anthropology							
BUSI 1301 Introduction to Business				<b>SUPPORT COURSES</b>	<b>22 HOURS</b>		
ECON 2301 Macroeconomics				PHYS 1101 General Physics Laboratory I	1		
GEOG 1303 General World Geography				PHYS 1301 General Physics I	3		
PSYC 2301 Introduction to Psychology				PHYS 1102 General Physics Laboratory II	1		
SOCI 1301 Introduction to Sociology				PHYS 1302 General Physics II	3		
SOCI 2319 The Mexican American Experience				MATH 2413 Calculus I	4		
				MATH 2414 Calculus II	4		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			MATH 3349 Differential Equations <i>or</i>	3		
KINE 11__ (any activity/health/fitness/wellness)	1			MATH 3347 Calculus III			
				COSC 1310 Computer Literacy	3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			<b>RESTRICTED ELECTIVES *</b>	<b>9 HOURS</b>		
Six hours of same modern language, other than English.					3		
	3				3		
	3				3		
<b>FREE ELECTIVES ‡</b>	<b>5 HOURS</b>			* Choose from Biology, Computer Science, Advanced Mathematics, Advanced Physics or Advanced Chemistry.			
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>125</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

‡ 3-hrs. Vocational/technical courses may apply to these electives

Source: Academic Advising Center Rev. 4-21-05

# COMMUNICATION

67  
BA.COMM  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major COMMUNICATION**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor _____	Room Number _____	Telephone Number _____
		Signature _____		
		Academic Advisor _____	Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			COMMUNICATION MAJOR REQUIREMENTS	42 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Core Courses for the COMMUNICATION Major</b>	<b>24 hours</b>		
ENGL 1301 Composition I	3	†		COMM 1307 Survey of the Media	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		COMM 3315 Methods and Strategies of Social Influence	3		
SPCH 1315 Applied Communication	3			COMM 3316 Intercultural Communication	3		
				COMM 3323 Theories of Communication	3		
<b>MATH REQUIREMENT Choose <u>one</u> of the following:</b>	<b>3 hours †</b>			COMM 3335 Mass Communication and Society	3		
MATH 1314 College Algebra				COMM 4311 Public Relations	3		
MATH 1332 Math for Liberal Arts				COMM 4345 Comm. and Conflict Management	3		
MATH Any Higher Level Math Course				COMM 4350 Applied Research Methods in Comm.	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>Choose ONE of the following Tracks:</b>	<b>18 hours</b>		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				<b>COMMUNICATION STUDIES TRACK</b>			
	3,1			SPCH 2333 Group Communication and Discussion	3		
	3,1			COMM 2316 Interviewing Principles	3		
				COMM 3310 Communication in Context	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			COMM 3330 Leadership Communication	3		
Literature (ENGL 2000 level)	3			COMM 4312 Applied Organizational Communication	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				COMM 4332 Principles of Instruction and Training	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3						
				<b>or</b>			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>MASS COMMUNICATION TRACK</b>			
HIST 1301 United States to 1877	3			COMM 2311 News Writing for the Mass Media I	3		
HIST 1302 United States Since 1877	3			COMM 2315 News Writing for the Mass Media II	3		
GOVT 2301 American Government I	3			COMM 3325 Technical and Mediated Communication	3		
GOVT 2302 American Government II	3			COMM 3360 Feature Writing	3		
				COMM 4340 Advertising	3		
				COMM 4344 Campaign Development	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>ELECTIVES</b>	<b>34 HOURS</b>		
ANTH 2351 Cultural Anthropology							
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 1____ (One hour of activity/health/wellness/ fitness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED HOURS</b>	<b>36</b>		

Source: Academic Advising Center - Rev. 3-28-05

# COMPUTER INFORMATION SYSTEM TECHNOLOGY

68  
BAT.CIS  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Applied Technology (B.A.T.)**  
**Major COMPUTER INFORMATION SYSTEM TECHNOLOGY**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>	<b>MAJOR: Computer Information System Technology</b>
	HRS   GR   SEM	<b>AAS Technical Field:</b>
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>	<b>35 HOURS</b>
ENGL 1301 Composition I	3   †	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3   †	
SPCH 1315 Applied Communication	3	
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>	
MATH 1314 College Algebra		
MATH Any Higher Level Math Course		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>	
Select two 4-hour science courses (3 hours lecture, 1 hour lab)		
	3,1	
	3,1	
		<b>Computer Information System Technology Track<sup>1</sup></b>
		<b>34 HOURS</b>
		COSC 1437 Programming Fundamentals II
		4
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>	CIST 3380 Special Topics
Literature (ENGL 2000 level)	3	3
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>		CIST 4380 Special Topics
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3	3
		MATH 3362 Discrete Structures
		3
		CIST 3330 Networking Database Management
		3
		CIST 4346 Systems Analysis and Design
		3
		CIST 4340 File Structures
		3
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>	COOP 4301 <sup>2</sup> Cooperative Education Internship
HIST 1301 United States to 1877	3	3
HIST 1302 United States Since 1877	3	
GOVT 2301 American Government I	3	
GOVT 2302 American Government II	3	
		<b>ELECTIVES – 9 Advanced Hours (Selected with Advisor)</b>
		3
		3
		3
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>	
ANTH 2351 Cultural Anthropology		<i>OR</i>
BUSI 1301 Introduction to Business		<b>Approved Upper Division Electives for Students Preparing for Training Positions</b>
ECON 2301 Macroeconomics		TECT 3301 Foundations of Technology Training
GEOG 1303 General World Geography		3
PSYC 2301 Introduction to Psychology		TECT 3302 Psychology of Technology Training
SOCI 1301 Introduction to Sociology		3
SOCI 2319 The Mexican American Experience		TECT 3303 Training Methods in Industry
		3
		<b>OTHER ELECTIVES:</b>
		Or CO-OP (2000 Level)
		3
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>	
Six hours of same modern language, other than English.		
	3	
	3	
		<b>TOTAL CREDIT HOURS FOR GRADUATION</b>
		<b>120</b>
		<b>TOTAL ADVANCED HOURS (MINIMUM)</b>
		<b>30</b>

<sup>1</sup> CIST Track will be structured so that 6 credit hours are offered on-line per semester.  
<sup>2</sup> May be taken up to three times with different contents.

# COMPUTER INFORMATION SYSTEM TECHNOLOGY (Early Childhood – 12<sup>th</sup> Grade)

69  
BAT.CIS  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Applied Technology (B.A.T)**  
**Major COMPUTER INFORMATION SYSTEM TECHNOLOGY**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>	<b>MAJOR: Computer Information System Technology</b>
	HRS   GR   SEM	<b>AAS Technical Field:</b>
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>	<b>35 HOURS</b>
ENGL 1301 Composition I	3   †	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3   †	
SPCH 1315 Applied Communication	3	
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>	
MATH 1314 College Algebra		
MATH Any Higher Level Math Course		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>	
Select two 4-hour science courses (3 hours lecture, 1 hour lab)		
	3,1	
	3,1	
		<b>Computer Information System Technology Track<sup>1</sup></b>
		<b>22 HOURS</b>
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>	CiSC 1437 Programming Fundamentals II
Literature (ENGL 2000 level)	3	CIST 3316 Web Design and Programming
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>		CIST 3330 Networking and Database Management
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3	CIST 3340 Concepts and Methods of Education Tech
		CIST 4310 Operating Systems Management
		CIST 4346 Systems Analysis and Design
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>	CIST 4360 Computer Graphics & Digital Imaging
HIST 1301 United States to 1877	3	
HIST 1302 United States Since 1877	3	
GOVT 2301 American Government I	3	
GOVT 2302 American Government II	3	
		<b>Prerequisites for Admission to Teacher Education</b>
		<b>19 HOURS</b>
		EDCIU 2101 School and Society
		EDSC 4323 Creating a Positive Productive Classroom Environment
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>	EDCI 4324 Dsgng. Instr. And Assmt. To Promote Student Learning
ANTH 2351 Cultural Anthropology		EDSC 4325 Imp. Responsive Instruction & Assessment
BUSI 1301 Introduction to Business		EDLI 4351 Content Area Literacy
ECON 2301 Macroeconomics		EDCI 4311 Student Teaching EC-4
GEOG 1303 General World Geography		EDSC 4398 Student Teaching 8-12
PSYC 2301 Introduction to Psychology		
SOCI 1301 Introduction to Sociology		
SOCI 2319 The Mexican American Experience		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>	
Six hours of same modern language, other than English.		
	3	
	3	
		<b>TOTAL CREDIT HOURS FOR GRADUATION</b>
		<b>124</b>
		<b>TOTAL ADVANCED HOURS (MINIMUM)</b>
		<b>30</b>

<sup>1</sup> CIST Track will be structured so that 6 credit hours are offered on-line per semester.

Source: Academic Advising Center - Rev. 4-7-05



# COMPUTER SCIENCE

70  
BS.COSC  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY

**Bachelor of Science**

**Non-Teacher Certification**

**Major COMPUTER SCIENCE**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	66 HOURS		
	HRS	GR	SEM		23 Hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Computer Science Foundation</b>			
ENGL 1301 Composition I	3	†		COSC 1336 Programming Fundamentals I	3	†	
ENGL 1302 Composition II	3	†		COSC 1437 Programming Fundamentals II	4	†	
SPCH 1315 Applied Communication	3			COSC 2312 Foundations of Computer Science	3	†	
				COSC 2316 Web Programming and Design <u>or</u>			
				COSC 2317 Signals and Systems	3		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			COSC 2310 Discrete Structures	3	†	
MATH 2413 Calculus I	4	†		MATH 1342 Elementary Statistics	3		
				MATH 2414 Calculus II	4		
				<b>Computer Science Core</b>	<b>25 Hours</b>		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			COSC 2336 Programming Fundamentals III	3	†	
PHYS 2325, 2125 University Physics I & Lab	3,1			COSC 2325 Machine Language and Computer Organization	3		
PHYS 2326, 2126 University Physics II & Lab	3,1	†		COSC 3325 Digital Logic & Computer Architecture	3		
				COSC 3330 Introduction to Networks and Database	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			COSC 3345 Data Structures and Algorithm Analysis	3		
Literature (ENGL 2000 level)	3			COSC 3355 Principles of Programming Languages	3		
ARTS 1301 Art Appreciation    ARTS 1303 Art History <u>or</u>				COSC 4310 Operating Systems	3		
MUSI 1306 Music Appreciation    MUSI 1308 Music Literature	3			COSC 4346 Software Engineering	3		
				COSC 4190 Senior Project	1		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>Computer Science Electives</b>	<b>15 Hours</b>		
HIST 1301 United States to 1877	3			COSC 43 ___	Advanced Elective	3	
HIST 1302 United States since 1877	3			COSC 43 ___	Advanced Elective	3	
GOVT 2301 American Government I	3			COSC 43 ___	Advanced Elective	3	
GOVT 2302 American Government II	3			COSC 43 ___	Advanced Elective	3	
				COSC 43 ___	Advanced Elective	3	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>Mathematics Electives Choose from:</b>	<b>3 Hours</b>		
ANTH 2351 Cultural Anthropology				MATH 3321, 3328, 3332, 3339, 3341, 3347, 3348, 3349, 4321, 4329, 4332,			
BUSI 1301 Introduction to Business				4342, 4343, or 4374			
ECON 2301 Macroeconomics					3		
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology				<b>ELECTIVES</b>	<b>10 HOURS</b>		
SOCI 1301 Introduction to Sociology				6 hours from MATH 1314, 1316, 1348, 1412, 2318, 2332 or any course			
SOCI 2319 The Mexican American Experience				Listed in "Computer Science" or "Math" Electives.			
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>				3		
KINE 11___ (any activity/health/fitness/wellness)	1				3		
					4		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>125</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

Source: Academic Advising Center Rev. 08-04-05

**CRIMINAL JUSTICE – Correctional Administration**

71  
BSCJ.CA  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Science in Criminal Justice**

**Non-Teacher Certification**

**Major CRIMINAL JUSTICE – CORRECTIONAL ADMINISTRATION**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	72 HOURS		
	HRS	GR	SEM		27 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Criminal Justice Major – Core Requirements</b>			
ENGL 1301 Composition I	3	†		CRIJ 1301 Introduction to Criminal Justice	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		CRIJ 1310 Fundamentals of Criminal Law	3		
SPCH 1315 Applied Communication	3			SOCI 1301 Introduction to Sociology	3		
				CRIJ 1313 Juvenile Justice System	3		
				CRIJ 3302 Current Lit & Research in Criminal Justice	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			CRIJ 3303 Nature of Crime	3		
MATH 1314 College Algebra				CRIJ 4301 Practicum-Field Experience	3		
MATH 1332 Math for Liberal Arts				GOVT 4321 American Const. Law: Civil Liberties	3		
Higher Level Math				CRIJ 4370 Senior Seminar in Crim. Justice Policy Issues	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>Correctional Administration Concentration</b>	<b>15 hours</b>		
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)				CRIJ 2313 Correctional System and Practices	3		
	3,1			CRIJ 3331 Legal Aspects of Corrections	3		
	3,1			CRIJ 3345 Correctional Administration	3		
				CRIJ 4341 Correctional Casework and Counseling	3		
				CRIJ 4343 Seminar of Issues in Corrections	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>Criminal Justice Electives<sup>1</sup></b>	<b>12 hours</b>		
Literature (ENGL 2000 level)	3				3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>					3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3				3		
					3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>Interdisciplinary Social Science Support Courses</b>	<b>18 hours</b>		
HIST 1301 United States to 1877	3			Advanced Electives from each of the following:			
HIST 1302 United States since 1877	3			SOCI Advanced Elective (3000 or 4000 level)	3		
GOVT 2301 American Government I	3			SOCI Advanced Elective (3000 or 4000 level)	3		
GOVT 2302 American Government II	3						
				PSYC Advanced Elective (3000 or 4000 level)	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			PSYC Advanced Elective (3000 or 4000 level)	3		
PSYC 2301 Introduction to Psychology	3						
				GOVT Advanced Elective (3000 or 4000 level)	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			GOVT Advanced Elective (3000 or 4000 level)	3		
KINE 11_____ (any activity/health/fitness/wellness)	1						
				<b>ELECTIVES<sup>2</sup></b>	<b>6 HOURS</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				3		
Six hours of same modern language, other than English.					3		
	3						
	3						
				<sup>1</sup> CRIJ 4362 Special Topics in Criminal Justice may be taken twice for credit as long as courses have different subject matter.			
				<sup>2</sup> Computer Science courses recommended			
				<sup>2</sup> 3-Hrs. from Vocational/technical courses may apply to these electives			
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>126</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

# CRIMINAL JUSTICE – On Line Degree

72  
BSCJ.OL  
Fall 2005

## THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE COLLEGE OF LIBERAL ARTS

**Bachelor of Science in Criminal Justice**

**Non-Teacher Certification**

**Major ON-LINE DEGREE IN CRIMINOLOGY & CRIMINAL JUSTICE**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	78 HOURS		
	HRS	GR	SEM	Criminal Justice Major – Core Requirements	66 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			CRCJ 2334 Introduction to Criminal Justice	3		
ENGL 1301 Composition I	3	†		CRIM 3340 Criminal Justice Administration	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		CRIM 4332 Theories of Criminal Behavior	3		
SPCH 1315 Applied Communication	3			CRCJ 3350 Research Methods	3		
				CRIJ 3315 Legal Aspects of Evidence	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			CRIJ 3331 Legal Aspects of Corrections	3		
MATH 1314 College Algebra				CRCJ 4301 American Judicial Systems	3		
MATH 1332 Math for Liberal Arts				CRIM 3365 Juvenile Delinquency and Justice	3		
Higher Level Math				CRCJ 4380 Comparative Criminal Justice Systems	3		
				CRIJ 4370 Senior Seminar in Criminal Justice	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			CRCJ 4333 Institutional Corrections	3		
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)				CRCJ 4315 Criminal Careers and Behavior Systems	3		
	3,1			CRIM 4381 Ethics in Criminal Justice	3		
	3,1			CRIM 4321 Probation and Parole	3		
				CRIJ 4312 Principles of Law Enforcement Supervision	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			CRIJ 4341 Correctional Casework and Counseling	3		
Literature (ENGL 2000 level)	3			CRIJ 4313 Seminar of Issues in Law Enforcement	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				CRIM 4382 Police and the Community	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			CRIJ 4362 Special Topics <sup>1</sup>	3		
				CRCJ 3380 Ethnic and Gender Issues in Criminal Justice	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			PSYC 4305 Drugs and Behavior	3		
HIST 1301 United States to 1877	3			CJSA 3320 Homicide and Capital Punishment	3		
HIST 1302 United States since 1877	3						
GOVT 2301 American Government I	3			<b>FREE ELECTIVES<sup>2</sup></b>	<b>12 hours</b>		
GOVT 2302 American Government II	3				3		
					3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>				3		
PSYC 2301 Introduction to Psychology	3				3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11_____ (any activity/health/fitness/wellness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3						
<b>Courses found online from:</b>				<sup>1</sup> CRIJ 4362 Special Topics in Criminal Justice may be taken twice for credit as long as courses have different subject matter.			
<b>CRCJ = UT-Arlington</b>				<sup>2</sup> Computer Science courses recommended			
<b>CRIM = UT Permian Basin</b>				<sup>2</sup> 3-Hrs. from Vocational/technical courses may apply to these electives			
<b>CRIJ = UTB/TSC</b>							
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>126</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

# CRIMINAL JUSTICE – Police Administration

73  
BSCJ.PA  
Fall 2005

## THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE COLLEGE OF LIBERAL ARTS

**Bachelor of Science in Criminal Justice**

**Non-Teacher Certification**

**Major CRIMINAL JUSTICE – POLICE ADMINISTRATION**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	72 HOURS		
	HRS	GR	SEM	<b>Criminal Justice Major – Core Requirements</b>	27 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			CRIJ 1301 Introduction to Criminal Justice	3		
ENGL 1301 Composition I	3	†		CRIJ 1310 Fundamentals of Criminal Law	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		SOCI 1301 Introduction to Sociology	3		
SPCH 1315 Applied Communication	3			CRIJ 1313 Juvenile Justice System	3		
				CRIJ 3302 Current Lit & Research in Criminal Justice	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			CRIJ 3303 Nature of Crime	3		
MATH 1314 College Algebra				CRIJ 4301 Practicum-Field Experience	3		
MATH 1332 Math for Liberal Arts				GOVT 4321 American Const. Law: Civil Liberties	3		
Higher Level Math				CRIJ 4370 Senior Seminar in Crim. Justice Policy Issues	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>Police Administration Concentration</b>	<b>15 hours</b>		
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)				CRIJ 2328 Police Systems and Practices	3		
	3,1			CRIJ 3315 Legal Aspects of Evidence	3		
	3,1			CRIJ 4311 Advanced Police Organization & Admin.	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			CRIJ 4312 Principles of Law Enforcement	3		
Literature (ENGL 2000 level)	3			CRIJ 4313 Seminar of Issues in Law Enforcement	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				<b>Criminal Justice Electives<sup>1</sup></b>	<b>12 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3				3		
					3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>				3		
HIST 1301 United States to 1877	3			<b>Interdisciplinary Social Science Support Courses</b>	<b>18 hours</b>		
HIST 1302 United States since 1877	3			Advanced Electives from each of the following:			
GOVT 2301 American Government I	3			SOCI Advanced Elective (3000 or 4000 level)	3		
GOVT 2302 American Government II	3			SOCI Advanced Elective (3000 or 4000 level)	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			PSYC Advanced Elective (3000 or 4000 level)	3		
PSYC 2301 Introduction to Psychology	3			PSYC Advanced Elective (3000 or 4000 level)	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			GOVT Advanced Elective (3000 or 4000 level)	3		
KINE 11_____ (any activity/health/fitness/wellness)	1			GOVT Advanced Elective (3000 or 4000 level)	3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			<b>ELECTIVES<sup>2</sup></b>	<b>6 HOURS</b>		
Six hours of same modern language, other than English.	3				3		
	3				3		
				<sup>1</sup> CRIJ 4362 Special Topics in Criminal Justice may be taken twice for credit as long as courses have different subject matter.			
				<sup>2</sup> Computer Science courses recommended			
				<sup>2</sup> 3-Hrs. from Vocational/technical courses may apply to these electives			
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>126</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 03-28-05

# ENGINEERING PHYSICS – BIOENGINEERING

74  
BS.ENGR.PHYS.BIOE  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
**Major: ENGINEERING PHYSICS Track: BIOENGINEERING**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	79 HOURS		
	HRS	GR	SEM		Support Courses	19 hours	
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			MATH 2414 Calculus II	4		
ENGL 1301 Composition I	3	†		MATH 2321 Differential Equations & Linear Algebra	3		
ENGL 1302 Composition II	3	†		MATH 3447 Calculus III	4		
SPCH 1315 Applied Communication	3			CHEM 1311, 1111 General Chemistry I & Laboratory	3,1		
				CHEM 1312, 1112 General Chemistry II & Laboratory	3,1		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>						
MATH 2413 Calculus I	4	†		<b>Core Physics Courses</b>	<b>14 hours</b>		
				PHYS 3400 Modern Physics w/lab	4		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			PHYS 3490 Mathematical Methods I	4		
PHYS 2325, 2125 University Physics I	3,1			PHYS 4330 Electromagnetic Theory	3		
PHYS 2326, 2126 University Physics II	3,1			PHYS 4390 Computational Methods for Engineers and Physicists	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature (ENGL 2000 level)	3						
ARTS 1301 Art Appreciation ARTS 1303 Art History or				<b>Core Engineering Courses</b>	<b>28 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ENGR 2301 Engineering Mechanics I: Statics	3		
				ENGR 2302 Engineering Mechanics II: Dynamics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ENGR 2332 Mechanics of Materials	3		
HIST 1301 United States to 1877	3			ENGR 3320 Linear Circuits	3		
HIST 1302 United States since 1877	3			ENGR 3421 Electronics I	4		
GOVT 2301 American Government I	3			ENGR 4441 Control Systems	4		
GOVT 2302 American Government II	3			ENGR 3303 Thermodynamics	3		
				ENGR 4242 Senior Design Project I	2		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ENGR 4243 Senior Design Project II	2		
ANTH 2351 Cultural Anthropology				ENGR 1101 Introduction to Engineering	1		
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				<b>Core Computer Science Courses</b>	<b>4 hours</b>		
GEOG 1303 General World Geography				COSC 1437 Programming Fundamentals II	4		
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology				<b>BIOENGINEERING TRACK</b>	<b>14 hours</b>		
SOCI 2319 The Mexican American Experience				BIOL 1306 General Biology I	3		
				BIOL 1106 General Biology I Laboratory	1		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			PHYS 3315 Physics of Biological Systems	3		
KINE 11__ (any activity/health/fitness/wellness)	1			PHYS 4315 Analysis of Biomolecules by Physical Methods	3		
				BENG 4120 Molecular Bioengineering Laboratory	1		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			BENG 4320 Molecular Bioengineering	3		
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>128</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 8-4-05

# ENGINEERING PHYSICS – COMPUTER ENGINEERING

75  
BS.ENGR.PHYS.COMPE  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science in Engineering Physics**  
**Major: ENGINEERING PHYSICS Track: COMPUTER ENGINEERING**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	79 HOURS		
	HRS	GR	SEM	Support Courses	15 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			MATH 2414 Calculus II	4		
ENGL 1301 Composition I	3	†		MATH 2321 Differential Equations & Linear Algebra	3		
ENGL 1302 Composition II	3	†		MATH 3447 Calculus III	4		
SPCH 1315 Applied Communication	3			CHEM 1311 General Chemistry I	3		
				CHEM 1111 General Chemistry I Laboratory	1		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			<b>Core Physics Courses</b>	<b>14 hours</b>		
MATH 2413 Calculus I	4	†		PHYS 3400 Modern Physics w/lab	4		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			PHYS 3490 Mathematical Methods I	4		
PHYS 2325, 2125 University Physics I	3,1			PHYS 4330 Electromagnetic Theory	3		
PHYS 2326, 2126 University Physics II	3,1			PHYS 4390 Computational Methods for Engineers and Physicists	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>Core Engineering Courses</b>	<b>28 hours</b>		
Literature (ENGL 2000 level)	3			ENGR 2301 Engineering Mechanics I: Statics	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History or				ENGR 2302 Engineering Mechanics II: Dynamics	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ENGR 2332 Mechanics of Materials	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ENGR 3320 Linear Circuits	3		
HIST 1301 United States to 1877	3			ENGR 3421 Electronics I	4		
HIST 1302 United States since 1877	3			ENGR 4441 Control Systems	4		
GOVT 2301 American Government I	3			ENGR 3303 Thermodynamics	3		
GOVT 2302 American Government II	3			ENGR 4242 Senior Design Project I	2		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ENGR 4243 Senior Design Project II	2		
ANTH 2351 Cultural Anthropology				ENGR 1101 Introduction to Engineering	1		
BUSI 1301 Introduction to Business				<b>Core Computer Science Courses</b>	<b>4 hours</b>		
ECON 2301 Macroeconomics				COSC 1437 Programming Fundamentals II	4		
GEOG 1303 General World Geography				<b>COMPUTER ENGINEERING TRACK</b>	<b>18 hours</b>		
PSYC 2301 Introduction to Psychology				COSC 2325 Machine Language and Computer Organization	3		
SOCI 1301 Introduction to Sociology				COSC 3325 Digital Logic and Computer Architecture	3		
SOCI 2319 The Mexican American Experience				COSC 2336 Programming Fundamentals III	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			COSC 3345 Data Structure and Algorithm Analysis	3		
KINE 11__ (any activity/health/fitness/wellness)	1			COSC 4310 Operating Systems	3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			COSC 4349 Computer Architecture	3		
Six hours of same modern language, other than English.				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>128</b>		
	3			<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		
	3						

† Grade must be C or better.

Source: Academic Advising Center Rev. 5-13-05

# ENGINEERING PHYSICS – ELECTRICAL ENGINEERING

76  
BS.ENGR.PHYS.ELET  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
**Major: ENGINEERING PHYSICS Track: ELECTRICAL ENGINEERING**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	79 HOURS		
	HRS	GR	SEM	<b>Support Courses</b>	15 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			MATH 2414 Calculus II	4		
ENGL 1301 Composition I	3	†		MATH 2321 Differential Equations & Linear Algebra	3		
ENGL 1302 Composition II	3	†		MATH 3447 Calculus III	4		
SPCH 1315 Applied Communication	3			CHEM 1311 General Chemistry I	3		
				CHEM 1111 General Chemistry I Laboratory	1		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			<b>Core Physics Courses</b>	<b>14 hours</b>		
MATH 2413 Calculus I	4	†		PHYS 3400 Modern Physics w/lab	4		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			PHYS 3490 Mathematical Methods I	4		
PHYS 2325, 2125 University Physics I	3,1			PHYS 4320 Electromagnetic Theory	3		
PHYS 2326, 2126 University Physics II	3,1			PHYS 4390 Computational Methods for Engineers and Physicists	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature (ENGL 2000 level)	3			<b>Core Engineering Courses</b>	<b>28 hours</b>		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				ENGR 2301 Engineering Mechanics I: Statics	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ENGR 2302 Engineering Mechanics II: Dynamics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ENGR 2332 Mechanics of Materials	3		
HIST 1301 United States to 1877	3			ENGR 3320 Linear Circuits	3		
HIST 1302 United States since 1877	3			ENGR 3421 Electronics I	4		
GOVT 2301 American Government I	3			ENGR 4441 Control Systems	4		
GOVT 2302 American Government II	3			ENGR 3303 Thermodynamics	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ENGR 4242 Senior Design Project I	2		
ANTH 2351 Cultural Anthropology				ENGR 4243 Senior Design Project II	2		
BUSI 1301 Introduction to Business				ENGR 1101 Introduction to Engineering	1		
ECON 2301 Macroeconomics				<b>Core Computer Science Courses</b>	<b>4 hours</b>		
GEOG 1303 General World Geography				COSC 1437 Programming Fundamentals II	4		
PSYC 2301 Introduction to Psychology				<b>ELECTRICAL ENGINEERING TRACK</b>	<b>18 hours</b>		
SOCI 1301 Introduction to Sociology				ELET 2330 Electronics II	3		
SOCI 2319 The Mexican American Experience				ENGR 4423 High Frequency Engineering	4		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			ENGR 4424 Electric Machinery	4		
KINE 11__ (any activity/health/fitness/wellness)	1			ENGR 4425 Analog and Digital Communications	4		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			ENGR 4326 Power Electronics	3		
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>128</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 5-13-05

# ENGINEERING PHYSICS - INDUSTRIAL

77  
BS.ENGR.PHYS.INDU  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
**Major: ENGINEERING PHYSICS Track INDUSTRIAL**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	81 HOURS		
	HRS	GR	SEM	Support Courses	11 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			MATH 2414 Calculus II	4		
ENGL 1301 Composition I	3	†		MATH 3347 Calculus III	3		
ENGL 1302 Composition II	3	†		CHEM 1311 General Chemistry I	3		
SPCH 1315 Applied Communication	3			CHEM 1111 General Chemistry I Laboratory	1		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			<b>Core Physics Courses</b>	<b>31 hours</b>		
MATH 2413 Calculus I	4	†		PHYS 2427 University Physics III	4		
				PHYS 3310 Classical Mechanics	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			PHYS 3490 Mathematical Methods I	4		
PHYS 2325, 2125 University Physics I	3,1			PHYS 3492 Mathematical Methods II	4		
PHYS 2326, 2126 University Physics II	3,1			PHYS 3400 Modern Physics w/lab	4		
				PHYS 4300 Senior Research Project	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			PHYS 4320 Quantum Mechanics	3		
Literature (ENGL 2000 level)	3			PHYS 4330 Electromagnetic Theory	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				PHYS 4390 Computational Methods in the Physical Sciences	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3						
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>INDUSTRIAL ENGINEERING TRACK</b>	<b>41 hours</b>		
HIST 1301 United States to 1877	3			CHEM 1312 General Chemistry II	3		
HIST 1302 United States since 1877	3			CHEM 1112 General Chemistry II Laboratory	1		
GOVT 2301 American Government I	3			PHYS 3320 Thermodynamics	3		
GOVT 2302 American Government II	3			ELET 3314 Instrumentation and Control	3		
				ENGR 2332 Mechanics of Materials	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ENGT 2303 Probability and Statistics	3		
ANTH 2351 Cultural Anthropology				ENGT 3320 Engineering Economics	3		
BUSI 1301 Introduction to Business				MFET 2420 Manufacturing Process Technologies	4		
ECON 2301 Macroeconomics				MFET 3310 International Quality Assurance Systems	3		
GEOG 1303 General World Geography				MFET 3320 Product and Process Design	3		
PSYC 2301 Introduction to Psychology				MFET 3325 Manufacturing Process Planning	3		
SOCI 1301 Introduction to Sociology				MFET 3341 Electronic Assembly Technology	3		
SOCI 2319 The Mexican American Experience				MFET 3351 Plastic Manufacturing Technology	3		
				MFET 4321 Designed Experimentation	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11__ (any activity/health/fitness/wellness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>132</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 5-13-05



# ENGINEERING PHYSICS – MECHANICAL ENGINEERING

78  
BS.ENGR.PHYS.MECH  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

Bachelor of Science  
Major: **ENGINEERING PHYSICS** Track: **MECHANICAL ENGINEERING**

Non-Teacher Certification  
Academic Year **2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	79 HOURS		
	HRS	GR	SEM		Support Courses		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>				<b>15 hours</b>		
ENGL 1301 Composition I	3	†		MATH 2414 Calculus II	4		
ENGL 1302 Composition II	3	†		MATH 2321 Differential Equations & Linear Algebra	3		
SPCH 1315 Applied Communication	3			MATH 3447 Calculus III	4		
				CHEM 1311 General Chemistry I	3		
				CHEM 1111 General Chemistry I Laboratory	1		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>						
MATH 2413 Calculus I	4	†		<b>Core Physics Courses</b>	<b>14 hours</b>		
				PHYS 3400 Modern Physics w/lab	4		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>						
PHYS 2325, 2125 University Physics I	3,1			PHYS 3490 Mathematical Methods I	4		
PHYS 2326, 2126 University Physics II	3,1			PHYS 4330 Electromagnetic Theory	3		
				PHYS 4390 Computational Methods for Engineers and Physicists	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature (ENGL 2000 level)	3			<b>Core Engineering Courses</b>	<b>28 hours</b>		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				ENGR 2301 Engineering Mechanics I: Statics	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ENGR 2302 Engineering Mechanics II: Dynamics	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>						
HIST 1301 United States to 1877	3			ENGR 2332 Mechanics of Materials	3		
HIST 1302 United States since 1877	3			ENGR 3320 Linear Circuits	3		
GOVT 2301 American Government I	3			ENGR 3421 Electronics I	4		
GOVT 2302 American Government II	3			ENGR 4441 Control Systems	4		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>						
ANTH 2351 Cultural Anthropology				ENGR 3303 Thermodynamics	3		
BUSI 1301 Introduction to Business				ENGR 4242 Senior Design Project I	2		
ECON 2301 Macroeconomics				ENGR 4243 Senior Design Project II	2		
GEOG 1303 General World Geography				ENGR 1101 Introduction to Engineering	1		
PSYC 2301 Introduction to Psychology				<b>Core Computer Science Courses</b>	<b>4 hours</b>		
SOCI 1301 Introduction to Sociology				COSC 1437 Programming Fundamentals II	4		
SOCI 2319 The Mexican American Experience				<b>MECHANICAL ENGINEERING TRACK</b>	<b>18 hours</b>		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11__ (any activity/health/fitness/wellness)	1			ENGR 3405 Engineering Materials	4		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.				ENGR 4406 Mechanics III	4		
	3			ENGR 4407 Manufacturing Process Technologies	4		
	3			ENGR 4308 Design Graphics with Solid Modeling	3		
				ENGR 4309 Mechanical Subsystems Design	3		
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>128</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 5-13-05

# ENGINEERING TECHNOLOGY – ELECTRONICS

79  
BS.ELET  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY

**Bachelor of Science**

**Non-Teacher Certification**

**Major ENGINEERING TECHNOLOGY - ELECTRONICS**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	93 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ENGT 1101 Introduction to Engineering Technology	1		
ENGL 1301 Composition I	3	†		ENGT 1401 Circuits I	4		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		ENGT 1402 Circuits II	4		
SPCH 1315 Applied Communication	3			ENGT 1407 Digital Fundamentals	4		
				ENGT 2130 Engineering Communications	1		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			ENGT 2303 Probability and Statistics	3		
MATH 1412 Pre-Calculus	4	†		ENGT 3301 Advanced Analytical Math	3		
				ENGT 3320 Engineering Economics	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			ENGT 4241 Senior Design Project I	2		
PHYS 1401 College Physics I and Lab	4			ENGT 4242 Senior Design Project II	2		
PHYS 1402 College Physics II and Lab	4			ELET 1150 Electronics Fabrication Laboratory	1		
				ELET 2140 Electronic Instrumentation Laboratory	1		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			ELET 2410 Electronics I	4		
Literature (ENGL 2000 level)	3			ELET 2415 Introduction to Engineering Programming	4		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				ELET 2430 Electronics II: Semiconductor Circuits	4		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ELET 3314 Instrumentation and Control	3		
				ELET 3412 Introduction to Microprocessors	4		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ELET 3413 Microprocessor Interfacing	4		
HIST 1301 United States to 1877	3			ELET 3431 Introduction to Telecommunications	4		
HIST 1302 United States since 1877	3			ELET 3440 Electric Machinery	4		
GOVT 2301 American Government I	3			ELET 4424 Power Distribution	4		
GOVT 2302 American Government II	3			MEET 1301 Introduction to Computers	3		
				MATH 2413 Calculus I	4		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MATH 2414 Calculus II	4		
ANTH 2351 Cultural Anthropology				CHEM 1311 General Chemistry I	3		
BUSI 1301 Introduction to Business				CHEM 1111 General Chemistry Laboratory I	1		
ECON 2301 Macroeconomics				INMT 1291 Capstone Experience	2		
GEOG 1303 General World Geography				MFET 3311 International Quality Assurance Systems	3		
PSYC 2301 Introduction to Psychology				MFET 4320 Materials and Processes	3		
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience				<b>TECHNICAL ELECTIVES</b>	<b>6 hours</b>		
					3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>				3		
KINE 11__ (any activity/health/fitness/wellness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>142</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 3-28-05

# ENGINEERING TECHNOLOGY – MANUFACTURING

80  
BS.MFET  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY

**Bachelor of Science**

**Non-Teacher Certification**

**Major** ENGINEERING TECHNOLOGY - MANUFACTURING

**Academic Year** 2005-2006

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

**Student Name** \_\_\_\_\_ **ID #** \_\_\_\_\_

**E-mail** \_\_\_\_\_ **Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	92 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ENGT 1101 Introduction to Engineering Technology	1		
ENGL 1301 Composition I	3	†		ENGT 1409 AC/DC Circuits	4		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		ENGT 2130 Engineering Communications	1		
SPCH 1315 Applied Communication	3			ENGT 2303 Probability and Statistics	3		
				ENGT 2401 Engineering Materials	4		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			ENGT 3301 Advanced Analytical Math	3		
MATH 1412 Pre-Calculus	4	†		ENGT 3303 Analysis for Technologists	3		
				ENGT 3320 Engineering Economics	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			ENGT 4241 Senior Design Project I	2		
PHYS 1401 College Physics I and Lab	4			ENGT 4242 Senior Design Project II	2		
PHYS 1402 College Physics II and Lab	4			ENGR 1204 Engineering Graphics I	2		
				ENGR 1205 Engineering Graphics II	2		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			ENGR 2301 Engineering Mechanics I: Statics	3		
Literature (ENGL 2000 level)	3			ENGR 2302 Engineering Mechanics II: Dynamics	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				ENGR 2332 Mechanics of Materials	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ELET 3314 Instrumentation and Control	3		
				MEET 1301 Introduction to Computers	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MEET 3311 International Quality Assurance Systems	3		
HIST 1301 United States to 1877	3			MEET 3430 Transport Technologies I	4		
HIST 1302 United States since 1877	3			MATH 2413 Calculus I	4		
GOVT 2301 American Government I	3			MATH 2414 Calculus II	4		
GOVT 2302 American Government II	3			CHEM 1311 General Chemistry I	3		
				CHEM 1111 General Chemistry Laboratory I	1		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			CHEM 1312 General Chemistry II	3		
ANTH 2351 Cultural Anthropology				CHEM 1112 General Chemistry Laboratory II	1		
BUSI 1301 Introduction to Business				INMT 1291 Capstone Experience	2		
ECON 2301 Macroeconomics				MFET 2420 Manufacturing Processes Technology	4		
GEOG 1303 General World Geography				MFET 3320 Product and Process Design	3		
PSYC 2301 Introduction to Psychology				MFET 3325 Manufacturing Processes Planning	3		
SOCI 1301 Introduction to Sociology				MFET 4321 Designed Experimentation	3		
SOCI 2319 The Mexican American Experience							
				<b>TECHNICAL ELECTIVES</b>	<b>9 hours</b>		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>				3		
KINE 11__ (any activity/health/fitness/wellness)	1				3		
					3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>141</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 3-28-05

# ENGINEERING TECHNOLOGY – MECHANICAL

81  
BS.MEET  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS AND TECHNOLOGY

**Bachelor of Science**

**Non-Teacher Certification**

**Major ENGINEERING TECHNOLOGY - MECHANICAL**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	92 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ENGT 1101 Introduction to Engineering Technology	1		
ENGL 1301 Composition I	3	†		ENGT 1409 AC/DC Circuits	4		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		ENGT 2130 Engineering Communications	1		
SPCH 1315 Applied Communication	3			ENGT 2303 Probability and Statistics	3		
				ENGT 2401 Engineering Materials	4		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			ENGT 3301 Advanced Analytical Math	3		
MATH 1412 Pre-Calculus	4	†		ENGT 3303 Analysis for Technologists	3		
				ENGT 3320 Engineering Economics	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			ENGT 4241 Senior Design Project I	2		
PHYS 1401 College Physics I and Lab	4			ENGT 4242 Senior Design Project II	2		
PHYS 1402 College Physics II and Lab	4			ENGR 1204 Engineering Graphics I	2		
				ENGR 1205 Engineering Graphics II	2		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			ENGR 2301 Engineering Mechanics I: Statics	3		
Literature (ENGL 2000 level)	3			ENGR 2302 Engineering Mechanics II: Dynamics	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				ENGR 2332 Mechanics of Materials	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ELET 3314 Instrumentation and Control	3		
				MEET 1301 Introduction to Computers	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MEET 3311 International Quality Assurance Systems	3		
HIST 1301 United States to 1877	3			MEET 3333 Mechanical Subsystem Design	3		
HIST 1302 United States since 1877	3			MEET 3430 Transport Technologies I	4		
GOVT 2301 American Government I	3			MEET 3431 Transport Technologies II	4		
GOVT 2302 American Government II	3			MEET 4325 Mechanical Power Systems	3		
				MATH 2413 Calculus I	4		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MATH 2414 Calculus II	4		
ANTH 2351 Cultural Anthropology				CHEM 1311 General Chemistry I	3		
BUSI 1301 Introduction to Business				CHEM 1111 General Chemistry Laboratory I	1		
ECON 2301 Macroeconomics				INMT 1291 Capstone Experience	2		
GEOG 1303 General World Geography				MFET 2420 Manufacturing Processes Technology	4		
PSYC 2301 Introduction to Psychology				MFET 3320 Product and Process Design	3		
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience				<b>TECHNICAL ELECTIVES</b>	<b>9 hours</b>		
					3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>				3		
KINE 11__ (any activity/health/fitness/wellness)	1				3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>141</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 03-28-05

# ENGLISH

82  
BA.ENGL  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts  
Major ENGLISH**

Minor \_\_\_\_\_

**Non-Teacher Certification  
Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>	<b>ENGLISH MAJOR REQUIREMENTS</b>
	HRS GR SEM	HRS GR SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>	ENGLISH Upper Division Hours (3000 and 4000 levels)
ENGL 1301 Composition I	3 †	<b>Core Courses for the ENGLISH Major</b>
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3 †	ENGL 3302 Literary Analysis
SPCH 1315 Applied Communication	3	ENGL 3312 <i>or</i> 3313 American Literature I <i>or</i> II
		ENGL 3319 Introduction to Descriptive Linguistics
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>	ENGL 4301 Shakespeare
MATH 1314 College Algebra		ENGL 4325 Composition Techniques
MATH 1332 Math for Liberal Arts		ENGL 4350 English Studies: The Theory and Practice
MATH Any Higher Level Math Course		
		<b>ENGLISH ADVANCED ELECTIVES</b> (3000 or 4000 level)
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>	ENGL Advanced Elective
Select two 4-hour science courses (3 hours lecture, 1 hour lab)		ENGL Advanced Elective
	3,1	ENGL Advanced Elective
	3,1	ENGL Advanced Elective
		ENGL Advanced Elective
		ENGL Advanced Elective
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>	ENGL Advanced Elective
Literature (ENGL 2000 level)	3	ENGL Advanced Elective
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3	<b>MINOR (9 hours must be Advanced Level)</b>
		Advanced
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>	Advanced
HIST 1301 United States to 1877	3	Advanced
HIST 1302 United States Since 1877	3	
GOVT 2301 American Government I	3	
GOVT 2302 American Government II	3	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>	
ANTH 2351 Cultural Anthropology		
BUSI 1301 Introduction to Business		
ECON 2301 Macroeconomics		
GEOG 1303 General World Geography		<b>ELECTIVES *</b>
PSYC 2301 Introduction to Psychology		
SOCI 1301 Introduction to Sociology		
SOCI 2319 The Mexican American Experience		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>	
Six hours of same modern language, other than English.		
	3	* 3-hrs. Vocational/technical courses may apply to these electives
	3	
		<b>TOTAL CREDIT HOURS FOR GRADUATION</b>
		<b>124</b>
		<b>TOTAL ADVANCED HOURS</b>
		<b>36</b>
† Grade must be C or better.		

Source: Academic Advising Center - Rev. 3-28-05

# ENGLISH (No Minor)

82  
BA.ENGLnm  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major ENGLISH**

**No Minor**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>	<b>ENGLISH MAJOR REQUIREMENTS</b>
	HRS GR SEM	HRS GR SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>	ENGLISH Upper Division Hours (3000 and 4000 levels)
ENGL 1301 Composition I	3 †	<b>Core Courses for the ENGLISH Major</b>
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3 †	ENGL 3302 Literary Analysis
SPCH 1315 Applied Communication	3	ENGL 3312 <i>or</i> 3313 American Literature I <i>or</i> II
		ENGL 3319 Introduction to Descriptive Linguistics
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>	ENGL 4301 Shakespeare
MATH 1314 College Algebra		ENGL 4325 Composition Techniques
MATH 1332 Math for Liberal Arts		ENGL 4350 English Studies: The Theory and Practice
MATH Any Higher Level Math Course		
		<b>ENGLISH ADVANCED ELECTIVES</b> (3000 or 4000 level)
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>	<b>21 hours</b>
Select two 4-hour science courses (3 hours lecture, 1 hour lab)		ENGL Advanced Elective
	3,1	ENGL Advanced Elective
	3,1	ENGL Advanced Elective
		ENGL Advanced Elective
		ENGL Advanced Elective
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>	ENGL Advanced Elective
Literature (ENGL 2000 level)	3	ENGL Advanced Elective
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3	<b>ELECTIVES *</b>
		<b>37 HOURS</b>
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>	
HIST 1301 United States to 1877	3	
HIST 1302 United States Since 1877	3	
GOVT 2301 American Government I	3	
GOVT 2302 American Government II	3	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>	
ANTH 2351 Cultural Anthropology		
BUSI 1301 Introduction to Business		
ECON 2301 Macroeconomics		
GEOG 1303 General World Geography		
PSYC 2301 Introduction to Psychology		
SOCI 1301 Introduction to Sociology		
SOCI 2319 The Mexican American Experience		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>	
Six hours of same modern language, other than English.		
	3	* 3-hrs. Vocational/technical courses may apply to these electives
	3	
		<b>TOTAL CREDIT HOURS FOR GRADUATION</b>
		<b>124</b>
† Grade must be C or better.		<b>TOTAL ADVANCED HOURS</b>
		<b>36</b>

Source: Academic Advising Center - Rev. 03-28-05

# GOVERNMENT

83  
BA.GOV  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major GOVERNMENT**

**Minor** \_\_\_\_\_

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor Signature _____	Room Number _____	Telephone Number _____
Academic Advisor _____			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_  
E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

	48 HOURS				36 HOURS		
GENERAL EDUCATION CORE	HRS	GR	SEM	GOVERNMENT MAJOR REQUIREMENTS	HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	9 hours			GOVERNMENT Upper Division Hours (3000 and 4000 level)	36 HOURS		
ENGL 1301 Composition I	3	†		<b>Core Course for the GOVERNMENT Major</b>	3 hours		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†		GOVT 3331 Methods of Political Science Research	3		
SPCH 1315 Applied Communication	3						
				<b>Advanced American Government</b>	6 hours		
<b>MATH REQUIREMENT Choose one of the following:</b>	3 hours †			GOVT 3314 American State Government			
MATH 1314 College Algebra				GOVT 3363 American Hispanic Politics			
MATH 1332 Math for Liberal Arts				GOVT 4320 American Constitutional Law: Federalism			
MATH Any Higher Level Math Course				GOVT 4321 American Constitutional Law: Liberties			
				GOVT 4360 American Executive Process			
<b>SCIENCE REQUIREMENT</b>	8 hours			GOVT 4363 American Legislative Process			
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				GOVT 4366 American Political Parties & Politics			
	3,1			GOVT 4367 American Judicial Process			
	3,1			GOVT 4368 Special Topics in American Government			
				<b>Comparative Government or International Relations</b>	3 hours		
<b>HUMANITIES REQUIREMENT</b>	6 hours			GOVT 3322 Politics of Developing Nations			
Literature (ENGL 2000 level)	3			GOVT 3343 International Politics			
ARTS 1301 Art Appreciation ARTS 1303 Art History or				GOVT 4369 Latin American Politics			
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			GOVT 4370 European Politics			
				GOVT 4371 Contemporary International Issues			
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			<b>Political Theory and Methodology</b>	3 hours		
HIST 1301 United States to 1877	3			GOVT 4332 American Political Theory			
HIST 1302 United States Since 1877	3			GOVT 4372 Classical Political Theory			
GOVT 2301 American Government I	3			GOVT 4373 Modern Political Theory			
GOVT 2302 American Government II	3			<b>Public Administration</b>	3 hours		
				GOVT 3323 Introduction to Public Administration			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours			GOVT 3385 Internship			
ANTH 2351 Cultural Anthropology				GOVT 4312 Urban and Metropolitan Planning			
BUSI 1301 Introduction to Business				GOVT 4365 American Administration Process			
ECON 2301 Macroeconomics				GOVT 4374 American Public Policy			
GEOG 1303 General World Geography				<b>Government Advanced Electives (3000 or 4000 level)</b>	12 hours		
PSYC 2301 Introduction to Psychology				GOVT Advanced Elective	3		
SOCI 1301 Introduction to Sociology				GOVT Advanced Elective	3		
SOCI 2319 The Mexican American Experience				GOVT Advanced Elective	3		
				GOVT Advanced Elective	3		
<b>KINESIOLOGY REQUIREMENT</b>	1 hour			<b>ECONOMIC PRINCIPLES</b>	6 hours		
KINE 1____ (One hour of activity/health/wellness/ fitness)	1			ECON 2301 Macroeconomics	3		
				ECON 2302 Microeconomics	3		
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours						
Six hours of same modern language, other than English.				<b>MINOR (9 hours must be Advanced Level)</b>	18 - 30 HOURS		
	3			Advanced	3		
	3			Advanced	3		
				Advanced	3		
<b>*Electives</b>	10 - 22 HOURS						
† Grade must be C or better.				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
* 3-hrs. Vocational/technical courses may apply to these electives				<b>TOTAL ADVANCED HOURS</b>	<b>36</b>		

# HEALTH SERVICES TECHNOLOGY

84  
BAT.HST  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF HEALTH SCIENCES

**Bachelor of Applied Technology (B.A.T.)**  
**Major HEALTH SERVICES TECHNOLOGY**

**Non-Teacher Certification**  
**Academic Year 2005 – 2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR : HEALTH SERVICES TECHNOLOGY	HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>AAS Technical Field</b>	<b>36 HOURS</b>		
ENGL 1301 Composition I	3	†					
ENGL 1302 Comp. II <b>or</b> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3						
<b>MATH REQUIREMENT Choose one of the following:</b>	<b>3 hours †</b>						
MATH 1314 College Algebra							
MATH 1332 Math for Liberal Arts							
MATH Any Higher Level Math Course							
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>						
BIOL 2301, 2101 Anatomy and Physiology I	3,1						
BIOL 2302, 2102 Anatomy and Physiology II	3,1						
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature (ENGL 2000 level)	3			<b>HEALTH SERVICES TECHNOLOGY TRACK</b>	<b>36 HOURS</b>		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				<b>Health Services Profession Core</b> Choose from the following:	<b>21 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			HPRS 3301 The Evolving Health Care System	3		
				HPRS 3302 Ethics & Law for Health Care Specialists	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			HPRS 3309 Leading and Managing the Health Care Team	3		
HIST 1301 United States to 1877	3			HPRS 3313 Health Throughout the Lifespan	3		
HIST 1302 United States Since 1877	3			HPRS 3316 Clinical Nutrition	3		
GOVT 2301 American Government I	3			HPRS 4300 Pharmacology	3		
GOVT 2302 American Government II	3			HPRS 4301 Introduction to Health Data Utilization	3		
				HPRS 4302 Continuous Quality Improvement	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			HPRS 4309 Research in Evidenced-based Healthcare	3		
SOCI 1301 Introduction to Sociology <b>or</b>				HPRS 4312 Pathophysiology	3		
PSYC 2301 Introduction to Psychology				HPRS 4316 Medical Microbiology	3		
				HPRS 3320 Patient Education in Health Sciences	3		
				HPRS 3324 Teaching in the Health Sciences	3		
				HPRS 4330 Independent Study	3		
				HPRS 4334 Issues and Trends in Health Care	3		
				HPRS 4360 Practicum in Health Services	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 1 (One hour of activity/health/wellness/ fitness)	1			<b>Health Services Technology Electives (Selected with Advisor)</b>	<b>15 hours</b>		
					3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				3		
Six hours of the same modern language other than English.					3		
	3				3		
	3				3		
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>120</b>		
				<b>TOTAL ADVANCED HOURS (MINIMUM)</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 3-28-05



# HEALTH SERVICES TECHNOLOGY – TEACHING

85  
BAT.HST.TCHG  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF HEALTH SCIENCES

**Bachelor of Applied Technology (B.A.T.)**  
**MAJOR Health Services Technology with Teacher Certification**

**Academic Year 2005 – 2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR : Health Services Technology	75+ HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>AAS Technical Field</b>	<b>30 - 45 hours</b>		
ENGL 1301 Composition I	3	†		Title			
ENGL 1302 Comp. II <b>or</b> ENGL 2311 Technical Writing	3	†		Total Technical Hours			
SPCH 1315 Applied Communication	3						
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>						
MATH 1314 College Algebra							
MATH 1332 Math for Liberal Arts							
MATH Any Higher Level Math Course							
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>						
BIOL 2301, 2101 Anatomy and Physiology I	3,1						
BIOL 2302, 2102 Anatomy and Physiology II	3,1						
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature (ENGL 2000 level)	3			<b>Health Services Technology Track</b> Choose from the following:	<b>21 hours</b>		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				HPRS 3301 The Evolving Health Care System	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			HPRS 3302 Ethics & Law for Health Care Specialists	3		
				HPRS 3309 Leading and Managing the Health Care Team	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			HPRS 3313 Health Throughout the Lifespan	3		
HIST 1301 United States to 1877	3			HPRS 3316 Clinical Nutrition	3		
HIST 1302 United States Since 1877	3			HPRS 4300 Pharmacology	3		
GOVT 2301 American Government I	3			HPRS 4301 Introduction to Health Data Utilization	3		
GOVT 2302 American Government II	3			HPRS 4302 Continuous Quality Improvement	3		
				HPRS 4309 Research in Evidenced-based Healthcare	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			HPRS 4312 Pathophysiology	3		
SOCI 1301 Introduction to Sociology <b>or</b>				HPRS 4316 Medical Microbiology	3		
PSYC 2301 Introduction to Psychology				HPRS 4360 Practicum in Health Services	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>Standard Health Services Technology Teacher Certificate</b>	<b>24 hours</b>		
KINE 1____ (One hour of activity/health/wellness/ fitness)	1			<b>Pedagogy and Professional Responsibility</b>			
				EDCI 4301 Foundations of Ed in a Diverse Society	3		
<b>MODERN LANGUAGE REQUIREMENTS</b>	<b>6 hours</b>			EDSC 4303 Understanding Learners in 8-12	3		
Six hours of the same modern language other than English at the 1000 level or higher				EDSC 4374 Designing Instruction for Grades 8-12	3		
	3			EDSC 4375 Strategies for Delivering Instruction 8-12	3		
	3			EDSC 4376 Ethical Standards and Classroom Management	3		
				EDCI 4320 Post Baccalaureate Internship	3		
				<b>Additional Requirements</b>			
				EDLI 4351 Reading in the Content Area	3		
				SPED 4370 Foundations of Special Education	3		
				<b>TOTAL MINIMUM CREDIT HOURS FOR GRADUATION</b>	<b>123</b>		
				<b>Minimum advanced credit hours for graduation</b>	<b>36</b>		

† Grade must be C or better.

Source: Academic Advising Center Rev. 3-28-05

# HISTORY

86  
BA.HIST  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts  
Major HISTORY**

**Minor \_\_\_\_\_**

**Non-Teacher Certification  
Academic Year 2005 – 2006**

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	39 HOURS		
	HRS	GR	SEM	<b>Upper Division Hours (3000-4000 levels)</b>	<b>30 Hours</b>		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Core courses for the HISTORY Major</b>	<b>18 hours</b>		
ENGL 1301 Composition I	3		†	HIST 2321 World History to 1650	3		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3		†	HIST 2322 World History since 1650	3		
SPCH 1315 Applied Communication	3			HIST 2380 Mexican-American History	3		
				HIST 3340 Texas History	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			HIST 4390 Senior Seminar in American History	3		
MATH 1314 College Algebra				HIST 4392 Senior Seminar in World History	3		
MATH 1332 Math for Liberal Arts				<b>AMERICAN HISTORY</b>	<b>Min. 3 hours</b>		
MATH 1324 Business Algebra				HIST 3313 American Colonial Era to 1783			
<b>or</b> any higher level Math course				HIST 3324 Formative Period of Am. Nation 1783-1840			
				HIST 4303 Emergence of Modern America 1877-1917			
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			HIST 4313 Twentieth Century America, 1917 to present			
<b>Select two 4-hour science courses (3 hours lecture, 1 hour lab)</b>				HIST 4338 American Intellectual and Social History			
	3,1			HIST 4343 Era of Sectional Conflict, 1840-1877			
	3,1			HIST 4344 United States Diplomatic History			
				HIST 4345 North American Economic History			
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			HIST 4380 History of World War I and II			
Literature (ENGL 2000 Level)	3			HIST 4381 U.S. Military History			
ARTS 1301 Art Appreciation ARTS 1303 Art History or				<b>European and World History</b>	<b>Min. 3 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			HIST 4365 History of the Middle Ages			
				HIST 4367 History of Early Modern Europe			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			HIST 4369 Nineteenth Century Europe			
HIST 1301 United States to 1877	3			HIST 4371 History of the Islamic World			
HIST 1302 United States Since 1877	3			HIST 4372 History of Russia			
GOVT 2301 American Government I	3			HIST 4373 History of Spain			
GOVT 2302 American Government II	3			HIST 4374 History of Asia			
				HIST 4379 Modern Europe: 1914-Present			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			HIST 4380 History of World War I and II			
ANTH 2351 Cultural Anthropology				HIST 4385 Ancient History			
BUSI 1301 Introduction to Business				<b>Latin American History</b>	<b>Min. 3 hours</b>		
ECON 2301 Macroeconomics				HIST 3334 Mexico and the Borderlands through Independence			
GEOG 1303 General World Geography				HIST 3335 Mexico since Independence			
PSYC 2301 Introduction to Psychology				HIST 4357 History of Modern Latin America			
SOCI 1301 Introduction to Sociology				HIST 4373 History of Spain			
SOCI 2319 The Mexican American Experience				<b>ADVANCED ELECTIVES</b>	<b>Min. 12 hours</b>		
				HIST Any Advanced Elective (3000-4000)			
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			HIST Any Advanced Elective (3000-4000)			
<b>KINE 1____ (One hour of activity/health/wellness/ fitness)</b>	1			HIST Any Advanced Elective (3000-4000)			
				HIST Any Advanced Elective (3000-4000)			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.				<b>MINOR (9 hours must be Advanced level)</b>	<b>18 - 30 HOURS</b>		
	3				Advanced	3	
	3				Advanced	3	
					Advanced	3	
<b>* ELECTIVES</b>	<b>7 - 19 HOURS</b>						
† Grade must be C or better.				TOTAL CREDIT HOURS FOR GRADUATION	124		
* 3-hrs. Vocational/technical courses may apply to these electives				TOTAL ADVANCED HOURS	36		

Source: Academic Advising Center Rev. 3-28-05

# KINESIOLOGY

87  
BS.KINE  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Science**  
**Major KINESIOLOGY**

**Minor** \_\_\_\_\_

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date			
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>		<b>KINESIOLOGY MAJOR REQUIREMENTS</b>	<b>49 HOURS</b>	
	HRS GR SEM			HRS GR SEM	
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>		<b>KINESIOLOGY CORE</b>	<b>45 hours</b>	
ENGL 1301 Composition I	3 †		KINE 1301 Introduction to Sport & Exercise Science	3	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3 †		KINE 1306 First Aid	3	
SPCH 1315 Applied Communication	3		KINEU 2304 Outdoor Education	3	
			KINE 1308 Sports Officiating (Football/Volleyball) <i>or</i>	3	
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>		KINE 1309 Sports Officiating (Basketball/Softball)		
MATH 1314 College Algebra			KINEU 3301 Psychology of Sport & Exercise	3	
MATH 1332 Math for Liberal Arts			KINE 3302 Foundations of Sport & Ex for Pre-Adolescents	3	
MATH Any Higher Level Math Course			KINE 3309 Modified Team and Individual Sports	3	
			KINE 3314 Dance for Children & Adolescents	3	
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>		KINE 3320 History & Principles of Sp. & Movement	3	
Select two 4-hour science courses (3 hours lecture, 1 hour lab)			KINE 3330 Coaching of Sports	3	
BIOL 2301/2101 Anatomy & Physiology I /Lab	3,1		KINE 3340 Principles of Wellness & Fitness	3	
BIOL 2302/2102 Anatomy & Physiology II /Lab or BIOL 1307/1107	3,1		KINE 3353 Physiology of Exercise & Human Performance	3	
			KINE 3370 Biomechanics	3	
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>		KINE 4310 Measurement Tech. in Physical Ex & Sports	3	
Literature (ENGL 2000 level)	3		KINE 4351 The Adapted Kinesiology Program	3	
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>					
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3		<b>Kinesiology Activities</b>	<b>4 hours</b>	
			KINE 1111 Folk & Square Dance	1	
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>		KINE 1124 Swimming	1	
HIST 1301 United States to 1877	3		KINE 1133 Basic Sports Skills	1	
HIST 1302 United States Since 1877	3		KINE 11__ Team Sport	1	
GOVT 2301 American Government I	3				
GOVT 2302 American Government II	3		<b>MINOR (9 hours must be Advanced level)</b>	<b>18 - 30 HOURS</b>	
			Advanced		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>		Advanced		
ANTH 2351 Cultural Anthropology			Advanced		
BUSI 1301 Introduction to Business					
ECON 2301 Macroeconomics					
GEOG 1303 General World Geography					
PSYC 2301 Introduction to Psychology					
SOCI 1301 Introduction to Sociology					
SOCI 2319 The Mexican American Experience					
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>				
KINE 1__ (One hour of activity/health/wellness/ fitness)	1		<b>ELECTIVES ‡</b>	<b>0 - 9 HOURS</b>	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				
Six hours of same modern language, other than English.					
	3				
	3				
† Grade must be C or better.			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>	
‡ 3-hrs. Vocational/technical courses may apply to these electives			<b>TOTAL ADVANCED HOURS</b>	<b>36</b>	

Source: Academic Advising Center - Rev. 3-28-05

# KINESIOLOGY

87  
BS.KINEnm  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Science**  
**Major KINESIOLOGY**

**No Minor**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor  Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			KINESIOLOGY MAJOR REQUIREMENTS	49 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	9 hours			<b>KINESIOLOGY CORE</b>	45 hours		
ENGL 1301 Composition I	3	†		KINE 1301 Introduction to Sport & Exercise Science	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		KINE 1306 First Aid	3		
SPCH 1315 Applied Communication	3			KINEU 2304 Outdoor Education	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	3 hours †			KINE 1308 Sports Officiating (Football/Volleyball) <i>or</i>	3		
MATH 1314 College Algebra				KINE 1309 Sports Officiating (Basketball/Softball)			
MATH 1332 Math for Liberal Arts				KINEU 3301 Psychology of Sport & Exercise	3		
MATH Any Higher Level Math Course				KINE 3302 Foundations of Sport & Ex for Pre-Adolescents	3		
<b>SCIENCE REQUIREMENT</b>	8 hours			KINE 3309 Modified Team and Individual Sports	3		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				KINE 3314 Dance for Children & Adolescents	3		
BIOL 2301/2101 Anatomy & Physiology I/Lab	3,1			KINE 3320 History & Principles of Sp. & Movement	3		
BIOL 2302/2102 Anatomy & Physiology II/Lab or BIOL 1307/1107	3,1			KINE 3330 Coaching of Sports	3		
<b>HUMANITIES REQUIREMENT</b>	6 hours			KINE 3340 Principles of Wellness & Fitness	3		
Literature (ENGL 2000 level)	3			KINE 3353 Physiology of Exercise & Human Performance	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				KINE 3370 Biomechanics	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			KINE 4310 Measurement Tech. in Physical Ex & Sports	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			KINE 4351 The Adapted Kinesiology Program	3		
HIST 1301 United States to 1877	3			<b>Kinesiology Activities</b>	4 hours		
HIST 1302 United States Since 1877	3			KINE 1111 Folk & Square Dance	1		
GOVT 2301 American Government I	3			KINE 1124 Swimming	1		
GOVT 2302 American Government II	3			KINE 1133 Basic Sports Skills	1		
				KINE 11__ Team Sport	1		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours			<b>ELECTIVES ‡ (Minimum 3 hours must be Advanced level)</b>	27 HOURS		
ANTH 2351 Cultural Anthropology				Advanced			
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	1 hour						
KINE 1__ (One hour of activity/health/wellness/ fitness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours						
Six hours of same modern language, other than English.							
	3						
	3						
† Grade must be C or better.				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
‡ 3-hrs. Vocational/technical courses may apply to these electives.				<b>TOTAL ADVANCED HOURS</b>	<b>36</b>		

Source: Academic Advising Center - Rev. 3-28-05

# KINESIOLOGY – EXERCISE SCIENCE

88  
BS.KINE.ES  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Science**  
**Major KINESIOLOGY - EXERCISE SCIENCE**

**Minor** \_\_\_\_\_

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor _____	Room Number _____	Telephone Number _____
		Signature _____		
		Academic Advisor _____		Date _____

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature			Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>KINESIOLOGY MAJOR REQUIREMENTS</b>
	HRS	GR	SEM	<b>49 HOURS</b>
COMMUNICATION REQUIREMENT	<b>9 hours</b>			<b>KINESIOLOGY - EXERCISE SCIENCE CORE</b>
ENGL 1301 Composition I	3	†		<b>45 hours</b>
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		KINE 1301 Introduction to Sport & Exercise Science
SPCH 1315 Applied Communication	3			KINE 1306 First Aid
				KINEU 2304 Outdoor Education
				KINE 1308 Sports Officiating (Football/Volleyball) <i>or</i>
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			KINE 1309 Sports Officiating (Basketball/Softball)
MATH 1314 College Algebra				KINE 3302 Foundations of Sport & Ex for Pre-Adolescents
MATH 1332 Math for Liberal Arts				KINE 3309 Modified Team and Individual Sports
MATH Any Higher Level Math Course				KINE 3312 The Intramural Program
				KINE 3314 Dance for Children & Adolescents
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			KINE 3320 History & Principles of Sp. & Movement
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				KINE 3330 Coaching of Sports
BIOL 2301/2101 Anatomy & Physiology I /Lab	3,1			KINE 3340 Principles of Wellness & Fitness
BIOL 2302/2102 Anatomy & Physiology II /Lab or BIOL 1307/1107	3,1			KINE 3353 Physiology of Exercise & Human Performance
				KINE 3370 Biomechanics
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			KINE 4310 Measurement Tech. in Physical Ex & Sports
Literature (ENGL 2000 level)	3			KINE 4351 The Adapted Kinesiology Program
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			<b>Kinesiology Activities</b>
				<b>4 hours</b>
				KINE 1111 Folk & Square Dance
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			KINE 1124 Swimming
HIST 1301 United States to 1877	3			KINE 1133 Basic Sports Skills
HIST 1302 United States Since 1877	3			KINE 11__ Team Sport
GOVT 2301 American Government I	3			
GOVT 2302 American Government II	3			<b>MINOR (9 hours must be Advanced level)</b>
				<b>18 - 30 HOURS</b>
				Advanced
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			Advanced
ANTH 2351 Cultural Anthropology				Advanced
BUSI 1301 Introduction to Business				
ECON 2301 Macroeconomics				
GEOG 1303 General World Geography				
PSYC 2301 Introduction to Psychology				
SOCI 1301 Introduction to Sociology				
SOCI 2319 The Mexican American Experience				
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			
KINE 1__ (One hour of activity/health/wellness/ fitness)	1			<b>ELECTIVES ‡</b>
				<b>0 - 9 HOURS</b>
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			
Six hours of same modern language, other than English.				
	3			
	3			
† Grade must be C or better.				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>
‡ 3-hrs. Vocational/technical courses may apply to these electives				<b>124</b>
				<b>TOTAL ADVANCED HOURS</b>
				<b>36</b>

Source: Academic Advising Center - Rev. 3-28-05

# KINESIOLOGY – EXERCISE SCIENCE No Minor

88  
BS.KINE.ESnm  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF EDUCATION

Bachelor of Science

Major **KINESIOLOGY – EXERCISE SCIENCE**

**No Minor**

Non-Teacher Certification

Academic Year **2005-2006**

Received by: _____	Date _____	Faculty Advisor  Signature _____ Academic Advisor	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			KINESIOLOGY MAJOR REQUIREMENTS	49 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	9 hours			<b>KINESIOLOGY - EXERCISE SCIENCE CORE</b>	45 hours		
ENGL 1301 Composition I	3	†		KINE 1301 Introduction to Sport & Exercise Science	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		KINE 1306 First Aid	3		
SPCH 1315 Applied Communication	3			KINEU 2304 Outdoor Education	3		
				KINE 1308 Sports Officiating (Football/Volleyball) <i>or</i>	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	3 hours †			KINE 1309 Sports Officiating (Basketball/Softball)			
MATH 1314 College Algebra				KINE 3302 Foundations of Sport & Ex for Pre-Adolescents	3		
MATH 1332 Math for Liberal Arts				KINE 3309 Modified Team and Individual Sports	3		
MATH Any Higher Level Math Course				KINE 3312 The Intramural Program	3		
				KINE 3314 Dance for Children & Adolescents	3		
<b>SCIENCE REQUIREMENT</b>	8 hours			KINE 3320 History & Principles of Sp. & Movement	3		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				KINE 3330 Coaching of Sports	3		
BIOL 2301/2101 Anatomy & Physiology I /Lab	3,1			KINE 3340 Principles of Wellness & Fitness	3		
BIOL 2302/2102 Anatomy & Physiology II /Lab or BIOL 1307/1107	3,1			KINE 3353 Physiology of Exercise & Human Performance	3		
				KINE 3370 Biomechanics	3		
<b>HUMANITIES REQUIREMENT</b>	6 hours			KINE 4310 Measurement Tech. in Physical Ex & Sports	3		
Literature (ENGL 2000 level)	3			KINE 4351 The Adapted Kinesiology Program	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>							
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			<b>Kinesiology Activities</b>	4 hours		
				KINE 1111 Folk & Square Dance	1		
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			KINE 1124 Swimming	1		
HIST 1301 United States to 1877	3			KINE 1133 Basic Sports Skills	1		
HIST 1302 United States Since 1877	3			KINE 11__ Team Sport	1		
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3			<b>ELECTIVES ‡ (Minimum 3 hours must be Advanced level)</b>	27 HOURS		
				Advanced			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours						
ANTH 2351 Cultural Anthropology							
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	1 hour						
KINE 1__ (One hour of activity/health/wellness/ fitness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours						
Six hours of same modern language, other than English.							
	3						
	3						
† Grade must be C or better.				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
‡ 3-hrs. Vocational/technical courses may apply to these electives.				<b>TOTAL ADVANCED HOURS</b>	<b>36</b>		

Source: Academic Advising Center - Rev. 3-28-05

# BACHELOR OF APPLIED ARTS AND SCIENCES - INTERDISCIPLINARY

89  
BAAS.ID  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE

## Bachelor of Applied Arts and Sciences (B.A.A.S.)

Academic Year 2005-2006

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

**IMPORTANT TO STUDENTS: CHECK WITH AN ACADEMIC ADVISOR FOR SUBJECT AREA SELECTION, COURSE PREREQUISITES OR ADMISSION TO PROGRAMS.**

GENERAL EDUCATION CORE	48 HOURS			TECHNICAL FIELD – AAS DEGREE OR COMPLETED	37 HOURS		
	HRS	GR	SEM	THE REQUIREMENTS FOR THE AAS DEGREE.	HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>						
ENGL 1301 Composition I	3	†					
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3						
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>						
MATH 1314 College Algebra							
MATH 1332 Math for Liberal Arts							
MATH Any Higher Level Math Course							
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>						
Select two 4-hour science courses (3 hours lecture, 1 hour lab)							
	3,1						
	3,1						
				<b>UPPER-LEVEL REQUIREMENTS</b>	<b>36 HOURS</b>		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			Take Three 12-Hour Subject Areas From Liberal Arts, Sciences, Business or Education. Courses in a Subject Area must have the same prefix.			
<b>Literature (ENGL 2000 level)</b>	3			<b>Must be ADVANCED hours (3000 or 4000 level).</b>			
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				<b>Subject Area I</b>	<b>12 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3				3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>				3		
HIST 1301 United States to 1877	3				3		
HIST 1302 United States Since 1877	3				3		
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3			<b>Subject Area II</b>	<b>12 hours</b>		
					3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>				3		
ANTH 2351 Cultural Anthropology					3		
BUSI 1301 Introduction to Business					3		
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography				<b>Subject Area III</b>	<b>12 hours</b>		
PSYC 2301 Introduction to Psychology					3		
SOCI 1301 Introduction to Sociology					3		
SOCI 2319 The Mexican American Experience					3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 1___ (One hour of activity/health/wellness/ fitness)	1			<b>ELECTIVES</b>	<b>3 hours</b>		
					3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3						
	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

Source: Academic Advising Center - Rev. 6-1-05

BAAS.ID Approved Subject Areas:  
12 hours must be from same prefix/subject.

EDUCATION

*ACP – EC-4.BILC*

- EACI 4324 Designing Instruction & Assessment to Promote Student Learning
- EABL 3312 Teaching Reading in the Bilingual Classroom (Spanish)
- EASL 4307 Foundations of ESL
- EAEC 4385 Growth & Development of the Young Child

*ACP – EC-4.ESL*

- EACI 4324 Designing Instruction & Assessment to Promote Student Learning
- EABL 3323 Beginning Literacy for ESL Learners: 2<sup>nd</sup>-4<sup>th</sup> Grades
- EASL 4307 Foundations of ESL
- EAEC 4385 Growth & Development of the Young Child

BUSINESS

Students must meet requirements for admission to upper-division in the School of Business.



# MATHEMATICS

90  
BS.MATH  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science  
Major MATHEMATICS**

**Minor** \_\_\_\_\_

**Non-Teacher Certification  
Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature: Academic Advisor		Date

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MATHEMATICS MAJOR REQUIREMENTS	42 HOURS		
	Hrs	Gr	Sem	Advanced hours in MATH Major	25 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Core Courses for the MATH Major</b>	Hrs	Gr	Sem
ENGL 1301 Composition I	3	†		MATH 2311 Foundations of Mathematics	3		
ENGL 1302 Composition II or ENGL 2311 Tech. & Business Writing	3	†		MATH 2318 Linear Algebra I	3		
SPCH 1315 Applied Communication	3			MATH 2332 Geometry I	3		
				MATH 2413 Calculus I	4		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following	<b>3 hours †</b>			MATH 2414 Calculus II	4		
MATH 1314 College Algebra				MATH 3321 Algebra I	3	†	
MATH Higher level MATH course				MATH 3328 Linear Algebra II	3		
				MATH 3332 Geometry II	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			MATH 3447 Calculus III	4		
8 hours of Natural and/or Physical Sciences				MATH 3341 Real Analysis	3		
	3/1			MATH 4321 Algebra II	3		
	3/1			MATH 4374 Probability and Statistics	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>MATHEMATICS ELECTIVES from:</b>	<b>3 hours</b>		
Literature class (2000 Level)	3			MATH 3339 Topology			
ARTS 1301 Art Appreciation ARTS 1303 Art History or				MATH 3348 Vector Analysis			
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MATH 3349 Differential Equations			
				MATH 3355 Fundamental Math for Sciences & Eng.			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MATH 3362 Discrete Structures			
HIST 1301 United States to 1877	3			MATH 3366 Computer Algebra Systems			
HIST 1302 United States since 1877	3			MATH 4329 Number Theory			
GOVT 2301 American Government I	3			MATH 4332 Groups and Geometries			
GOVT 2302 American Government II	3			MATH 4342 Complex Analysis			
				MATH 4343 Advanced Calculus			
<b>SOCIAL/BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MATH 4361 Problems Solving and Mathematical Modeling			
ANTH 2351 Cultural Anthropology				MATH 4391 Special Topics in Mathematics			
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				<b>COMPUTER SCIENCE REQUIREMENT</b>			
GEOG 1303 General World Geography				COSC 1336 Programming Fundamentals I (Preferred) or COSC 1310	3		
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology				<b>MINOR</b>	<b>(9 hours must be advanced)</b>		<b>18 - 30 HOURS</b>
SOCI 2319 Mexican American Experience					Advanced	3	
					Advanced	3	
					Advanced	3	
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11 Lifetime Fitness or any one hour activity course	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of the same modern language other than English at the 1000 level or higher							
	3						
	3						
				<b>FREE ELECTIVES ‡</b>	<b>1 - 13 HOURS</b>		
† Grade must be C or better.				<b>Total Semester Credit Hours</b>		<b>124</b>	
‡ 3-hrs. Vocational/technical courses may apply to these electives.				<b>Total Advanced (Minimum)</b>		<b>36</b>	

Source: Academic Advising Center Rev. 3-28-05

# MATHEMATICS (No Minor)

90  
BS.MATHnm  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science  
Major MATHEMATICS**

**Non-Teacher Certification  
Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature:		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MATHEMATICS MAJOR REQUIREMENTS	42 HOURS		
	Hrs	Gr	Sem	Advanced hours in MATH Major	25 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>Core Courses for the MATH Major</b>	Hrs	Gr	Sem
ENGL 1301 Composition I	3	†		MATH 2311 Foundations of Mathematics	3		
ENGL 1302 Composition II or ENGL 2311 Tech. & Business Writing	3	†		MATH 2318 Linear Algebra I	3		
SPCH 1315 Applied Communication	3			MATH 2332 Geometry I	3		
				MATH 2413 Calculus I	4		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following	<b>3 hours †</b>			MATH 2414 Calculus II	4		
MATH 1314 College Algebra				MATH 3321 Algebra I	3	†	
MATH Higher level MATH course				MATH 3328 Linear Algebra II	3		
				MATH 3332 Geometry II	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			MATH 3447 Calculus III	4		
8 hours of Natural and/or Physical Sciences				MATH 3341 Real Analysis	3		
	3/1			MATH 4321 Algebra II	3		
	3/1			MATH 4374 Probability and Statistics	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>MATHEMATICS ELECTIVES from:</b>	<b>3 hours</b>		
Literature class (2000 Level)	3			MATH 3339 Topology			
ARTS 1301 Art Appreciation ARTS 1303 Art History or				MATH 3348 Vector Analysis			
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MATH 3349 Differential Equations			
				MATH 3355 Fundamental Math for Sciences & Eng.			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MATH 3362 Discrete Structures			
HIST 1301 United States to 1877	3			MATH 3366 Computer Algebra Systems			
HIST 1302 United States since 1877	3			MATH 4329 Number Theory			
GOVT 2301 American Government I	3			MATH 4332 Groups and Geometries			
GOVT 2302 American Government II	3			MATH 4342 Complex Analysis			
				MATH 4343 Advanced Calculus			
<b>SOCIAL/BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MATH 4361 Problems Solving and Mathematical Modeling			
ANTH 2351 Cultural Anthropology				MATH 4391 Special Topics in Mathematics			
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				<b>COMPUTER SCIENCE REQUIREMENT</b>			
GEOG 1303 General World Geography				COSC 1336 Programming Fundamentals I (Preferred) or COSC 1310	3		
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology				<b>ADVANCED ELECTIVES</b>			
SOCI 2319 Mexican American Experience					Advanced	3	
					Advanced	3	
					Advanced	3	
					Advanced	3	
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11___ Lifetime Fitness or any one hour activity course	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			<b>FREE ELECTIVES ‡</b>	<b>20 HOURS</b>		
Six hours of the same modern language other than English at the 1000 level or higher							
	3						
	3						
† Grade must be C or better.				<b>Total Semester Credit Hours</b>		<b>124</b>	
‡ 3-hrs. Vocational/technical courses may apply to these electives.				<b>Total Advanced (Minimum)</b>		<b>36</b>	

Source: Academic Advising Center Rev. 3-28-05





# MUSIC – Vocal Option

93  
BA.MUSI.VOCA  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major MUSIC - VOCAL OPTION**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature			Date					
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>MUSIC MAJOR REQUIREMENTS</b>			<b>63 HOURS</b>		
	HRS	GR	SEM	<b>Core Courses for the MUSIC Major</b>			HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			MUSI 1211/1111	Music Theory I		3	†	
ENGL 1301 Composition I	3	†		MUSI 1212/1112	Music Theory II		3	†	
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†		MUSI 2211/2111	Music Theory III		3	†	
SPCH 1315 Applied Communication	3			MUSI 2212/2112	Music Theory IV		3	†	
				MUSI 3211	Orchestration & Arranging		2	†	
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			MUSI 3289	Introduction to Conducting		2	†	
MATH 1314 College Algebra				MUSI 3312	Counterpoint & Analysis		2	†	
MATH 1332 Math for Liberal Arts				MUSI 3308	Music History I		3	†	
MATH Any Higher Level Math Course				MUSI 3309	Music History II		3	†	
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			MUSI 4211	Computer Applications in Music		2		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				MUSI 4289	Advanced Conducting		2		
	3,1			MUSI 4301	Senior Experience in Music		3	†	
	3,1			MUAP 3170	Recital Performance		1	†	
				MUAP 3170	Recital Performance		1	†	
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			MUAP 3170	Recital Performance		1	†	
Literature (ENGL 2000 level)	3			MUAP 1387	Applied Music I		3	†	
MUSIU 1308 Music Literature * Required for Major	3	†		MUAP 1388	Applied Music II		3	†	
				MUAP 2387	Applied Music III		3	†	
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MUAP 2388	Applied Music IV		3	†	
HIST 1301 United States to 1877	3			MUAP 3401	Applied Music V		4	†	
HIST 1302 United States Since 1877	3			MUAP 3402	Applied Music VI		4	†	
GOVT 2301 American Government I	3			MUAP 4401	Applied Music VII		4	†	
GOVT 2302 American Government II	3			MUAP 4402	Applied Music VIII		4	†	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>VOCAL OPTION COURSES</b>			<b>19 HOURS</b>		
ANTH 2351 Cultural Anthropology				MUSI 1162	Diction I		1		
BUSI 1301 Introduction to Business				MUSI 1165	Diction II		1		
ECON 2301 Macroeconomics				MUSI 1181	Piano Class		1		
GEOG 1303 General World Geography				MUSI 1181	Piano Class		1		
<b>PSYC 2301 Introduction to Psychology</b>				MUSI 1183	Voice Class I		1		
SOCI 1301 Introduction to Sociology				MUSI 1184	Voice Class II		1		
SOCI 2319 The Mexican American Experience				MUSI	Ensemble		1		
				MUSI	Ensemble		1		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			MUSI	Ensemble		1		
KINE 1___ (One hour of activity/health/wellness/ fitness)	1			MUSI	Ensemble		1		
				MUSI	Ensemble		1		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			MUSI	Ensemble		1		
FREN 1311 Elementary French I	3			MUSI	Ensemble		1		
GERM 1311 Elementary German I	3			MUSI	Ensemble		1		
				<b>ADVANCED ELECTIVES (3000 or 4000 Level)</b>			<b>5 hours</b>		
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>			<b>130</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED HOURS</b>			<b>36</b>		

*In addition, each semester the student is required to be in a core ensemble and an elective ensemble of choice and be enrolled in the appropriate applied lesson, pass a piano proficiency exam before student teaching and pass a comprehensive departmental exam before graduation. The student is required to be enrolled in piano class each long semester until the piano exam is passed.*

# NURSING

94  
BSN.NURS  
Fall 2005

## THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE SCHOOL OF HEALTH SCIENCES

**Bachelor of Science in Nursing**  
Major - **NURSING**

**Non-Teacher Certification**  
Academic Year 2005-2006

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE †	48 HOURS			MAJOR REQUIREMENTS †	65 HOURS		
	HRS	GR	SEM	Required Courses for the NURSING Major	23 hours		
<b>COMMUNICATION REQUIREMENTS</b>	<b>9 hours</b>			NURS 3701 Nursing of the Adult Client	7		
ENGL 1301 Composition I	3			NURS 3702 Nursing of the Childbearing and Ch. Family	7		
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3			NURS 3303 Nursing of the Family in Psychosocial Crisis	3		
SPCH 1318 Interpersonal Communications	3			NURS 3604 Clinical Skills in Nursing Practice	6		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours</b>			<b>NURSING CLASS BASE CORE COURSES</b>	<b>39 hours</b>		
MATH 1314 College Algebra				NURS 3304 Perspectives in Prof. Nursing Practice	3		
or any higher level Math course				NURS 3405 Health Assessment in Professional Nursing	4		
				NURS 3508 Foundations of Holistic Nursing	5		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			NURS 4606 Health Promotion in Professional Nursing	6		
BIOL 2301/2101 Anatomy and Physiology I & Lab	3,1			NURS 4311 Contemporary Issues in Prof. Nursing	3		
BIOL 2302/2102 Anatomy and Physiology II & Lab	3,1			NURS 4309 Research in Professional Nursing	3		
				NURS 4610 Professional Nursing in the Community	6		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			NURS 4307 Trans-cultural Nursing	3		
Literature (ENGL 2000 level)	3			NURS 4612 Leadership in Professional Nursing	6		
ARTS 1301 Art Appreciation <b>or</b> ARTS 1303 Art History	3						
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>NURSING ELECTIVE</b>	<b>3 hours</b>		
HIST 1301 United States to 1877	3				3		
HIST 1302 United States since 1877	3			<b>ADDITIONAL DEGREE BASE REQUIREMENTS</b>	<b>16 HOURS</b>		
GOVT 2301 American Government I	3			SOCI 1301 Introduction to Sociology	3		
GOVT 2302 American Government II	3			COSC 1310 Computer Literacy	3		
				BIOL 2321 Microbiology	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			BIOL 2121 Microbiology Lab	1		
PSYC 2301 Introduction to Psychology	3			MUSI 1306 Music Appreciation <b>or</b> Philosophy	3		
				x3xx Statistics	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11 _____ (any activity/health/fitness/wellness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.				† All Courses Require a Minimum Grade "C"			
	3						
	3			<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>129</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

Source: Academic Advising Center Rev. 8-4-05

# PHYSICS

95  
BS.PHYS  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATH & TECHNOLOGY

**Bachelor of Science**  
**Major PHYSICS**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	49 HOURS			MAJOR REQUIREMENTS	66 - 68 HOURS		
	HRS	GR	SEM		HRS	GR	SEM
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>CORE COURSES FOR THE PHYSICS MAJOR</b>	<b>29 hours</b>		
ENGL 1301 Composition I	3	†					
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		PHYS 3400 Modern Physics	4		
SPCH 1315 Applied Communication	3			PHYS 3201 Advanced Physics Lab I	2		
				PHYS 3310 Classical Mechanics	3		
<b>MATH REQUIREMENT</b>	<b>4 hours</b>			PHYS 3320 Thermodynamics	3		
MATH 2413 Calculus I	4	†		PHYS 3390 Mathematics for Scientists and Engineers I	3		
				PHYS 3392 Mathematics for Scientists and Engineers II	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			PHYS 4300 Undergraduate Research	3		
PHYS 2325, 2125 University Physics I & Lab	3,1			PHYS 4320 Quantum Mechanics	3		
PHYS 2326, 2126 University Physics II & Lab	3,1			PHYS 4330 Electromagnetic Theory	3		
				<b>PHYSICS ELECTIVES – Must be at 3000, 4000 Level</b>	<b>6 - 8 hours</b>		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature (ENGL 2000 level)	3						
ARTS 1301 Art Appreciation <i>or</i> ARTS 1303 Art History							
MUSI 1306 Music Appreciation <i>or</i> MUSI 1308 Music Literature	3			<b>SUPPORT COURSES</b>	<b>22 hours</b>		
				MATH 2414 Calculus II	4		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MATH 3447 Calculus III	4		
HIST 1301 United States to 1877	3			MATH 3349 Differential Equations	3		
HIST 1302 United States Since 1877	3			CHEM 1311 General Chemistry I	3		
GOVT 2301 American Government I	3			CHEM 1111 General Chemistry I Lab	1		
GOVT 2302 American Government II	3			CHEM 1312 General Chemistry II	3		
				CHEM 1112 General Chemistry II Lab	1		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			COSC 1318 Programming Structures	3		
ANTH 2351 Cultural Anthropology				<b>RESTRICTED ELECTIVES *</b>	<b>9 hours</b>		
BUSI 1301 Introduction to Business					3		
ECON 2301 Macroeconomics					3		
GEOG 1303 General World Geography					3		
PSYC 2301 Introduction to Psychology				* Chemistry, Biology, Computer Science, Advanced Math, or Advanced Physics.			
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience				<b>FREE ELECTIVES **</b>	<b>12 HOURS</b>		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 1____ (One hour of activity/health/wellness/ fitness)	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of same modern language, other than English.							
	3			** 3-hrs. Vocational/technical courses may apply to these electives.			
	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>127 - 129</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

Source: Academic Advising Center - Rev. 8-4-05





# SOCIOLOGY

97  
BA.SOCI  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major SOCIOLOGY**

**Minor** \_\_\_\_\_

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor  Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

**Student Name** \_\_\_\_\_ **ID #** \_\_\_\_\_

**E-mail** \_\_\_\_\_ **Signature** \_\_\_\_\_ **Date** \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	34 HOURS		
	HRS	GR	SEM	<b>Required Courses for the SOCIOLOGY Core</b>	<b>13 hours</b>		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			SOCI 1301 Introduction to Sociology	3		
ENGL 1301 Composition I	3		†	SOCI 2317 Statistics of Psychology and Sociology	3		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3		†	SOCI 4305 Methods of Social Research	3		
SPCH 1315 Applied Communications	3			SOCI 3335 Social Theory	3		
				SOCI 4184 Senior Seminar	1		
<b>MATH REQUIREMENT</b> <i>Choose one of the following:</i>	<b>3 hours †</b>						
MATH 1314 College Algebra				<b>Distribution Courses - One must be at 4000 level</b>	<b>21 hours</b>		
MATH 1332 Math for Liberal Arts				<b>Category 1: Community</b> Choose at least 1 from the following:			
MATH 1324 Business Algebra				SOCI 2301 Marriage and Family			
or any higher level Math course				SOCI 3333 American Communities			
				SOCI 3323 Hispanics in a Global Society			
<b>SCIENCE REQUIREMENTS</b>	<b>8 hours</b>			SOCI 4325 Population and Migration Problems			
<b>Select two 4-hour Science courses (3 hours lecture, 1 hour lab)</b>							
BIOL 1306/1106 recommended	3,1			<b>Category 2: Stratification</b> Choose at least 1 from the following:			
BIOL 1307/1107 recommended	3,1			SOCI 3363 Gender			
				SOCI 3364 Minorities			
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			SOCI 4352 Social Inequality			
Literature (ENGL 2000 level)	3						
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				<b>Category 3: Authority</b> Choose at least 1 from the following:			
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			SOCI 3324 Health Systems			
				SOCI 3373 Mass Communications and Culture			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			SOCI 3374 Religion in Society			
HIST 1301 United States to 1877	3			SOCI 4375 Organizations and Work			
HIST 1302 United States since 1877	3						
GOVT 2301 American Government I	3			<b>Category 4: Alienation</b> Choose at least 1 from the following:			
GOVT 2302 American Government II	3			SOCI 1306 Social Problems			
				SOCI 3313 Criminology			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			SOCI 3393 Aging			
ANTH 2351 Cultural Anthropology				SOCI 4314 Deviance			
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				<b>Additional Distribution Electives</b>			
GEOG 1303 General World Geography				SOCI 3311 El Contexto de la Novela Mexicana <i>Taught in Spanish</i>			
PSYC 2301 Introduction to Psychology				SOCI 4383 Independent Study			
SOCI 2319 The Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>MINOR</b>	<b>18-30 HOURS</b>		
KINE 11 _____ (any activity/health/fitness/wellness)	1			Upper Division hours (3000 or 4000 level) Minimum	<b>9 hours</b>		
					Advanced	3	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				Advanced	3	
Six hours of same modern language, other than English.					Advanced	3	
	3						
	3						
<b>‡ Electives</b>	<b>12 – 24 HOURS</b>						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

‡ 3-hrs. of Vocational/technical courses may apply to these electives

Source: Academic Advising Center Rev. 3-28-05

# SPANISH

98  
BA.SPAN  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major SPANISH**

Minor \_\_\_\_\_

**Non-Teaching Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	36 HOURS		
	HRS	GR	SEM	<b>SPANISH Major Required Courses</b>	27 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			SPAN 3301 Spanish Literature I (1100-1750)	3		
ENGL 1301 Composition I	3	†		SPAN 3302 Spanish Literature II (1750-Present) <b>or</b>	3		
ENGL 1302 Composition II	3	†		SPAN 4309 Contemporary Spanish Literature			
SPCH 1315 Applied Communication	3			SPAN 3303 Advanced Spanish Composition	3		
				SPAN 3310 Masterpieces of Spanish American Lit. I	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			SPAN 3311 Masterpieces of Spanish American Lit. II	3		
MATH 1314 College Algebra				SPAN 3330 Spanish Grammar	3		
MATH 1332 Math for Liberal Arts				SPAN 4303 Hispanic Civilization	3		
MATH 1324 Business Algebra				SPAN 4310 Spanish Phonology and Phonetics	3		
or any higher level Math course				SPAN 4371 Chicano Narrative	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>SPANISH ELECTIVES</b> (3000 or 4000 level)	<b>9 hours</b>		
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)				SPAN Advanced Elective	3		
	3,1			SPAN Advanced Elective	3		
	3,1			SPAN Advanced Elective	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>MINOR</b> (9 hours must be advanced level)	<b>18 – 30 HOURS</b>		
Literature (ENGL 2000 level)	3			Advanced	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				Advanced	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			Advanced	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>						
HIST 1301 United States to 1877	3						
HIST 1302 United States Since 1877	3						
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3						
				<b>‡ ELECTIVES</b>	<b>10 - 22 HOURS</b>		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>						
ANTH 2351 Cultural Anthropology							
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>Recommended: Spanish Majors /Minors /Specialization</b>			
KINE 11____ (any activity/health/fitness/wellness)	1			SOCI 2319 The Mexican American Experience			
				ENGL 2321 World Literature I			
				MATH 1332 Mathematics for Liberal Arts			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			HIST 2321 World History I			
SPAN 2321 Hispanic Language and Culture I	3						
SPAN 2322 Hispanic Language and Culture II	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

‡ 3-hrs. of Vocational/technical courses may apply to these electives

Source: Academic Advising Center Rev. 3-28-05

# SPANISH – No Minor

98nm  
BA.SPAN  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts  
Major SPANISH**

**No Minor**

**Non-Teaching Certification  
Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR REQUIREMENTS	36 HOURS		
	HRS	GR	SEM	<b>SPANISH Major Required Courses</b>	27 hours		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			SPAN 3301 Spanish Literature I (1100-1750)	3		
ENGL 1301 Composition I	3	†		SPAN 3302 Spanish Literature II (1750-Present) <b>or</b>	3		
ENGL 1302 Composition II	3	†		SPAN 4309 Contemporary Spanish Literature			
SPCH 1315 Applied Communication	3			SPAN 3303 Advanced Spanish Composition	3		
				SPAN 3310 Masterpieces of Spanish American Lit. I	3		
<b>MATH REQUIREMENT</b> <i>Choose one of the following:</i>	<b>3 hours †</b>			SPAN 3311 Masterpieces of Spanish American Lit. II	3		
MATH 1314 College Algebra				SPAN 3330 Spanish Grammar	3		
MATH 1332 Math for Liberal Arts				SPAN 4303 Hispanic Civilization	3		
MATH 1324 Business Algebra				SPAN 4310 Spanish Phonology and Phonetics	3		
or any higher level Math course				SPAN 4371 Chicano Narrative	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>SPANISH ELECTIVES</b> (3000 or 4000 level)	<b>9 hours</b>		
Select two 4-hour Science courses (3 hours lecture, 1 hour lab)				SPAN Advanced Elective	3		
	3,1			SPAN Advanced Elective	3		
	3,1			SPAN Advanced Elective	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>‡ ELECTIVES</b>	<b>40 HOURS</b>		
Literature (ENGL 2000 level)	3						
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>							
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3						
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>						
HIST 1301 United States to 1877	3						
HIST 1302 United States Since 1877	3						
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3						
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>						
ANTH 2351 Cultural Anthropology							
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology							
SOCI 1301 Introduction to Sociology							
SOCI 2319 The Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>Recommended: Spanish Majors /Minors /Specialization</b>			
KINE 11__ (any activity/health/fitness/wellness)	1			SOCI 2319 The Mexican American Experience			
				ENGL 2321 World Literature I			
				MATH 1332 Mathematics for Liberal Arts			
				HIST 2321 World History I			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
SPAN 2321 Hispanic Language and Culture I	3						
SPAN 2322 Hispanic Language and Culture II	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>124</b>		
				<b>TOTAL ADVANCED HOURS (minimum)</b>	<b>36</b>		

† Grade must be C or better.

‡ 3-hrs. of Vocational/technical courses may apply to these electives

Source: Academic Advising Center Rev. 3-28-05

# TECHNOLOGY APPLICATION/TRAINING

99  
BAT.TAT  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Applied Technology (B.A.T.)**  
**Major TECHNOLOGY APPLICATION/TRAINING**

**Non-Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>	<b>MAJOR: TECHNOLOGY APPLICATION/TRAINING</b>
	HRS   GR   SEM	<b>AAS Technical Field:</b>
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>	<b>35 HOURS</b>
ENGL 1301 Composition I	3   †	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3   †	
SPCH 1315 Applied Communication	3	
<b>MATH REQUIREMENT</b> Choose <u>one</u> of the following:	<b>3 hours †</b>	
MATH 1314 College Algebra		
MATH Any Higher Level Math Course		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>	
Select two 4-hour science courses (3 hours lecture, 1 hour lab)		
	3,1	
	3,1	
		<b>TECHNOLOGY APPLICATION/TRAINING TRACK</b>
		<b>41 HOURS</b>
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>	MATH 1342 Elementary Statistics (or ENGT 2303)
Literature (ENGL 2000 level)	3	ENGT 2401 Engineering Materials
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>		MFET 2420 Manufacturing Process Technologies
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3	MFET 3311 International Quality Assurance Systems
		MFET 3320 Product and Processing Design
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>	MFET 3325 Manufacturing Process Planning
HIST 1301 United States to 1877	3	MFET 3331 Computer Aided Manufacturing
HIST 1302 United States Since 1877	3	MFET 3332 Robots in Manufacturing
GOVT 2301 American Government I	3	ENGT 3320 Engineering Economics
GOVT 2302 American Government II	3	
		TECT 3301 Foundations of Technology Training
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>	TECT 3302 Psychology of Technology Training
ANTH 2351 Cultural Anthropology		TECT 3303 Training Methods in Industry
BUSI 1301 Introduction to Business		
ECON 2301 Macroeconomics		<b>TECHNICAL ELECTIVES</b>
GEOG 1303 General World Geography		3 Advanced Hours (Selected with Advisor)
PSYC 2301 Introduction to Psychology		Or
SOCI 1301 Introduction to Sociology		COOP 4301 Cooperative Education Internship
SOCI 2319 The Mexican American Experience		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>	
KINE 1____ (One hour of activity/health/wellness/ fitness)	1	
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>	
Six hours of same modern language, other than English.		
	3	
	3	
		<b>TOTAL CREDIT HOURS FOR GRADUATION</b>
		<b>124</b>
† Grade must be C or better.		<b>TOTAL ADVANCED HOURS (MINIMUM)</b>
		<b>30</b>

Source: Academic Advising Center - Rev. 3-28-05

# WORKFORCE LEADERSHIP AND SUPERVISION

100  
BAT.WLS  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF BUSINESS

**Bachelor of Applied Technology (B.A.T.)  
Major WORKFORCE LEADERSHIP AND SUPERVISION**

**Non-Teacher Certification  
Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor _____	Room Number _____	Telephone Number _____
		Signature _____		
		Academic Advisor _____		Date _____

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			MAJOR: WORKFORCE LEADERSHIP & SUPERVISION	35 HOURS		
	HRS	GR	SEM	AAS Technical Field:			
<b>COMMUNICATION REQUIREMENT</b>	9 hours						
ENGL 1301 Composition I	3	†					
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3						
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	3 hours †						
MATH 1314 College Algebra <i>or</i>							
MATH 1342 Elementary Statistics							
<b>SCIENCE REQUIREMENT</b>	8 hours						
Select two 4-hour science courses (3 hours lecture, 1 hour lab)							
	3,1						
	3,1						
				<b>WORKFORCE LEADERSHIP/SUPERVISION TRACK</b>	<b>37 HOURS</b>		
				BUSI 1301 Intro to Business <i>or</i> BMGT 1301 Supervision	3		
<b>HUMANITIES REQUIREMENT</b>	6 hours			MANA 4366 Small Business Management	3	**	
Literature (ENGL 2000 level)	3			BUSI 3335 Organizational Communications	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				BMIS 3351 Information Systems in Organizations	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ACCT 2401 Principles of Accounting I <i>or</i> ACNT 1403 Intro to Accounting I	4		
				BLAW 3337 Business Law I	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			MANA 3361 Principles of Management	3		
HIST 1301 United States to 1877	3			MANA 3362 Human Resource Management	3	**	
HIST 1302 United States Since 1877	3			MARK 3371 Principles of Marketing	3	**	
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3			<b>9 Advanced Hours</b>			
				INTL 3392 Supply Chain Management		**	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours			INTL 4361 International Management		**	
ECON 2301 or PSYC 2301 or SOCI 1301 or SOCI 2319	3			MANA 4350 Business Ethics			
				<b>OR</b>			
				<b>Approved upper division electives for students preparing for training positions.</b>			
<b>KINESIOLOGY REQUIREMENT</b>	1 hour			TECT 3301 Foundations of Technology Training			
KINE 1___ (One hour of activity/health/wellness/ fitness)	1			TECT 3302 Psychology of Technology Training			
				TECT 3303 Training Methods in Industry			
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours						
Six hours of same modern language, other than English.							
	3						
	3						
				<b>TOTAL CREDIT HOURS FOR GRADUATION</b>	<b>120</b>		
† Grade must be C or better.				<b>TOTAL ADVANCED (Minimum)</b>	<b>30</b>		

\*\* Student must obtain approval for admission to Upper Division (2.5 GPA and AABA or 6 hrs. from completion.)

# EARLY CHILDHOOD – 4<sup>TH</sup> GRADE BILINGUAL GENERALIST

101  
BAIS.EC-4.BILC.GEN  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Arts in Interdisciplinary Studies**  
**Major Early Childhood-4<sup>th</sup> Grade Bilingual Generalist**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature Academic Advisor		Date

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail:	Signature			Date					
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>			<b>3 HOURS £</b>		
	HRS	GR	GPT	HRS	GR	GPT	HRS	GR	GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society			1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum			2		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†							
SPCH 1315 Applied Communication	3	‡		<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>			<b>21 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities			3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following	<b>3 hours †</b>			EDCI 4322 Human Development and Instruction			3		
MATH 1314 College Algebra				EDCI 4323 Creating a Positive Productive Classroom Environ.			3		
MATH 1324 Business Algebra				EDCI 4324 Designing Inst. & Assess to Promote Student Lrng.			3		
MATH 1332 Math for Liberal Arts				EDCI 4325 Implementing Responsive Instruction & Assessment			3		
Higher Level MATH Course				EDCI 4608 Student Teaching EC-4 Bilingual Generalist			6		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>READING</b>			<b>9 HOURS £</b>		
6 hours of Natural and/or Physical Sciences				BILS 3310 Emergent Literacy in the Bilg. Classroom (Spanish)			3		
	3			BILS 3312 Teaching Reading in the Bilg. Classroom (Spanish)			3		
	3			BILS 3314 Content Area Methodology in the Bilg. Classroom			3		
<b>*See Major – Science Lab requirement</b>	<b>(2)</b>			<b>(Spanish)</b>					
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>ENGLISH/SPANISH</b>			<b>12 HOURS</b>		
Literature Class (2000 Level)	3			ENGL 3319 Introduction to Descriptive Linguistics			3		
MUSIU 2313 Teaching Fine Arts in the Elem. School	3			ENGL 3330 English Grammar			3		
				SPAN 4316 Acquisition of the Spanish Language			3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			SPAN 4368 Children's Literature in Spanish			3		
HIST 1301 United States to 1877	3								
HIST 1302 United States since 1877	3			<b>SOCIAL STUDIES</b>			<b>6 HOURS</b>		
GOVT 2301 American Government I	3			GEOG 3320 Cultural Geography for Educators			3		
GOVT 2302 American Government II	3			INDS 3303 Culture & Humanity: Human Diversity in Cross Cultural Perspective			3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>MATH</b>			<b>6 HOURS</b>		
ANTH 2351 Cultural Anthropology				MATH 3335 Contemporary Mathematics I			3		
BUSI 1301 Introduction to Business				MATH 3336 Contemporary Mathematics II			3		
ECON 2301 Macroeconomics									
GEOG 1303 General World Geography				<b>SCIENCE</b>			<b>6 HOURS</b>		
PSYC 2301 Introduction to Psychology				PSCI 4210 Physical Science for Teachers I			2		
SOCI 1301 Introduction to Sociology				PSCI 4220 Physical Science for Teachers II			2		
SOCI 2319 Mexican American Experience				* Science Lab			1		
				* Science Lab			1		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>								
<b>*See Major – KINEU 2255 Health &amp; Motor Development for EC-4</b>	<b>*</b>								
				<b>COMBINATION OF SUBJECTS</b>			<b>17 HOURS £</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			EDSL 4307 Foundations of ESL			3		
SPAN 2321 Hispanic Language & Culture I	3			EDEC 4385 Growth and Development of the Young Child			3		
SPAN 2322 Hispanic Language & Culture II	3			EDEC 4389 The Environment and Early Childhood			3		
				SPED 4386 Modifications in Inclusive Settings			3		
				EDLI 3329 Literacy Assessment for ESL Learners			3		
				* KINEU 2255 Health & Motor Development for EC-4			2		
				<b>Total Semester Credit Hours</b>			<b>125</b>		
<b>£ Maintain a minimum of 2.50 GPA with no grade lower than a C.</b>				<b>Total Advanced (Minimum)</b>			<b>36</b>		

† Grade must be C or better.  
‡ Grade must be B or better.

Source: Academic Advising Center Rev. 4-12-05

# EARLY CHILDHOOD – 4<sup>TH</sup> GRADE ESL GENERALIST

102  
BAIS.EC-4.ESL.GEN  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Arts in Interdisciplinary Studies**  
**Major Early Childhood-4<sup>th</sup> Grade English as a Second Language Generalist**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor  Signature Academic Advisor	Room Number	Telephone Number
		Date		

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	HRS	GR	GPT		HRS	GR	GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
				<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>24 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
				EDSL 4306 Content Area Methods in the ESL Classroom	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following	<b>3 hours †</b>			EDCI 4322 Human Development and Instruction	3		
MATH 1314 College Algebra				EDCI 4323 Creating a Positive Productive Classroom Environ.	3		
MATH 1324 Business Algebra				EDCI 4324 Designing Inst. & Assess to Promote Student Lrng.	3		
MATH 1332 Math for Liberal Arts				EDCI 4325 Implementing Responsive Instruction & Assessment	3		
Higher Level MATH Course				EDCI 4608 Student Teaching EC-4	6		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>READING</b>	<b>12 HOURS £</b>		
6 hours of Natural and/or Physical Sciences				EDLI 3310 Emergent Lit. for E S L Learners: Grades EC--1	3		
	3			EDLI 3323 Beginning Literacy for E S L Learners Grades 2--4	3		
	3			EDLI 3329 Literacy Assessment for E S L Learners	3		
<b>*See Major ~ Science Lab requirement</b>	(2)			EDLI 3340 E S L Language Arts and Literature	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>ENGLISH</b>	<b>9 HOURS</b>		
Literature Class (2000 Level)	3			ENGL 3319 Introduction to Descriptive Linguistics	3		
MUSIU 2313 Teaching Fine Arts in the Elem. School	3			ENGL 4325 Composition Techniques	3		
				ENGL 3330 English Grammar	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>SOCIAL STUDIES £</b>	<b>6 HOURS</b>		
HIST 1301 United States to 1877	3			GEOG 3320 Cultural Geography for Educators	3		
HIST 1302 United States since 1877	3			INDS 3303 Culture & Humanity: Human Diversity in Cross Cultural Perspective	3		
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3						
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>MATH</b>	<b>6 HOURS</b>		
ANTH 2351 Cultural Anthropology				MATH 3335 Contemporary Mathematics I	3		
BUSI 1301 Introduction to Business				MATH 3336 Contemporary Mathematics II	3		
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography				<b>SCIENCE</b>	<b>6 HOURS</b>		
PSYC 2301 Introduction to Psychology				PSCI 4210 Physical Science for Teachers I	2		
SOCI 1301 Introduction to Sociology				PSCI 4220 Physical Science for Teachers II	2		
SOCI 2319 Mexican American Experience				* Science Lab	1		
				* Science Lab	1		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
<b>*See Major ~ KINEU 2255 Health &amp; Motor Development for EC-4</b>	*						
				<b>COMBINATION OF SUBJECTS</b>	<b>14 HOURS £</b>		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			EDSL 4307 Foundations of ESL	3		
	3			EDEC 4385 Growth and Development of the Young Child	3		
	3			EDEC 4389 The Environment and Early Childhood	3		
				SPED 4386 Modifications in Inclusive Settings	3		
				* KINEU 2255 Health & Motor Development for EC-4	2		
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>				<b>Total Semester Credit Hours</b>	<b>125</b>		
				<b>Total Advanced (Minimum)</b>	<b>36</b>		

† Grade must be C or better.  
‡ Grade must be B or better.

Source: Academic Advising Center Rev. 4-19-05

**EARLY CHILDHOOD – 4<sup>TH</sup> GRADE GENERALIST/ EC - 12<sup>TH</sup> GRADE SPECIAL EDUCATION**

103  
BAIS.EC-4.SPED.GEN  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Arts in Interdisciplinary Studies**  
**Major Early Childhood-4<sup>th</sup> Grade Generalist/EC-12 Special Education**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	HRS	GR	GPT		HRS	GR	GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
				<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>21 HOURS £</b>		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following	<b>3 hours †</b>			EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
MATH 1314 College Algebra			†	EDCI 4322 Human Development and Instruction	3		
MATH 1324 Business Algebra			†	EDCI 4323 Creating a Positive Productive Classroom Environ.	3		
MATH 1332 Math for Liberal Arts			†	EDCI 4324 Designing Inst. & Assess to Promote Student Lrng.	3		
Higher Level MATH Course			†	EDCI 4325 Implementing Responsive Instruction & Assessment	3		
				EDCI 4311 Student Teaching EC-4	3		
				SPED 4313 Student Teaching Generic Special Education	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>						
6 hours of Natural and/or Physical Sciences				<b>READING</b>	<b>12 HOURS £</b>		
	3			EDLI 3310 Emergent Lit. for E S L Learners: Grades EC--1	3		
	3			EDLI 3323 Beginning Literacy for E S L Learners Grades 2--4	3		
*See Major → Science Lab requirement	(2)			EDLI 3329 Literacy Assessment for E S L Learners	3		
				EDLI 3340 E S L Language Arts and Literature	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>						
Literature Class (2000 Level)	3			<b>ENGLISH</b>	<b>9 HOURS</b>		
MUSIU 2313 Teaching Fine Arts in the Elem. School	3			ENGL 3319 Introduction to Descriptive Linguistics	3		
				ENGL 4325 Composition Techniques	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ENGL 3330 English Grammar	3		
HIST 1301 United States to 1877	3						
HIST 1302 United States since 1877	3			<b>SOCIAL STUDIES</b>	<b>3 HOURS</b>		
GOVT 2301 American Government I	3			GEOG 3320 Cultural Geography for Educators	3		
GOVT 2302 American Government II	3						
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>MATH</b>	<b>6 HOURS</b>		
ANTH 2351 Cultural Anthropology				MATH 3335 Contemporary Mathematics I	3		
BUSI 1301 Introduction to Business				MATH 3336 Contemporary Mathematics II	3		
ECON 2301 Macroeconomics							
GEOG 1303 General World Geography				<b>SCIENCE</b>	<b>6 HOURS</b>		
PSYC 2301 Introduction to Psychology				PSCI 4210 Physical Science for Teachers I	2		
SOCI 1301 Introduction to Sociology				PSCI 4220 Physical Science for Teachers II	2		
SOCI 2319 Mexican American Experience				* Science Lab	1		
				* Science Lab	1		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
*See Major → KINEU 2255 Health & Motor Development for EC-4	*			<b>SPECIAL EDUCATION</b>	<b>18 HOURS £</b>		
				SPED 3390 Introduction to Exceptional Children	3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			SPED 4320 Legal Roles and Resp. of the Special Educator	3		
	3			SPED 4330 Problems in Lang. and Lit. for Inds. w/Special Needs	3		
	3			SPED 4380 Classroom Inst. For Individuals with Special Needs	3		
				SPED 4395 Practicum in Generic Special Education	3		
				EDEC 4389 The Environment and Early Childhood	3		
				<b>ADDITIONAL REQUIREMENTS</b>	<b>2 HOURS</b>		
				* KINEU 2255 Health & Motor Development for EC-4	2		
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>							
† Grade must be C or better.				<b>Total Semester Credit Hours</b>	<b>125</b>		
‡ Grade must be B or better.				<b>Total Advanced (Minimum)</b>	<b>36</b>		

Source: Academic Advising Center Rev. 4-12-05



# ENGLISH LANGUAGE ARTS/READING – 4<sup>TH</sup> – 8<sup>TH</sup> GRADE TEACHING

104  
BA.ENGL.4-8  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major ENGLISH LANGUAGE ARTS/READING (4<sup>TH</sup> – 8<sup>TH</sup> Grade)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature			Date		
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>		
	HRS	GR	GPT	HRS	GR	GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum		
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3	†				
SPCH 1315 Applied Communication	3	‡		<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>		
				<b>24 HOURS £</b>		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			EDCI 3304 Fulfilling Prof. Roles and Responsibilities		
MATH 1314 College Algebra				EDMG 4322 Human Development and Instruction		
MATH 1332 Math for Liberal Arts				EDMG 4323 Creating a Positive Productive Classroom Environ.		
MATH Any Higher Level Math Course				EDMG 4324 Designing Inst. & Assess to Promote Student Lmg.		
				EDMG 4325 Implementing Responsive Instr. & Assessment		
				SPED 4386 Modifications in Inclusive Settings		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDMG 4648 Student Teaching 4-8		
6 hours of Natural and/or Physical Sciences						
	3			<b>CERTIFICATION FIELDS</b>		
	3			<b>39 HOURS £</b>		
<b>*See Major ~</b> Science Lab requirement	( 2 )			EDLI 3343 Foundations of Beginning Literacy		
				EDLI 4329 Literacy and Assessment		
				EDLI 4350 Adolescent Literature		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			EDLI 4351 Content Area Literacy		
Literature (ENGL 2000 level)	3			EDLI 4367 Literacy and The English Language Learner		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				ENGL 3302 Literary Analysis		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ENGL 3312 American Literature Survey: I <b>or</b>		
				ENGL 3313 American Literature Survey II		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			ENGL 3319 Introduction to Descriptive Linguistics		
HIST 1301 United States to 1877	3			ENGL 3330 English Grammar		
HIST 1302 United States Since 1877	3			ENGL 4301 Shakespeare		
GOVT 2301 American Government I	3			ENGL 4325 Composition Techniques		
GOVT 2302 American Government II	3			ENGL 4328 Introduction to English as a Second Language		
				ENGL 4350 English Studies: The Theory and Practice		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>					
ANTH 2351 Cultural Anthropology				<b>MATH</b>		
BUSI 1301 Introduction to Business				<b>6 HOURS</b>		
ECON 2301 Macroeconomics				MATH 3335 Contemporary Mathematics I		
GEOG 1303 General World Geography				MATH 3336 Contemporary Mathematics II		
PSYC 2301 Introduction to Psychology						
SOCI 1301 Introduction to Sociology				<b>SCIENCE</b>		
SOCI 2319 The Mexican American Experience				<b>6 HOURS</b>		
				PSCI 4210 Physical Science for Teachers I		
				PSCI 4220 Physical Science for Teachers II		
				* Science Lab		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			* Science Lab		
KINE 1___ (One hour of activity/health/wellness/ fitness)	1					
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>					
Six hours of same modern language, other than English.						
	3					
	3					
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>						
† Grade must be C or better.				<b>Total Semester Credit Hours</b>		
‡ Grade must be B or better.				<b>124</b>		
				<b>Total Advanced (Minimum)</b>		
				<b>36</b>		

Source: Academic Advising Center - Rev. 3-28-05

# MATHEMATICS – 4<sup>TH</sup> – 8<sup>TH</sup> GRADE TEACHING

105  
BS.MATH.4-8  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
Major **MATHEMATICS (4<sup>TH</sup> – 8<sup>TH</sup> GRADE)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature:		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	Hrs	Gr	Gpt		Hrs	Gr	Gpt
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
				<b>PEDAGOGY AND PROFESSIONAL RESPONSIBILITY</b>	<b>24 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours</b>			EDMG 4322 Human Development and Instruction	3		
MATH 1314 College Algebra		†		EDMG 4323 Creating a Positive Productive Classroom Environ.	3		
Higher level MATH course				EDMG 4324 Designing Inst. & Assess. To Promote Stud. Lrng.	3		
				EDMG 4325 Implementing Responsive Instruction & Assessment	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDMG 4378 Teaching Mathematics in 4-8 classrooms	3		
8 hours of Natural and/or Physical Sciences				EDMG 4648 Student Teaching 4-8	6		
	3						
	3			<b>MATHEMATICS</b>	<b>38 HOURS</b>		
<b>*See Major</b> Science Lab requirement	(2)			MATH 1342 Elementary Statistics	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			MATH 2318 Linear Algebra I	3		
Literature class (2000 Level)	3			MATH 2332 Geometry I	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				MATH 2413 Calculus I	4		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MATH 2414 Calculus II	4		
				MATH 3310 Survey of Mathematics Concepts and Principles I	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MATH 3317 Survey of Mathematics Concepts and Principles II	3		
HIST 1301 United States to 1877	3			MATH 3321 Algebra I	3		
HIST 1302 United States since 1877	3			MATH 3332 Geometry II	3		
GOVT 2301 American Government I	3			MATH 3335 Contemporary Math I	3		
GOVT 2302 American Government II	3			MATH 3336 Contemporary Math II	3		
				MATH 4361 Problem Solving and Mathematics Modeling	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>COMBINATION OF SUBJECTS</b>	<b>9 HOURS £</b>		
ANTH 2351 Cultural Anthropology				EDLI 4351 Content Area Literacy	3		
BUSI 1301 Introduction to Business				EDLI 4367 Literacy and the English Language Learner	3		
ECON 2301 Macroeconomics				SPED 4386 Modifications in Inclusive Settings	3		
GEOG 1303 General World Geography							
PSYC 2301 Introduction to Psychology				<b>SCIENCE</b>	<b>6 HOURS</b>		
SOCI 1301 Introduction to Sociology				PSCI 4210 Physical Science for Teachers I	2		
SOCI 2319 Mexican American Experience				PSCI 4220 Physical Science for Teachers II	2		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			* Science Lab	1		
KINE 11 Lifetime Fitness or any one hour activity course	1			* Science Lab	1		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of the same modern language other than English at the 1000 level or higher							
	3						
	3						
				<b>Total Semester Credit Hours</b>	<b>126</b>		
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>				<b>Total Advanced (Minimum)</b>	<b>36</b>		

† Grade must be C or better.  
‡ Grade must be B or better.

Source: Academic Advising Center Rev. 4-12-05

# SCIENCE – 4<sup>TH</sup> – 8<sup>TH</sup> GRADE TEACHING

106  
BS.SCI.4-8  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
**Major SCIENCE (4<sup>TH</sup> – 8<sup>TH</sup> Grade)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature:		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	Hrs	Gr	Gpt		Hrs	Gr	Gpt
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours</b>			<b>PEDAGOGY AND PROFESSIONAL RESPONSIBILITY</b>	<b>24 HOURS £</b>		
MATH 1314 College Algebra		†		EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
Higher level MATH course				EDMG 4322 Human Development and Instruction	3		
				EDMG 4323 Creating a Positive Productive Classroom Environ.	3		
				EDMG 4324 Designing Inst. & Assess. To Promote Stud. Lrng.	3		
				EDMG 4325 Implementing Responsive Instruction & Assessment	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDMG 4376 Teaching Science in 4-8 classrooms	3		
8 hours of Natural and/or Physical Sciences				EDMG 4648 Student Teaching 4-8	6		
BIOL 1306/1106 General Biology I/Lab	3/1						
BIOL 1307/1107 General Biology II/Lab	3/1			<b>SCIENCE</b>	<b>15 HOURS</b>		
				BIOL 3309/3109 Ecology & Lab	3/1		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			BIOL 3303/3103 Genetics & Lab	3/1		
Literature class (2000 Level)	3			BIOL 4330 Integrative Biology for Middle School Teachers	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				<b>BIOL Advanced Electives</b> Select one from the following:	<b>4 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			BIOL 3308/3108 Plant Morphology & Lab			
				BIOL 3314/3114 Invertebrate Zoology & Lab			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>SUPPORT COURSES</b>	<b>18 HOURS</b>		
HIST 1301 United States to 1877	3			CHEM 1311/1111 General Chemistry I & Laboratory I	3/1		
HIST 1302 United States since 1877	3			CHEM 1312/1112 General Chemistry II & Laboratory II	3/1		
GOVT 2301 American Government I	3			PHYS 1310/1110 Conceptual Physics	3/1		
GOVT 2302 American Government II	3			GEOL 1301/1101 Principles of Earth Sciences	3/1		
				PSCI 4210 Physical Science for Educators	2		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>MATH</b>	<b>6 HOURS</b>		
ANTH 2351 Cultural Anthropology				MATH 3335 Contemporary Mathematics I	3		
BUSI 1301 Introduction to Business				MATH 3336 Contemporary Mathematics II	3		
ECON 2301 Macroeconomics				<b>SUPPORT</b>	<b>9 HOURS £</b>		
GEOG 1303 General World Geography				EDLI 4351 Content Area Literacy	3		
PSYC 2301 Introduction to Psychology				EDLI 4367 Literacy and the English Language Learner	3		
SOCI 1301 Introduction to Sociology				SPED 4386 Modifications in Inclusive Settings	3		
SOCI 2319 Mexican American Experience				<b>ELECTIVE</b> Recommended:	<b>1 HOUR</b>		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			COSC 1310 or other computer science course agreed by advisor			
KINE 11__ Lifetime Fitness or any one hour activity course	1			PSCI 4220 Physical Science for Educators II			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of the same modern language other than English at the 1000 level or higher							
	3						
	3						
				<b>Total Semester Credit Hours</b>	<b>124</b>		
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>				<b>Total Advanced (Minimum)</b>	<b>36</b>		

† Grade must be C or better.  
‡ Grade must be B or better.

Source: Academic Advising Center Rev. 4-22-05

# ENGLISH LANGUAGE ARTS/READING – 8<sup>TH</sup> – 12<sup>TH</sup> GRADE TEACHING

107  
BA.ENGL.8-12  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major ENGLISH LANGUAGE ARTS/READING (8<sup>TH</sup> – 12<sup>TH</sup> GRADE)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature			Date
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>
	HRS	GR	GPT	<b>3 HOURS £</b>
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			<b>EDCIU 2101 School and Society</b>
ENGL 1301 Composition I	3	†		<b>EDCI 4203 Technology and the School Curriculum</b>
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		1
SPCH 1315 Applied Communication	3	‡		2
				<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			<b>21 HOURS £</b>
MATH 1314 College Algebra				EDCI 3304 Fulfilling Prof. Roles and Responsibilities
MATH 1332 Math for Liberal Arts				EDSC 4322 Human Development and Instruction
MATH Any Higher Level Math Course				EDSC 4323 Creating a Positive Productive Classroom Environ.
				EDSC 4324 Designing Inst. & Assess to Promote Student Lrng.
				EDSC 4325 Implementing Responsive Instr. & Assessment
				EDSC 4641 Student Teaching 8-12
				3
				3
				3
				3
				6
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>READING/ENGLISH</b>
8 hours of Natural and/or Physical Sciences				<b>24 HOURS</b>
	3/1			ENGL 3302 Literary Analysis
	3/1			ENGL 3319 Introduction to Descriptive Linguistics
				ENGL 3330 English Grammar
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			ENGL 3331 History of the English Language
Literature (ENGL 2000 level)	3			ENGL 4325 Composition Techniques
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				EDLI 4329 Literacy and Assessment
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			ENGL 4350 English Studies: The Theory and Practice
				EDLI 4367 Literacy and The English Language Learner
				3
				£
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			<b>LITERATURE</b>
HIST 1301 United States to 1877	3			<b>9 HOURS</b>
HIST 1302 United States Since 1877	3			ENGL 3309 Major British Authors
GOVT 2301 American Government I	3			ENGL 3312 American Literature Survey I <i>or</i>
GOVT 2302 American Government II	3			ENGL 3313 American Literature Survey II
				ENGL 4301 Shakespeare
				3
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>Upper-Level LITERATURE Courses</b>
ANTH 2351 Cultural Anthropology				<b>12 HOURS</b>
BUSI 1301 Introduction to Business				Recommended: courses divided among British & American Literature
ECON 2301 Macroeconomics				3
GEOG 1303 General World Geography				3
PSYC 2301 Introduction to Psychology				3
SOCI 1301 Introduction to Sociology				3
SOCI 2319 The Mexican American Experience				
				<b>SUPPORT</b>
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>12 HOURS £</b>
KINE 1____ (One hour of activity/health/wellness/ fitness)	1			EDLI 4350 Adolescent Literature
				EDLI 4351 Content Area Literacy
				ENGL 4328 Introduction to English as a Second Language
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			SPED 4386 Modifications in Inclusive Settings
Six hours of same modern language, other than English.				3
	3			
	3			
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>				
† Grade must be C or better.				<b>Total Semester Credit Hours</b>
‡ Grade must be B or better.				<b>129</b>
				<b>Total Advanced (Minimum)</b>
				<b>36</b>

Source: Academic Advising Center - Rev. 3-28-05

# HISTORY - 8<sup>TH</sup> - 12<sup>TH</sup> GRADE TEACHING

108  
BA.HIST.8-12  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major HISTORY (8<sup>TH</sup> – 12<sup>TH</sup> Grade)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor  Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_ **3 HOURS £**

GENERAL EDUCATION CORE	Hrs	Gr	Gpt	PREREQUISITE FOR ADMISION TO TEACHER EDUCATION	Hrs.	Gr	Gpt
<b>COMMUNICATION REQUIREMENT</b>	<b>9 HOURS</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
				<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>21 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
				EDSC 4322 Human Development and Instruction	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 HOURS †</b>			EDSC 4323 Creating a Positive Productive Classroom Environ.	3		
MATH 1314 College Algebra				EDSC 4324 Designing Inst. & Assess to Promote Student Learning	3		
MATH 1324 Business Algebra				EDSC 4325 Implementing Responsive Instruction& Assessment	3		
MATH 1332 Math for Liberal Arts				EDSC 4641 Student Teaching 8-12	6		
Higher level MATH course							
				<b>HISTORY MAJOR</b>	<b>48 HOURS</b>		
<b>SCIENCE REQUIREMENT</b>	<b>8 HOURS</b>			<b>Core Courses for History Major</b>	<b>18 hours</b>		
8 hours of Natural and/or Physical Sciences				HIST 2321 World History to 1650	3		
	3/1			HIST 2322 World History since 1650	3		
	3/1			HIST 2380 Mexican American History	3		
				HIST 3340 Texas History	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 HOURS</b>			HIST 4390 American History Senior Seminar	3		
Literature class (2000 Level)	3			HIST 4392 World History Senior Seminar	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				<b>Upper Level Electives: American History</b>	<b>6 hours</b>		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			HIST 3313 American Colonial Era to 1783			
				HIST 3324 Formative Period of American Nation 1783-1840			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 HOURS</b>			HIST 4303 Emergency of Modern America 1877-1917			
HIST 1301 United States to 1877	3			HIST 4313 Twentieth Century American. 1917 to present			
HIST 1302 United States Since 1877	3			HIST 4338 American Intellectual and Social History			
GOVT 2301 American Government I	3			HIST 4343 Era of Sectional Conflict, 1840-1877			
GOVT 2302 American Government II	3			HIST 4344 United States Diplomatic History			
				HIST 4345 North American Economic History			
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 HOURS</b>			HIST 4380 History of World War I and II			
PSYC 2301 Introduction to Psychology (required)	3			HIST 4381 U. S. Military History			
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 HOUR</b>			Total American History			
KINE 11 _____ Lifetime Fitness or any one hour activity course	1			<b>European (or Asian) History</b>	<b>6 hours</b>		
				HIST 4365 History of the Middle Ages			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 HOURS</b>			HIST 4367 History of Early Modern Europe			
Six hours of the same modern language other than English.				HIST 4369 Nineteenth Century Europe			
	3			HIST 4371 History of the Islamic World			
	3			HIST 4372 History of Russia			
				HIST 4373 History of Spain			
				HIST 4374 History of Asia			
				HIST 4379 Modern Europe: 1914-Present			
				HIST 4380 History of World War I and II			
				HIST 4385 Ancient History			
				Total European and World History			
				<b>Latin American History</b>	<b>6 hours</b>		
				HIST 3334 Mexico and the Borderlands through Independence			
				HIST 3335 Mexico since Independence			
				HIST 4357 History of Modern Latin America			
				HIST 4373 History of Spain			
				Total Latin American History			
				<b>Advanced Government Electives</b>	<b>6 hours</b>		
				GOVT Advanced Government Elective	3		
				GOVT Advanced Government Elective	3		
				<b>ELECTIVES</b>	<b>6 hours</b>		
				Upper Level Electives in GEOG or INDS or	3		
				ECON 2301 or ECON 2302	3		
				<b>COMBINATION OF SUBJECTS</b>	<b>6 HOURS £</b>		
				EDLI 4351 Content Area Literacy	3		
				SPED 4386 Modifications in Inclusive Settings	3		
£ Maintain a minimum of 2.50 GPA with no grade lower than a C							
† Grade must be C or better.				<b>Total Semester Credit Hours</b>	<b>126</b>		
‡ Grade must be B or better.				<b>Total Advanced</b>	<b>(Minimum 36)</b>	<b>62</b>	

# HISTORY - SOCIAL STUDIES - 8<sup>TH</sup> - 12<sup>TH</sup> GRADE TEACHING

109  
BA.HIST.SS.8-12  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**

**Teacher Certification**  
**Academic Year 2005-2006**

**Major HISTORY – SOCIAL STUDIES (8<sup>TH</sup> – 12<sup>TH</sup> Grade)**

Received by: _____	Date _____	Faculty Advisor Signature _____	Room Number _____	Telephone Number _____
Academic Advisor _____			Date _____	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: _____	Signature _____	Date _____	3 HOURS £			
<b>GENERAL EDUCATION CORE</b>	<b>Hrs</b>	<b>Gr</b>	<b>Gpt</b>	<b>PREREQUISITE FOR ADMISSION TO TEACHER EDUCATION</b>		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 HOURS</b>			<b>Hrs</b>	<b>Gr</b>	<b>Gpt</b>
ENGL 1301 Composition I	3	†		EDCIU 2101 School an Society	1	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		EDCI 4203 Technology and the School Curriculum	2	
SPCH 1315 Applied Communication	3	‡		<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>		
				<b>21 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3	
				EDSC 4322 Human Development and Instruction	3	
				EDSC 4323 Creating a Positive Productive Classroom Environ.	3	
				EDSC 4324 Designing Inst. & Assess to Promote Student Learning	3	
				EDSC 4325 Implementing Responsive Instruction& Assessment	3	
				EDSC 4641 Student Teaching 8-12	6	
				<b>SCIENCE REQUIREMENT</b>		
				<b>8 HOURS</b>		
				<b>HISTORY MAJOR</b>		
				<b>33 HOURS</b>		
				<b>Core Courses for History Major</b>		
				<b>18 hours</b>		
				HIST 2321 World History to 1650	3	
				HIST 2322 World History since 1650	3	
				HIST 2380 Mexican American History	3	
				HIST 3340 Texas History	3	
				HIST 4390 American History Senior Seminar	3	
				HIST 4392 World History Senior Seminar	3	
				<b>Upper Level Electives: American History</b>		
				<b>6 hours</b>		
				HIST 3313 American Colonial Era to 1783		
				HIST 3324 Formative Period of American Nation 1783-1840		
				HIST 4303 Emergence of Modern America, 1877-1917		
				HIST 4313 Twentieth Century America, 1917 to present		
				HIST 4338 American Intellectual and Social History		
				HIST 4343 Era of the Sectional Conflict, 1840-1877		
				HIST 4344 United States Diplomatic History		
				HIST 4345 North American Economic History		
				HIST 4380 History of World War I and II		
				HIST 4381 U. S. Military History		
				<b>Total American History</b>		
				<b>6 hours</b>		
				<b>European and World History</b>		
				HIST 4365 History of the Middle Ages		
				HIST 4367 History of Early Modern Europe		
				HIST 4369 Nineteenth Century Europe		
				HIST 4371 History of the Islamic World		
				HIST 4372 History of Russia		
				HIST 4373 History of Spain		
				HIST 4374 History of Asia		
				HIST 4379 Modern Europe: 1914-Present		
				HIST 4380 History of World War I and II		
				HIST 4385 Ancient History		
				<b>Total European and World History</b>		
				<b>3 hours</b>		
				<b>Latin American History</b>		
				HIST 3334 Mexico and the Borderlands through Independence		
				HIST 3335 Mexico Since Independence		
				HIST 4357 History of Modern Latin America		
				HIST 4373 History of Spain		
				<b>Total Latin American History</b>		
				<b>18 HOURS</b>		
				<b>Advanced GOVERNMENT Electives</b>		
				GOVT 3373 Contemporary Texas (Required)	3	
				GOVT 4390 Senior Seminar (Required)	3	
				Plus 6 Hours chosen from GOVT 3322, 3343, 4369, 4370, 4371	3	
					3	
				Plus 6 Hours, chosen from GOVT 4320, 4321, 4360, 4363, 4366, 4367, 4368, 4374	3	
				<b>ECONOMICS REQUIREMENT</b>		
				<b>6 HOURS</b>		
				ECON 2301 Macroeconomics (Required)	3	
				ECON 2302 Microeconomics (Required)	3	
				<b>Advanced GEOGRAPHY Electives</b>		
				<b>6 HOURS</b>		
				GEOG 3320 Cultural Geography for Educators (Required)	3	
				GEOG 3334 Conservation of World Resources <i>or</i>		
				GEOG 3333 Latin-American Geography		
				<b>COMBINATION OF SUBJECTS</b>		
				<b>3 HOURS £</b>		
				EDLI 4351 Content Area Literacy	3	
				<b>Total Semester Credit Hours</b>		
				<b>138</b>		
				<b>Total Advanced (Minimum)</b>		
				<b>36</b>		

£ Maintain a minimum of 2.50 GPA with a grade no lower than a C  
† Grade must be C or better.  
‡ Grade must be B or better.

# MATHEMATICS – 8<sup>TH</sup> – 12<sup>TH</sup> GRADE TEACHING

110  
BS.MATH.8-12  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
Major **MATHEMATICS (8<sup>TH</sup> – 12<sup>TH</sup> GRADE)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature:		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	Hrs	Gr	Gpt		Hrs	Gr	Gpt
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
				<b>PEDAGOGY AND PROFESSIONAL RESPONSIBILITY</b>	<b>24 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			EDSC 4322 Human Development and Instruction	3		
MATH 1314 College Algebra				EDSC 4323 Creating a Positive Productive Classroom Environ.	3		
Higher level MATH course				EDSC 4324 Designing Inst. & Assess. To Promote Stud. Lrng.	3		
				EDSC 4325 Implementing Responsive Instruction & Assessment	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDSC 4378 Teaching Mathematics in 8-12 Classroom	3		
8 hours of Natural and/or Physical Sciences				EDSC 4641 Student Teaching 8-12	6		
	3/1						
	3/1			<b>MATHEMATICS</b>	<b>39 HOURS</b>		
				MATH 1342 Elementary Statistics	3		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			MATH 2318 Linear Algebra I	3		
Literature class (2000 Level)	3			MATH 2332 Geometry I	3		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				MATH 2413 Calculus I	4		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			MATH 2414 Calculus II	4		
				MATH 3310 Survey of Mathematics Concepts and Principles I	3		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MATH 3317 Survey of Mathematics Concepts and Principles II	3		
HIST 1301 United States to 1877	3			MATH 3321 Algebra I	3		
HIST 1302 United States since 1877	3			MATH 3332 Geometry II	3		
GOVT 2301 American Government I	3			MATH 3447 Calculus III	4		
GOVT 2302 American Government II	3			MATH 4329 Number Theory	3		
				MATH 4361 Problem Solving and Mathematics Modeling	3		
<b>SOCIAL/BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>						
ANTH 2351 Cultural Anthropology				<b>COMBINATION OF SUBJECTS</b>	<b>12 HOURS £</b>		
BUSI 1301 Introduction to Business				EDLI 4351 Content Area Literacy	3		
ECON 2301 Macroeconomics				EDLI 4367 Literacy and the English Language Learner	3		
GEOG 1303 General World Geography				SPED 3390 Introduction to Exceptional Children	3		
PSYC 2301 Introduction to Psychology				SPED 4386 Modifications in Inclusive Settings	3		
SOCI 1301 Introduction to Sociology							
SOCI 2319 Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11__ Lifetime Fitness or any one hour activity course	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of the same modern language other than English at the 1000 level or higher							
	3						
	3						
				<b>Total Semester Credit Hours</b>	<b>126</b>		
				<b>Total Advanced (Minimum)</b>	<b>36</b>		

£ Maintain a minimum of 2.50 GPA with a grade no lower than a C.

† Grade must be C or better.

‡ Grade must be B or better.

Source: Academic Advising Center Rev. 8-4-05

# SCIENCE – 8<sup>TH</sup> – 12<sup>TH</sup> GRADE TEACHING

111  
BS.SCI.8-12  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF SCIENCE, MATHEMATICS & TECHNOLOGY

**Bachelor of Science**  
**Major SCIENCE (8<sup>TH</sup> – 12<sup>TH</sup> Grade)**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor  Signature _____ Academic Advisor _____	Room Number _____	Telephone Number _____
			Date _____	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			SCIENCE TEACHING MAJOR	HR.	GR.	GPT
	HR	GR	GPT	<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>	<b>3 HOURS £</b>		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡		<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>24 HOURS £</b>		
				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours</b>			EDSC 4322 Human Development and Instruction	3		
MATH 1314 College Algebra		†		EDSC 4323 Creating a Positive Productive Classroom Environ.	3		
Higher level MATH course				EDSC 4324 Designing Inst. & Assess to Promote Student Lrng.	3		
				EDSC 4325 Implementing Responsive Instruction & Assessment	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDSC 4379 Teaching Science in 8-12 classrooms	3		
BIOL 1306/1106 General Biology I/Lab	3/1			EDSC 4641 Student Teaching Secondary 8-12	6		
BIOL 1307/1107 General Biology II/Lab	3/1						
				<b>LIFE SCIENCE</b>	<b>11 HOURS</b>		
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			BIOL 3303/3103 Genetics and Laboratory	3/1		
Literature class (2000 level)	3			BIOL 3309/3109 Ecology and Laboratory	3/1		
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				BIOL 4331 Integrative Biology for High School Science Teachers	3		
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3						
				<b>CHEMISTRY</b>	<b>11 HOURS</b>		
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			CHEM 1311/1111 General Chemistry I and Laboratory	3/1		
HIST 1301 United States to 1877	3			CHEM 1312/1112 General Chemistry II and Laboratory	3/1		
HIST 1302 United States Since 1877	3			CHEM 4306 Environmental Chemistry	3		
GOVT 2301 American Government I	3						
GOVT 2302 American Government II	3			<b>PHYSICAL SCIENCE</b>	<b>12 HOURS</b>		
				PHYS 1301/1101 General Physics I and Laboratory	3/1		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			PHYS 1302/1102 General Physics II and Laboratory	3/1		
ANTH 2351 Cultural Anthropology				PHYS 1310/1110 Conceptual Physics I and Laboratory	3/1		
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				<b>EARTH SCIENCE AND SPACE SCIENCE</b>	<b>8 HOURS</b>		
GEOG 1302 General World Geography				GEOG 1303/1103 Physical Geology and Laboratory	3/1		
PSYC 2301 Introduction to Psychology				GEOG 1304/1104 Historical Geology and Laboratory	3/1		
SOCI 1301 Introduction to Sociology							
SOCI 2319 Mexican American Experience				<b>SUPPORT</b>	<b>9 HOURS £</b>		
				EDLI 4351 Content Area Literacy	3		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			SPED 4386 Modifications in Inclusive Settings	3		
KINE 11 Lifetime Fitness or any one hour activity course	1			MATH 1316 Trigonometry	3		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of the same modern language other than English at the 1000 level or higher							
	3						
	3			<b>Total Semester Credit Hours</b>	<b>126</b>		
<b>£ Maintain a minimum of 2.50 GPA with no grade lower than a C.</b>				<b>Total Advanced (Minimum)</b>	<b>36</b>		

† Grade must be C or better.  
‡ Grade must be B or better.

Source: Academic Advising Center Rev. 5-12-05



# SPANISH – 6<sup>TH</sup> – 12<sup>TH</sup> GRADE TEACHING

112  
BA.SPAN.6-12  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major SPANISH (6<sup>TH</sup> – 12<sup>TH</sup> Grade)**

Minor \_\_\_\_\_

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date			
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>		<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>		
	HRS GR GPT			HRS	GR GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>		<b>3 HOURS £</b>		
ENGL 1301 Composition I	3	†		1	
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†			
SPCH 1315 Applied Communication	3	‡		2	
			<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>		
				<b>21 HOURS £</b>	
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>		EDCI 3304 Fulfilling Prof. Roles and Responsibilities		
MATH 1314 College Algebra				3	
MATH 1332 Math for Liberal Arts				3	
MATH Any Higher Level Math Course				3	
				3	
				6	
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>		<b>SPANISH MAJOR</b>		
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				<b>36 HOURS</b>	
	3,1			Upper Division Hours	
	3,1			36 HOURS	
				3	
				3	
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>		SPAN 3301 Spanish Literature I (1100 to 1750)		
Literature (ENGL 2000 level)	3			3	
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				3	
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			3	
				3	
				3	
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>		SPAN 3302 Spanish Literature II (1750 to present) <i>or</i>		
HIST 1301 United States to 1877	3			3	
HIST 1302 United States Since 1877	3			3	
GOVT 2301 American Government I	3			3	
GOVT 2302 American Government II	3			3	
				3	
				3	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>		SPAN 3303 Spanish Grammar		
ANTH 2351 Cultural Anthropology				3	
BUSI 1301 Introduction to Business				3	
ECON 2301 Macroeconomics				3	
GEOG 1303 General World Geography				3	
PSYC 2301 Introduction to Psychology					
SOCI 1301 Introduction to Sociology					
SOCI 2319 The Mexican American Experience					
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>		<b>MINOR</b> (Minimum 9 Advanced Hours)		
KINE 1____ (One hour of activity/health/wellness/ fitness)	1			<b>18 HOURS</b>	
				Advanced	3
				Advanced	3
				Advanced	3
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>		<b>ADDITIONAL REQUIREMENTS</b>		
SPAN 2321 Hispanic Language and Culture I	3			<b>3 HOURS £</b>	
SPAN 2322 Hispanic Language and Culture II	3			3	
<b>£ Maintain a minimum of 2.50 GPA with no grade lower than a C.</b>					
† Grade must be C or better.			<b>Total Semester Credit Hours</b>		
‡ Grade must be B or better.				<b>129</b>	
			<b>Total Advanced (Minimum)</b>		
				<b>36</b>	

# SPANISH – 6<sup>TH</sup> – 12<sup>TH</sup> GRADE TEACHING - No Minor

112  
BA.SPAN.6-12nm  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major SPANISH (6<sup>TH</sup> – 12<sup>TH</sup> Grade)**

**Teacher Certification**  
**No Minor**

**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature			Date		
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>		<b>3 HOURS £</b>
	HRS	GR	GPT	HRS	GR	GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101	School and Society	1
ENGL 1301 Composition I	3	†		EDCI 4203	Technology and the School Curriculum	2
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3	†				
SPCH 1315 Applied Communication	3	‡		<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>		<b>21 HOURS £</b>
				EDCI 3304	Fulfilling Prof. Roles and Responsibilities	3
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			EDSC 4322	Human Development and Instruction	3
MATH 1314 College Algebra				EDSC 4323	Creating a Positive Productive Classroom Environ.	3
MATH 1332 Math for Liberal Arts				EDSC 4324	Designing Inst. & Assess to Promote Student Lrng.	3
MATH Any Higher Level Math Course				EDSC 4325	Implementing Responsive Instr. & Assessment	3
				EDSC 4641	Student Teaching Secondary 8-12	6
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			<b>SPANISH MAJOR</b>		<b>36 HOURS</b>
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				Upper Division Hours		36 HOURS
	3,1			SPAN 3301	Spanish Literature I (1100 to 1750)	3
	3,1			SPAN 3302	Spanish Literature II (1750 to present) <b>or</b>	3
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			SPAN 4309	Contemporary Spanish Literature	
Literature (ENGL 2000 level)	3			SPAN 3303	Advanced Spanish Composition	3
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				SPAN 3310	Masterpieces of Spanish American Literature I	3
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			SPAN 3311	Masterpieces of Spanish American Literature II	3
				SPAN 3330	Spanish Grammar	3
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			SPAN 4303	Hispanic Civilization	3
HIST 1301 United States to 1877	3			SPAN 4310	Spanish Phonology and Phonetics	3
HIST 1302 United States Since 1877	3			SPAN 4316	Acquisition of the Spanish Language	3
GOVT 2301 American Government I	3			SPAN 4371	Chicano Narrative	3
GOVT 2302 American Government II	3			SPAN 4373	Studies in Hispanic Culture	3
				SPAN	Advanced Elective (3000 or 4000 Level)	3
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			<b>ELECTIVES *</b>		<b>18 HOURS</b>
ANTH 2351 Cultural Anthropology						
BUSI 1301 Introduction to Business						
ECON 2301 Macroeconomics						
GEOG 1303 General World Geography						
PSYC 2301 Introduction to Psychology						
SOCI 1301 Introduction to Sociology						
SOCI 2319 The Mexican American Experience						
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>					
KINE 1___ (One hour of activity/health/wellness/ fitness)	1			* 3-hrs. Vocational/technical courses may apply to these electives		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			<b>ADDITIONAL REQUIREMENTS</b>		<b>3 HOURS £</b>
SPAN 2321 Hispanic Language and Culture I	3			EDLI 4351	Content Area Literacy	3
SPAN 2322 Hispanic Language and Culture II	3					
<b>£ Maintain a minimum of 2.50 GPA with no grade lower than a C.</b>						
† Grade must be C or better.				<b>Total Semester Credit Hours</b>		<b>129</b>
‡ Grade must be B or better.				<b>Total Advanced (Minimum)</b>		<b>36</b>

# ART – ALL LEVEL TEACHING

113  
BA.ARTS.AL  
Fall 2005

## THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major ART – ALL LEVEL**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	Hrs	Gr	Gpt	ART CORE REQUIREMENTS	30 HOURS		
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			ARTS 1303 Art History Survey I - See General Education Core	*		
ENGL 1301 Composition I	3	†		ARTS 1304 Art History Survey II	3		
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3	†		ARTS 1311 Two Dimensional Design	3		
SPCH 1315 Applied Communication	3	‡		ARTS 1312 Three Dimensional Art	3		
				ARTS 1316 Drawing I	3		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			ARTS 1317 Drawing II	3		
MATH 1314 College Algebra				ARTS 3381 Perception and Expression in Art I	3		
MATH 1324 Business Algebra				ARTS 3383 Art in the Secondary School	3		
MATH 1332 Math for Liberal Arts				ARTS 3384 Perception and Expression in Art II	3		
Higher level MATH course				ARTS 4393 Senior Exhibit	3		
				ARTS 4301 Senior Experience	3		
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>						
	3/1			<b>ELECTIVES FROM THE FOLLOWING</b>	<b>9 HOURS</b>		
	3/1			ARTS 2313 Computer Imaging I			
				ARTS 2316 Painting I			
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			ARTS 2333 Printmaking I			
Literature class (2000 Level)	3			ARTS 2356 Photography I			
ARTS 1303 Art History Survey I (* Required for Major)	3			ARTS 2326 Sculpture I			
				ARTS 2346 Ceramics I			
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>						
HIST 1301 United States to 1877	3			<b>ELECTIVES FROM THE FOLLOWING</b>	<b>9 HOURS</b>		
HIST 1302 United States Since 1877	3			ARTS 2314 Computer Imaging II			
GOVT 2301 American Government I	3			ARTS 2317 Painting II			
GOVT 2302 American Government II	3			ARTS 2334 Printmaking II			
				ARTS 2357 Photography II			
<b>SOCIAL/BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			ARTS 2327 Sculpture II			
ANTH 2351 Cultural Anthropology				ARTS 2347 Ceramics II			
BUSI 1301 Introduction to Business							
ECON 2301 Macroeconomics				<b>ELECTIVES FROM THE FOLLOWING</b>	<b>6 HOURS</b>		
GEOG 1303 General World Geography				ARTS 3303 Italian Renaissance Art (1400—1650)			
PSYC 2301 Introduction to Psychology				ARTS 3338 Creative & Critical Thinking in Art			
SOCI 1301 Introduction to Sociology				ARTS 3352 Contemporary Art			
SOCI 2319 Mexican American Experience				ARTS 3382 19 <sup>th</sup> Century European Art (1789—1900)			
				ARTS 4353 American Art			
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			ARTS 4354 Latin American Art & Architecture			
KINE 11__ Lifetime Fitness or any one hour activity course	1			ARTS 4355 Spanish Medieval, Renaissance & Baroque Art			
				ARTS 4387 Far Eastern Art History			
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>						
Six hours of the same modern language other than English.				<b>ELECTIVES FROM THE FOLLOWING</b>	<b>9 HOURS</b>		
	3			ARTS 3314 <sup>A</sup> Individual Problems			
	3			ARTS 3321 <sup>A</sup> Advanced Painting			
				ARTS 3323 <sup>A</sup> Advanced Drawing			
				ARTS 3326 <sup>A</sup> Advanced Sculpture			
<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>	<b>3 HOURS £</b>			ARTS 3371 <sup>A</sup> Advanced Ceramics			
EDCIU 2101 School and Society	1			ARTS 4331 <sup>A</sup> Advanced Computer Imaging			
EDCI 4203 Technology and the School Curriculum	2			ARTS 4334 <sup>A</sup> Advanced Printmaking			
				ARTS 4359 <sup>A</sup> Advanced Photography			
<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>21 HOURS £</b>			ARTS 4391 <sup>A</sup> Studio Art General			
EDCI 3304 Fulfilling Professional Roles and Responsibilities	3			ARTS 4337 <sup>A</sup> Internship in Art Studio			
EDSC 4322 Human Development and Instruction <b>or</b>	3			^ may be repeated four times for credit			
EDCI 4322							
EDSC 4323 Creating a Positive Productive Classroom Environ.	3			<b>ADDITIONAL REQUIREMENTS</b>	<b>3 HOURS £</b>		
EDSC 4324 Designing Inst. & Assess to Promote Student Lrng.	3			EDLI 4351 Content Area Literacy	3		
EDCI 4325 Implementing Responsive Instruction & Assessment	3						
EDCI 4311 Student Teaching	3			<b>Total Semester Credit Hours</b>	<b>138</b>		
EDSC 4398 Student Teaching	3			<b>Total Advanced Hours (Minimum)</b>	<b>36</b>		

† Grade must be C or better. ‡ Grade must be B or better. £ Maintain a minimum of 2.50 GPA with a grade no lower than a C.

# KINESIOLOGY – ALL LEVEL TEACHING

114  
BS.KINE.AL  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Science**  
**Major KINESIOLOGY – ALL LEVEL**

**Minor \_\_\_\_\_**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature	Date			
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>		<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>		
	HRS	GR	GPT	HRS	GR
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>				
ENGL 1301 Composition I	3	†		EDCIU 2101 School and Society	1
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†		EDCI 4203 Technology and the School Curriculum	2
SPCH 1315 Applied Communication	3	‡			
				<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>21 HOURS £</b>
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			EDCI 3304 Fulfilling Prof. Roles and Responsibilities	3
MATH 1314 College Algebra				EDSC 4322 Human Development and Instruction <i>or</i>	3
MATH 1332 Math for Liberal Arts				EDCI 4322	
MATH Any Higher Level Math Course				EDSC 4323 Creating a Positive Productive Classroom Environ.	3
				EDSC 4324 Designing Inst. & Assess to Promote Student Lrng.	3
				EDSC 4325 Implementing Responsive Instr. & Assessment	3
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDCI 4311 Student Teaching EC-4	3
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				EDSC 4398 Student Teaching 8-12	3
BIOL 2301/2101 Anatomy & Physiology I /Lab	3,1				
BIOL 2302/2102 Anatomy & Physiology II /Lab <i>or</i> BIOL 1307/1107	3,1			<b>CERTIFICATION FIELDS</b>	<b>38 HOURS</b>
				KINE 1111 Folk & Square Dance	1
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			KINE 1133 Basic Sports Skills	1
Literature (ENGL 2000 level)	3			KINE 1124 Swimming	1
ARTS 1301 Art Appreciation ARTS 1303 Art History <i>or</i>				KINE 11__ Individual/Dual Sport	1
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			KINE 11__ Team Sport	1
				KINE 1306 First Aid	3
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			KINE 3302 Foundations of Sport & Exercise for Pre-Adolescents	3
HIST 1301 United States to 1877	3			KINE 3309 Modified Team & Individual Sports	3
HIST 1302 United States Since 1877	3			KINE 3314 Dance for Children & Adolescents	3
GOVT 2301 American Government I	3			KINE 3330 Coaching of Sports	3
GOVT 2302 American Government II	3			KINE 3340 Principles of Wellness & Fitness	3
				KINE 3353 Physiology of Exercise and Human Performance	3
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			KINE 3356 Aesthetics of Movement	3
ANTH 2351 Cultural Anthropology				KINE 3370 Biomechanics	3
BUSI 1301 Introduction to Business				KINE 4310 Measurement Tech. In Physical Exer. & Sports	3
ECON 2301 Macroeconomics				KINE 4351 Adapted Kinesiology Program	3
GEOG 1303 General World Geography					
PSYC 2301 Introduction to Psychology				<b>MINOR (Minimum 9 hours Advanced)</b>	<b>18 – 30 HOURS</b>
SOCI 1301 Introduction to Sociology				Advanced	3
SOCI 2319 The Mexican American Experience				Advanced	3
				Advanced	3
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>				
KINE 1__ (One hour of activity/health/wellness/ fitness)	1				
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>				
Six hours of same modern language, other than English.					
	3				
	3			<b>ADDITIONAL REQUIREMENTS</b>	<b>3 HOURS £</b>
				EDLI 4351 Content Area Literacy	3
<b>£ Maintain a minimum 2.50 GPA with no grade lower than a C.</b>					
† Grade must be C or better.				<b>Total Semester Credit Hours</b>	<b>131</b>
‡ Grade must be B or better.				<b>Total Advanced (Minimum)</b>	<b>36</b>

Source: Academic Advising Center - Rev. 3-28-05

# KINESIOLOGY – ALL LEVEL TEACHING – No Minor

114  
BS.KINE.ALnm  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
SCHOOL OF EDUCATION

**Bachelor of Science**  
**Major KINESIOLOGY – ALL LEVEL**

**No Minor**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor	Date	

Student Name \_\_\_\_\_ ID # \_\_\_\_\_

E-mail	Signature			Date		
<b>GENERAL EDUCATION CORE</b>	<b>48 HOURS</b>			<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>		
	HRS	GR	GPT	HRS	GR	GPT
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>					
ENGL 1301 Composition I	3	†		EDCIU 2101 School and Society	1	
ENGL 1302 Composition II <b>or</b> ENGL 2311 Technical Writing	3	†		EDCI 4203 Technology and the School Curriculum	2	
SPCH 1315 Applied Communication	3	‡				
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>		
MATH 1314 College Algebra				EDCI 3304 Fulfilling Prof. Roles and Responsibilities	3	
MATH 1332 Math for Liberal Arts				EDSC 4322 Human Development and Instruction <b>or</b>	3	
MATH Any Higher Level Math Course				EDCI 4322		
				EDSC 4323 Creating a Positive Productive Classroom Environ.	3	
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDSC 4324 Designing Inst. & Assess to Promote Student Lmg.	3	
Select two 4-hour science courses (3 hours lecture, 1 hour lab)				EDSC 4325 Implementing Responsive Instr. & Assessment	3	
BIOL 2301/2101 Anatomy & Physiology I/Lab	3,1			EDCI 4311 Student Teaching EC-4	3	
BIOL 2302/2102 Anatomy & Physiology II/Lab or BIOL 1307/1107	3,1			EDSC 4398 Student Teaching 8-12	3	
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>CERTIFICATION FIELDS</b>		
Literature (ENGL 2000 level)	3			KINE 1111 Folk & Square Dance	1	
ARTS 1301 Art Appreciation ARTS 1303 Art History <b>or</b>				KINE 1133 Basic Sports Skills	1	
MUSI 1306 Music Appreciation MUSI 1308 Music Literature	3			KINE 1124 Swimming	1	
				KINE 11__ Individual/Dual Sport	1	
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			KINE 11__ Team Sport	1	
HIST 1301 United States to 1877	3			KINE 1306 First Aid	3	
HIST 1302 United States Since 1877	3			KINE 3302 Foundations of Sport & Exercise for Pre-Adolescents	3	
GOVT 2301 American Government I	3			KINE 3309 Modified Team & Individual Sports	3	
GOVT 2302 American Government II	3			KINE 3314 Dance for Children & Adolescents	3	
				KINE 3330 Coaching of Sports	3	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			KINE 3340 Principles of Wellness & Fitness	3	
ANTH 2351 Cultural Anthropology				KINE 3353 Physiology of Exercise and Human Performance	3	
BUSI 1301 Introduction to Business				KINE 3356 Aesthetics of Movement	3	
ECON 2301 Macroeconomics				KINE 3370 Biomechanics	3	
GEOG 1303 General World Geography				KINE 4310 Measurement Tech. In Physical Exer. & Sports	3	
PSYC 2301 Introduction to Psychology				KINE 4351 Adapted Kinesiology Program	3	
SOCI 1301 Introduction to Sociology				<b>ELECTIVES</b>		
SOCI 2319 The Mexican American Experience				<b>18 HOURS</b>		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>					
KINE 1__ (One hour of activity/health/wellness/ fitness)	1					
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>					
Six hours of same modern language, other than English.				* 3-hrs. Vocational/technical courses may apply to these electives		
	3					
	3			<b>ADDITIONAL REQUIREMENTS</b>		
				<b>3 HOURS £</b>		
£ Maintain a minimum of 2.50 GPA with no grade lower than a C.				EDLI 4351 Content Area Literacy	3	
† Grade must be C or better.				<b>Total Semester Credit Hours</b>		
‡ Grade must be B or better.				<b>131</b>		
				<b>Total Advanced (Minimum)</b>		
				<b>36</b>		

Source: Academic Advising Center - Rev. 3-28-05

# MUSIC – INSTRUMENTAL – ALL LEVEL TEACHING

115  
BA.MUSI.INST.AL  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHWEST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major MUSIC - INSTRUMENTAL- ALL LEVEL**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	Hrs	Gr	Gpt		Hrs	Gr	Gpt
<b>COMMUNICATION REQUIREMENT</b>	9 hours			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	3 hours †			<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	21 HOURS £		
MATH 1314 College Algebra				EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
MATH 1324 Business Algebra				EDSC 4322 Human Development and Instruction <i>or</i>	3		
MATH 1332 Math for Liberal Arts				EDCI 4322			
Higher level MATH course				EDSC 4323 Creating a Positive Productive Classroom Environ.	3		
				EDSC 4324 Designing Inst. & Assess to Promote Student Lrng.	3		
				EDCI 4325 Implementing Responsive Instruction & Assessment <i>or</i>	3		
				EDSC 4325 (Music Education Majors should contact advisor)			
<b>SCIENCE REQUIREMENT</b>	8 hours						
	3/1			EDCI 4311 Student Teaching EC-4	3		
	3/1			EDSC 4398 Student Teaching 8-12	3		
				* must pass Music Department Piano Proficiency prior to this Semester. *must pass Junior/Senior Recital prior to this semester			
<b>HUMANITIES REQUIREMENT</b>	6 hours			<b>MUSIC REQUIREMENTS FOR ALL MUSIC MAJORS</b>	34 HOURS		
Literature class (2000 Level)	3			MUSI 1211/1111 Music Theory I	3	†	
MUSIU 2308 Music History I	3	†					
<b>SOCIAL SCIENCE REQUIREMENT</b>	12 hours			MUSI 1212/1112 Music Theory II	3	†	
HIST 1301 United States to 1877	3			MUSI 2211/2111 Music Theory III	3	†	
HIST 1302 United States since 1877	3			MUSI 2212/2112 Music Theory IV	3	†	
GOVT 2301 American Government I	3			MUSI 3211 Orchestration& Arranging	3	†	
GOVT 2302 American Government II	3			MUSI 3289 Introduction to Conducting	2	†	
				MUSI 3307 Secondary instrumental Techniques	3	†	
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	3 hours			MUSI 3312 Counterpoint & Analysis	3		
ANTH 2351 Cultural Anthropology				Musi 3308 Music History II	3	†	
BUSI 1301 Introduction to Business				MUSI 3309 Music History III	3	†	
ECON 2301 Macroeconomics				MUSI 4289 Advanced Conducting	2		
GEOG 1303 General World Geography				MUSI 4301 Senior Experience in Music	3	†	
PSYC 2301 Introduction to Psychology				MUSI Advanced	1		
SOCI 1301 Introduction to Sociology							
SOCI 2319 Mexican American Experience							
<b>KINESIOLOGY REQUIREMENT</b>	1 hour			<b>INSTRUMENTAL OPTION</b>	27 HOURS		
KINE 11 ___ Lifetime Fitness or any one hour activity course	1			MUSI 1188 Percussion Class I	1		
				MUSI 2188 Percussion Class II	1		
<b>MODERN LANGUAGE REQUIREMENT</b>	6 hours			MUSI 1189 Strings Class I	1		
GERM 1311 Elementary German I	3			MUSI 2189 Strings Class II	1		
FREN 1311 Elementary French I	3			MUSI 1168 Brass Class I	1		
				MUSI 2168 Brass Class II	1		
				MUSI 1166 Woodwinds Class I	1		
				MUSI 2166 Woodwinds Class II	1		
				MUSI 1181 Piano Class *must continue to register for this class until Music Department Piano Proficiency is passed	1		
				MUSI Ensembles *must be enrolled in a core ensemble & an <b>elective Ensemble every semester</b>	4		
				MUAP Applied (seven semesters)	14	†	
				*completion of sophomore recital, *completion of senior recital			
				MUSI 3304 Elem. Music Tech. <i>and</i> MUSI 3306 Sec. Chor. Tech. Recommended for teacher certification. See Advisor.			
				<b>ADDITIONAL REQUIREMENTS</b>	3 HOURS £		
				EDLI 4351 Content Area Literacy	3		
<b>£ Maintain a minimum of 2.50 GPA with no grade lower than a C.</b>				<b>Total Semester Credit Hours</b>	<b>136</b>		
† Grade must be C or better.				<b>Advanced Hours (Minimum)</b>	<b>36</b>		
‡ Grade must be B or better.							

Source: Academic Advising Center Rev. 3-28-05

# MUSIC – KEYBOARD – ALL LEVEL TEACHING

116  
BA.MUSI.KEYB.AL  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major MUSIC - KEYBOARD- ALL LEVEL**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by:	Date	Faculty Advisor	Room Number	Telephone Number
		Signature		
		Academic Advisor		Date

Student Name \_\_\_\_\_ ID# \_\_\_\_\_

E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

GENERAL EDUCATION CORE	48 HOURS			PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION	3 HOURS £		
	Hrs	Gr	Gpt		Hrs	Gr	Gpt
<b>COMMUNICATION REQUIREMENT</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
ENGL 1301 Composition I	3	†		EDCI 4203 Technology and the School Curriculum	2		
ENGL 1302 Composition II <i>or</i> ENGL 2311 Technical Writing	3	†					
SPCH 1315 Applied Communication	3	‡					
				<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>21 HOURS £</b>		
<b>MATH REQUIREMENT</b> Choose <i>one</i> of the following:	<b>3 hours †</b>			EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
MATH 1314 College Algebra				EDSC 4322 Human Development and Instruction <i>or</i>	3		
MATH 1324 Business Algebra				EDCI 4322			
MATH 1332 Math for Liberal Arts				EDSC 4323 Creating a Positive Productive Classroom Environ.	3		
Higher level MATH course				EDSC 4324 Designing Inst. & Assess to Promote Student Learning	3		
				EDCI 4325 Implementing Responsive Instruction & Assessment <i>or</i>	3		
				EDSC 4325 (Music Education Majors should contact advisor)			
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDCI 4311 Student Teaching EC-4	3		
	3/1			EDSC 4398 Student Teaching 8-12	3		
	3/1			* must pass Music Department Piano Proficiency prior to this Semester. *must pass Junior/Senior Recital prior to this semester			
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>MUSIC REQUIREMENTS FOR ALL MUSIC MAJORS</b>	<b>57 HOURS</b>		
Literature class (2000 Level)	3			MUSI 1211/1111 Music Theory I	3	†	
MUSIU 2308 Music History I	3	†					
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MUSI 1212/1112 Music Theory II	3	†	
HIST 1301 United States to 1877	3			MUSI 2211/2111 Music Theory III	3	†	
HIST 1302 United States since 1877	3			MUSI 2212/2112 Music Theory IV	3	†	
GOVT 2301 American Government I	3			MUSI 3211 Orchestration & Arranging	2	†	
GOVT 2302 American Government II	3			MUSI 3289 Introduction to Conducting	2	†	
				MUSI 3307 Secondary Instrumental Techniques	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MUSI 3312 Counterpoint & Analysis	3		
ANTH 2351 Cultural Anthropology				MUSI 3308 Music History II	3	†	
BUSI 1301 Introduction to Business				MUSI 3309 Music History III	3	†	
ECON 2301 Macroeconomics				MUSI 4289 Advanced Conducting	2		
GEOG 1303 General World Geography				MUSI 4301 Senior Experience in Music	3	†	
PSYC 2301 Introduction to Psychology				MUSI Advanced	1		
SOCI 1301 Introduction to Sociology				MUSI Ensemble	2		
SOCI 2319 Mexican American Experience				MUAP Applied	14	†	
				MUSI 3304 Elem. Music Tech. <i>and</i> MUSI 3306 Sec. Chor. Tech.	Recommended for teacher certification. See Advisor.		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>						
KINE 11 _____ Lifetime Fitness or any one hour activity course	1						
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			<b>KEYBOARD OPTION</b>			
GERM 1311 Elementary German I	3			MUSI 1114 Keyboard Skills I	1		
FREN 1311 Elementary French I	3			MUSI 1115 Keyboard Skills II	1		
				MUSI 1132 Acc/Cham Music *must be enrolled every semester	5		
				(core ensemble credit)			
				<b>ADDITIONAL REQUIREMENTS (3 Hours)</b>	<b>3 HOURS £</b>		
				EDLI 4351 Content Area Literacy	3		
<b>£ Maintain a minimum of 2.50 GPA with no grade lower than a C.</b>							
† Grade must be C or better.				Total Semester Credit Hours	132		
‡ Grade must be B or better.				Advanced Hours (Minimum)	36		

Source: Academic Advising Center Rev. 3-28-05

**MUSIC – VOCAL – ALL LEVEL TEACHING**

117  
BA.MUSI.VOCALAL  
Fall 2005

THE UNIVERSITY OF TEXAS AT BROWNSVILLE and TEXAS SOUTHMOST COLLEGE  
COLLEGE OF LIBERAL ARTS

**Bachelor of Arts**  
**Major MUSIC - VOCAL- ALL LEVEL**

**Teacher Certification**  
**Academic Year 2005-2006**

Received by: _____	Date _____	Faculty Advisor _____	Room Number _____	Telephone Number _____
		Signature _____		
		Academic Advisor _____	Date _____	

Student Name \_\_\_\_\_ ID# \_\_\_\_\_  
E-mail: \_\_\_\_\_ Signature \_\_\_\_\_ Date \_\_\_\_\_

	<b>48 HOURS</b>			<b>PREREQUISITES FOR ADMISSION TO TEACHER EDUCATION</b>	<b>3 HOURS £</b>		
	Hrs	Gr	Gpt		Hrs	Gr	Gpt
<b>GENERAL EDUCATION CORE</b>	<b>9 hours</b>			EDCIU 2101 School and Society	1		
<b>COMMUNICATION REQUIREMENT</b>	<b>3 hours †</b>			EDCI 4203 Technology and the School Curriculum	2		
ENGL 1301 Composition I	3		†				
ENGL 1302 Composition II or ENGL 2311 Technical Writing	3		†				
SPCH 1315 Applied Communication	3		‡				
	<b>3 hours †</b>			<b>PEDAGOGY &amp; PROFESSIONAL RESPONSIBILITY</b>	<b>21 HOURS £</b>		
<b>MATH REQUIREMENT</b> Choose <b>one</b> of the following:	<b>3 hours †</b>			EDCI 3304 Fulfilling Professional Roles and Responsibilities	3		
MATH 1314 College Algebra				EDSC 4322 Human Development and Instruction or	3		
MATH 1324 Business Algebra				EDCI 4322			
MATH 1332 Math for Liberal Arts				EDSC 4323 Creating a Positive Productive Classroom Environ.	3		
Higher level MATH course				EDSC 4324 Designing Inst. & Assess to Promote Student Learning	3		
				EDCI 4325 Implementing Responsive Instruction & Assessment or	3		
				EDSC 4325 (Music Education Majors should contact advisor)			
<b>SCIENCE REQUIREMENT</b>	<b>8 hours</b>			EDCI 4311 Student Teaching EC-4	3		
	3/1			EDSC 4398 Student Teaching 8-12	3		
	3/1			* must pass Music Department Piano Proficiency prior to this Semester. *must pass Junior/Senior Recital prior to this semester			
<b>HUMANITIES REQUIREMENT</b>	<b>6 hours</b>			<b>MUSIC REQUIREMENTS FOR ALL MUSIC MAJORS</b>	<b>57 HOURS</b>		
Literature class (2000 Level)	3			MUSI 1211/1111 Music Theory I	3	†	
MUSIU 2308 Music History I	3		†				
<b>SOCIAL SCIENCE REQUIREMENT</b>	<b>12 hours</b>			MUSI 1212/1112 Music Theory II	3	†	
HIST 1301 United States to 1877	3			MUSI 2211/2111 Music Theory III	3	†	
HIST 1302 United States since 1877	3			MUSI 2212/2112 Music Theory IV	3	†	
GOVT 2301 American Government I	3			MUSI 3211 Orchestration & Arranging	2	†	
GOVT 2302 American Government II	3			MUSI 3289 Introduction to Conducting	2	†	
				MUSI 3307 Secondary Instrumental Techniques	3		
<b>BEHAVIORAL SCIENCE REQUIREMENT</b>	<b>3 hours</b>			MUSI 3312 Counterpoint & Analysis	3	†	
ANTH 2351 Cultural Anthropology				MUSI 3308 Music History II	3	†	
BUSI 1301 Introduction to Business				MUSI 3309 Music History III	3	†	
ECON 2301 Macroeconomics						†	
GEOG 1303 General World Geography				MUSI 4289 Advanced Conducting	2		
PSYC 2301 Introduction to Psychology				MUSI 4301 Senior Experience in Music	3	†	
SOCI 1301 Introduction to Sociology				MUSI Advanced	1		
SOCI 2319 Mexican American Experience				MUSI Ensemble	2		
<b>KINESIOLOGY REQUIREMENT</b>	<b>1 hour</b>			<b>VOCAL OPTION</b>			
KINE 11__ Lifetime Fitness or any one hour activity course	1			MUSI 1162 Diction I	1		
				MUSI 1165 Diction II	1		
<b>MODERN LANGUAGE REQUIREMENT</b>	<b>6 hours</b>			MUSI 1181 Piano Class *must continue to register for this	2		
GERM 1311 Elementary German I	3			Class until Music Department Piano Proficiency is passed			
FREN 1311 Elementary French I	3			MUSI 1183 Voice Class I	1		
				MUSI 1184 Voice Class II	1		
				MUAP Applied (seven semesters)	14	†	
				*completion of sophomore recital, *completion of senior recital			
				MUSI 3304 Elem. Music Tech. and MUSI 3306 Sec. Chor. Tech.			
				Recommended for teacher certification. See Advisor			
				<b>ADDITIONAL REQUIREMENTS (3 Hours)</b>	<b>3 HOURS £</b>		
				EDLI 4351 Content Area Literacy	3		
<b>£ Maintain a minimum of 2.50 GPA with a grade no lower than a C.</b>				<b>Total Semester Credit Hours</b>	<b>132</b>		
† Grade must be C or better.				<b>Advanced Hours (Minimum)</b>	<b>36</b>		
‡ Grade must be B or better.							

Source: Academic Advising Center Rev. 3-28-05



# 2005-06 NON-CERTIFICATION MINORS

## Art .....30 hours

ARTS 1303	Art History Survey I.....	3
ARTS 1304	Art History Survey II.....	3
ARTS 1311	Two-dimensional Design.....	3
ARTS 1312	Three-dimensional Design.....	3
ARTS 1316	Drawing I.....	3
ARTS 1317	Drawing II.....	3
3 hours:	Choose from ARTS 2313, 2316, 2333, 2326, or 2346 .....	3
9 hrs of Upper Division Art History/Studio		
ARTS	(Adv. Elective 3000/4000).....	3
ARTS	(Adv. Elective 3000/4000).....	3
ARTS	(Adv. Elective 3000/4000).....	3

## Art History .....18 hours

ARTS 1303	Art History Survey I.....	3
ARTS 1304	Art History Survey II.....	3
12 hours of Upper Division Art History		
ARTS	(Adv. Elective 3000/4000).....	3
ARTS	(Adv. Elective 3000/4000).....	3
ARTS	(Adv. Elective 3000/4000).....	3
ARTS	(Adv. Elective 3000/4000).....	3

## Biology ..... 24-25 hours

BIOL 1306	Biology I.....	3
BIOL 1106	Biology I Lab .....	1
BIOL 1307	Biology II.....	3
BIOL 1107	Biology II Lab.....	1
BIOL 3303/3103	Genetics .....	3,1
BIOL 3309/3109	Ecology .....	3,1
BIOL 3312/3112	Cell Biology .....	3,1
BIOL	4-5 hrs from 2301, 2101, 2321, 2121, 2328, 2128, 3301, 3101, 3308, 3108, 3314, 3114, 4100, 4170, 4199, 4299, or 4399, 4309, 4109, 4370, 4302, 4102, 4304, 4104, 4310, 4110, 4314, 4114, 4320, 4120, 4340, 4140, 4350, 4150.....	4-5

## Business Administration ..... 18-19 hours

BUSI 1301	Intro to Business .....	3
ACCT 2301/2401	Prin. of Accounting I.....	3-4
ECON 2301	Macroeconomics .....	or
ECON 2302	Microeconomics .....	3
BUSI 3335	Org. Communications .....	3
BLAW 3337	Business Law .....	3
MANA 3361	Principles of Management.....	3

## Chemistry .....24 hours

CHEM 1311/1111	Chemistry I & Lab.....	3,1
CHEM 1312/1112	Chemistry II & Lab .....	3,1
CHEM 2323/2123	Organic Chem & Lab.....	3,1
CHEM	(Adv. Elective 3000/4000) .....	3
CHEM	(Adv. Elective 3000/4000) .....	3
CHEM	(Adv. Elective 3000/4000) .....	3
CHEM	(Adv. Elective 3000/4000) .....	3

## Communication 18 hours

COMM 2320	Survey of the Media .....	3
COMM 3316	Intercultural Communication .....	3

COMM 3323	Theories of Communication.....	3
COMM 3335	Mass Comm. and Society.....	3
COMM	Elective (2000/3000/4000) .....	3
COMM	Elective (2000/3000/4000) .....	3

## Community and School Health Education .....18 hours

HLTH 2320	Personal Health .....	3
HLTH 2325	Nutrition .....	3
HLTH 3300	Elem. & Sec.School Health.....	3
HLTH 3305	Selected Topics in Health .....	3
HLTH 4300	Human Diseases.....	3
HLTH 4305	Comm.& Consumer Health .....	3

## Computer Sciences .....25 hours

COSC 1418	Program Structures I .....	4
COSC 2318	Program Structures II.....	3
COSC 3310	Systems Program & C.P.....	3
COSC 3330	Network & Data Mgmt. ....	3
COSC 3345	Data & Info. Structures .....	3
COSC 4310	Operating Systems .....	3
COSC 4342	Database Mgmt. Systems .....	3
COSC or MATH	(Adv. Elective) .....	3

## Criminal Justice 18 hours

CRIJ 1301	Intro to Criminal Justice .....	3
CRIJ 3302	Literature & Research .....	3
CRIJ	(Elective – any level).....	3
CRIJ	(Elective – any level).....	3
CRIJ	(Adv. Elective 3000/4000) .....	3
CRIJ	(Adv. Elective 3000/4000) .....	3

## English .....27 hours

ENGL 1301	Composition I .....	3
ENGL 1302	Composition II .....	3
ENGL 233x	World Literature .....	3
ENGL	(Adv. Elective 3000/4000).....	3
ENGL	(Adv. Elective 3000/4000).....	3
ENGL	(Adv. Elective 3000/4000).....	3
ENGL	(Adv. Elective 3000/4000).....	3
ENGL	(Adv. Elective 3000/4000).....	3
ENGL	(Adv. Elective 3000/4000).....	3

## Environmental Sciences .....26 hours

BIOL 1306	Biological Principles I.....	3
BIOL 1106	Biological Principles Lab I.....	1
BIOL 1307	Biological Principles II .....	3
BIOL 1107	Biological Principles Lab II.....	1
GEOL 1303	Physical Geology.....	3
GEOL 1103	Physical Geology Lab.....	1
GEOL 1304	Historical Geology .....	3
GEOL 1104	Historical Geology Lab .....	1
GEOL 3310	Environmental Geology .....	3
GEOL 3305	Oceanography.....	3
GEOL 3105	Oceanography Lab .....	1
CHEM 4306	Environmental Chemistry.....	3

**Geosciences – Geography .....26 hours**

GEOG 1301	Elements of Phys. Geog.	3
GEOG 1303	Gen. World Geography	3
GEOL 1303	Physical Geology	3
GEOL 1103	Physical Geology Lab	1
GEOL 1304	Historical Geology	3
GEOL 1104	Historical Geology Lab	1
12 hrs from GEOG 3320, GEOG 3333, GEOG 3334, GEOG/GEOL 4440, GEOG/GEOL 4441 or GEOL 4350		12

**Geosciences – Geology ..... 24-25 hours**

GEOG 1301	Elements of Phys. Geog.	3
GEOG 1303	Gen. World Geography	3
GEOL 1303	Physical Geology	3
GEOL 1103	Physical Geology Lab	1
GEOL 1304	Historical Geology	3
GEOL 1104	Historical Geology Lab	1
10-11 hrs from GEOG 4350, GEOG 3334, GEOG/GEOL 4440, or GEOG/GEOL 4441		10-11

**Government .....18 hours**

GOVT 2301	American Government I	3
GOVT 2302	American Government II	3
GOVT	(Adv. Elective 3000/4000)	3
GOVT	(Adv. Elective 3000/4000)	3
GOVT	(Adv. Elective 3000/4000)	3
GOVT	(Adv. Elective 3000/4000)	3

**History .....18 hours**

HIST 2321	World History to 1650	3
HIST 2322	World History since 1650	3
HIST 2380	Mexican-American History	3
HIST 3340	Texas History	3
HIST	(Adv. Elective 3000/4000)	3
HIST	(Adv. Elective 3000/4000)	3

**Jazz Studies .....20 hours**

MUSI 1263	Jazz Improv & Th. (2 sem)	4
MUSI 3363	Intermed. Improvisation	3
MUSI 2310	Special Topics	3
MUSI 1115	Keyboard Skills II	3
MUSI 3311	Jazz Arranging	3
MUSI 3136	Jazz Ensemble (4 sem)	4

**Kinesiology .....22 hours**

KINE 1133	Basic Sports Skills	1
KINE 1306	First Aid	3
KINE 3302	Foun. of Sports & Exer.	3
KINE 3309	Mod. Team & Ind. Sports	3
KINE 3314	Dance for Child. and Adol.	3
KINE 3353	Phys. of Ex & Human Perf.	3
KINE 3370	Biomechanics	3
KINE 4310	Adapted Kinesiology	3

**Mathematics .....26 hours**

MATH 1342	Elementary Statistics	3
MATH 2413	Calculus I	4
MATH 2414	Calculus II	4
MATH 3332	Geometry II	3
MATH 3347	Calculus III	3

MATH 3362	Discrete Structures	3
MATH	(Adv. Elective 3000/4000)	3
MATH	(Adv. Elective 3000/4000)	3

**Music .....27 hours**

MUSI 1181	Class Piano	1
MUSI 1308	Music Literature	3
MUSI 1211	Music Theory I	2
MUSI 1111	Elementary Ear Training I	1
MUSI 1212	Music Theory II	2
MUSI 1112	Elementary Ear Training II	1
MUSI 3289	Intro to Conducting	2
MUSI 3304	Elem. Music Tech.	3
MUSI	Lower Div. Ensemble (4 sem)	4
MUSI	Upper Div. Ensemble (4 sem)	4
MUAP	Applied Music (2 sem)	4

**Physics .....22 hours**

PHYS 2425	University Physics I	4
PHYS 2426	University Physics II	4
PHYS 2427	University Physics III	4
PHYS 3400	Modern Physics	4
PHYS	(Adv. Elective 3000/4000)	3
PHYS	(Adv. Elective 3000/4000)	3

**Psychology .....18 hours**

PSYC 2301	Intro to Psychology	3
PSYC	(Elective – any level)	3
PSYC	(Elective – any level)	3
PSYC	(Adv. Elective 3000/4000)	3
PSYC	(Adv. Elective 3000/4000)	3
PSYC	(Adv. Elective 3000/4000)	3

**Sociology .....18 hours**

SOCI 1301	Intro to Sociology	3
SOCI 3335	Social Theory	3
SOCI 4352	Social Inequality	3
SOCI	(Elective – any level)	3
SOCI	(Adv. Elective – 3000/4000)	3
SOCI	(Adv. Elective – 3000/4000)	3

**Spanish \* .....18 hours**

SPAN	(Adv. Elective 3000/4000)	3
SPAN	(Adv. Elective 3000/4000)	3
SPAN	(Adv. Elective 3000/4000)	3
SPAN	(Adv. Elective 3000/4000)	3
SPAN	(Adv. Elective 3000/4000)	3
SPAN	(Adv. Elective 3000/4000)	3

**Spanish Translation \* .....18 hours**

TRSP 3332	Intro to Sp/Eng Trans.	3
TRSP 3335^	Topics in Translation	3
TRSP	(Adv. Elective 3000/4000)	3
TRSP	(Adv. Elective 3000/4000)	3
TRSP	(Adv. Elective 3000/4000)	3
TRSP	(Adv. Elective 3000/4000)	3

^ This course may be taken 3 times for credit.

\* SPAN 2321 and 2322 Hispanic Language & Culture I and II are required as part of the General Education Core for the Spanish and Spanish Translation minors.

# COURSE LISTINGS

## **Accounting (ACCT)**

### **ACCT 2401 Principles of Accounting I**

Financial accounting as it applies to sole proprietorships, partnerships, and corporation. Financial accounting systems and accounting for equity rights. Lec 4, Cr 4. Prerequisites: ACNT 1403 recommended (with minimum grade of C), Sophomore standing. BBA degrees require that this course be passed with a C or better.

### **ACCT 2402 Principles of Accounting II**

Fundamentals of managerial accounting system, budgeting, financial analysis quantitative technique, and accounting for departments and branches, price level change as they affect decision-making. Lec 4, Cr 4. Prerequisite: ACCT 2401 (with minimum grade of C). BBA degrees require that this course be passed with a C or better.

### **ACCT 3321 Intermediate Accounting I**

The accounting process and financial statements; present value concepts; a detailed study of current assets and current liabilities; property, plant and equipment; intangible assets. Lec 3, Cr 3. Prerequisite: ACCT 2402 with minimum grade of C; admission to upper division.

### **ACCT 3322 Intermediate Accounting II**

The continuing study of Intermediate Accounting I; long term liabilities; long term investments; capital structure and earnings per share; pension costs, leases; statement of charges in financial position. Lec 3, Cr 3. Prerequisite: ACCT 3321 with minimum grade of C; admission to upper division.

### **ACCT 3323 Income Tax Procedure**

Analysis of federal tax laws, with emphasis on determining net taxable income and preparing income tax returns for individuals. Lec 3, Cr 3. Prerequisite: Admission to Upper Division. ACCT 2401 with minimum grade of C.

### **ACCT 3324 Cost Management**

Basic cost accounting concepts and techniques, with an emphasis on providing information for management decision-making. Topics include job and process costing, cost-volume-profit analysis, budgeting, standard costs and variance analysis, direct costing, cost behavior, and relevant costs. Lec 3, Cr 3. Prerequisite: ACCT 2402 with minimum grade of C; admission to upper division.

### **ACCT 3325 Governmental and Not-For-Profit Accounting**

The special features of fund accounting as applied to not-for-profit entities, municipalities, school districts, and other governmental units. Lec 3, Cr 3. Prerequisite: ACCT 2401 with minimum grade of C; admission to upper division.

### **ACCT 3351 Information Systems in Organizations**

This course addresses issues associated with the expanding role of information systems and accounting information systems in organizations, including their development and use, strategic impact, and international implications. Lec 3, Cr 3. Prerequisite: ACCT 2402 with minimum grade of C; admission to upper division.

### **ACCT 4320 Advanced Accounting I**

Selected topics including accounting for income taxes, price level changes, foreign operations, estates and trusts, corporate reorganizations and liquidations and nonprofit organizations. Lec 3, Cr 3. Prerequisite: ACCT 3322 with minimum grade of C; admission to upper division.

### **ACCT 4321 Advanced Accounting II**

Theory and techniques of consolidated financial statements. Accounting for partnerships and branches and branch operations. Lec 3, Cr 3. Prerequisite: ACCT 3322 with minimum grade of C; admission to upper division.

### **ACCT 4323 Contemporary Accounting Theory**

Contemporary advanced accounting and auditing theory, including controversial issues, with emphasis on income determination and asset valuation particular attention is given to current publications of professional and governmental agencies. Lec 3, Cr 3. Prerequisite: ACCT 3322 with minimum grade of C, ACCT 4324 or concurrent enrollment with minimum grade of C; admission to upper division.

### **ACCT 4324 Auditing I**

A survey of auditing standards and procedures applied by public accountants and internal auditors in examining financial statements and verifying underlying data. Includes elements of operational auditing. Lec 3, Cr 3. Prerequisite: ACCT 3322 with minimum grade of C; admission to upper division.

### **ACCT 4325 Taxation 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, and alternative minimum tax and tax credits. Prerequisite: ACCT 3323 with minimum grade of C. Admission to Upper Division.

### **ACCT 4327 Advanced Managerial Accounting**

Advanced cost and managerial concepts. Effects on internal reporting. Topics include evolution and development of cost accounting, cost allocations and other topics of current interest. Prerequisite: ACCT 3324 with minimum grade of C; admission to Upper Division.

### **ACCT 4328 Seminar in Auditing**

Examination of auditing philosophy and contemporary auditing issues. Study of auditing research including the behavioral aspects of auditing. Prerequisite: ACCT 4324 with minimum grade of C.

### **ACCT 4329 Corporation and Partnership Tax**

Analysis of tax laws applicable to partnerships and corporations. Federal gift, estate and inheritance taxes may also be covered. Lec 3, Cr 3. Prerequisite: ACCT 3323 (with minimum grade of C). Admission to upper division.

### **ACCT 4331 Accounting Report Writing**

An applied communication/report-writing course for accounting majors using current reporting standards. Emphasis on data accumulation, documentation, drafting and communication of the different types of opinion letters, management letters, representation letters, compilation reports, internal control reports, reports, interim reports, reports to the S.E.C., proper notes to financial statements, written communication with other professional accountants, and special reports. Lec 3, Cr 3. Prerequisite: ACCT 4324 with minimum grade of C or concurrent enrollment; admission to upper division. Senior standing.

### **ACCT 4345 Accounting Internship**

Supervised full-time or part-time, off campus training in public accounting, industry, or government. Oral and written required. Prerequisites: Accounting major, and Senior standing with a minimum 3.0 accumulated GPA in upper division accounting courses; admission to upper division. Students must apply to program and be accepted prior to registration. May not be repeated for credit. Senior standing. Admission to Upper Division.

### **ACCT 4351 Fraud Examination**

An examination of various aspects of fraud prevention and detection including: elements of fraud, types of fraud involving accounting information, economic impact of fraud, use of controls to detect and prevent fraud, and fraud examination methods. Limited use of case analysis. Prerequisite: ACCT 4324 with minimum grade of C and admission to upper division and Senior standing.

## **Air Conditioning and Refrigeration (HART, MAIR)**

### **HART 1301 Basic Electricity for HVAC**

Principles of electricity as required by HVAC, including proper use of test equipment, electrical circuits, and component theory and operation.

### **HART 1303 Air Conditioning Control Principles**

A basic study of HVAC and refrigeration controls; troubleshooting of control components; emphasis on use of wiring diagrams to analyze high and low voltage circuits; a review of Ohm's law as applied to air conditioning controls and circuits.

### **HART 1307 Refrigeration Principles**

An introduction to the refrigeration cycle, heat transfer theory, temperature/pressure relationship, refrigerant handling, refrigeration components and safety.

### **HART 1341 Residential Air Conditioning**

A study of components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Prerequisite: HART 1301 and HART 1307.

### **HART 1345 Gas and Electric Heating**

Study of the procedures and principles used in servicing heating systems including gas-fired furnaces and electric heating systems. Prerequisite: HART 1301 and HART 1307.

### **HART 1356 EPA Recovery Certification Preparation**

Certification training for HVAC refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling. Instruction will provide a review of EPA guidelines for refrigerant recovery and recycling during the installation, service, and repair of all HVAC and refrigeration systems.

### **HART 2301 Air Conditioning and Refrigeration Codes**

HVAC standards and concepts with emphasis on the understanding, and documentation of the codes and regulations required for the state mechanical contractors license and local codes. Prerequisite: HART 1301 and HART 1307.

### **HART 2336 Air Conditioning Troubleshooting**

An advanced course in application of troubleshooting principles and use of test instruments to diagnose air conditioning and refrigeration components and system problems including conducting performance tests. Prerequisite: HART 1301 and HART 1307.

### **HART 2338 Air Conditioning Installation and Startup**

A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on startup and performance testing.

### **HART 2345 Air Conditioning System Design**

Study of the properties of air and results of cooling, heating, humidifying or dehumidifying; heat gain and heat loss calculations including equipment selection and balancing the air system. Prerequisite: HART 1301 and HART 1307.

### **HART 2349 Heat Pumps**

A study of heat pumps, heat pump control circuits, defrost controls, auxiliary heat, air flow, and other topics related to heat pump systems. Prerequisite: HART 1301 and HART 1307.

### **HART 2388 Internship - Heating, Air Conditioning, Refrigeration Mechanic and Repairer**

A work-based learning experience that enables the student to apply

specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: HART 1301 and HART 1307.

### **MAIR 1349 Refrigerator, Freezers, Window Air Conditioners**

Theory, sequence of operation, components and repair, electrical schematics, and troubleshooting electrical components in air conditioning and refrigeration. Emphasis on safety for the electrical, mechanical, and sealed systems.

## **Anthropology (ANTH)**

### **ANTH 2301 Physical Anthropology**

Human evolution, race, heredity, the organic basis of culture history through Paleolithic period. Lec 3, Cr 3.

### **ANTH 2351 Cultural Anthropology**

Key concepts, methods and theory in the study of cultural diversity, social institutions, linguistics of culture change among world peoples. Lec 3, Cr 3.

### **ANTH 3375 Mexican American Folklore**

A survey of general introductory topics in folklore as applied to the Hispanic American population of the American Southwest and Northern Mexico. Topics include myth, tale, folk medicine, song, dance, as well as discussion of the Material culture. Lec 3, Cr 3.

### **ANTH 4353 Ritual, Belief, and Healing**

An examination of how ritual and belief systems create alternative healing systems with a focus on the U.S. Mexico border and curanderismo. Lec 3, Cr 3.

### **ANTH 4369 Archeology of Mexico and Central America**

A survey of the major archeological sites and the theories concerning the pre-Columbian societies of Meso-American. Lec 3, Cr 3.

## **Arabic (ARABU)**

### **ARABU 1311 Elementary Arabic I**

This course is a study of fundamental skills in listening comprehension, speaking, reading, and writing. It includes basic vocabulary, grammatical structures, and culture.

### **ARABU 1312 Elementary Arabic II**

This course is the second of two basic course in the Arabic language. It is a continuation of the study of fundamental skills in listening comprehension, speaking, reading, and writing, including basic vocabulary, grammatical structures, and culture. Prerequisite: ARABU 1311.

## **Arts (ARTS)**

### **ARTS 1301 Art Appreciation**

An introduction to creative art; relationship of line, mass, color, texture. A survey of the history and philosophy of art and architecture in the Western World. Lec 3, Cr 3.

### **ARTS 1303 Art History Survey I**

Art History Survey I is a survey of painting, sculpture, architecture, and the minor arts from prehistoric times to the 14th century.

### **ARTS 1304 Art History Survey II**

Art History Survey II is a survey of painting, sculpture, architecture, and minor arts from the 14th century to the present. Prerequisite: ARTS 1303.

### **ARTS 1311 Two Dimensional Design**

Principles of design and development of design structure on two dimensional surfaces. Lec 3, Lab 3, Cr 3.

**ARTS 1312 Three Dimensional Design**

This course investigates the art elements and principles of design applied to three dimensional surfaces. Lec 3, Lab 3, Cr 3.

**ARTS 1316 Drawing I**

The investigation of drawing media and techniques, including descriptive and expressive possibilities. Lec 2, lab 4, Ind 3, Cr 3.

**ARTS 1317 Drawing II**

Drawing II is a continuation of Drawing I with an emphasis on forms of expression that represent the human figure. Prerequisite: ARTS 1311 and ARTS 1316.

**ARTS 2134 Computer Imaging II**

This course is a continuation of Computer Imaging I, but with a greater emphasis on the creation of fine art digital manipulation and computer graphics.

**ARTS 2233 Drawing III**

A continuation of Drawing II, but with an even greater emphasis on the human figure. Prerequisite: ARTS 1317.

**ARTS 2313 Computer Imaging I**

Computer Imaging I is an introductory studio art course that explores the potential of computer hardware and software as a medium for visual, conceptual and practical uses in the visual arts. Prerequisite: ARTS 1311.

**ARTS 2316 Painting I**

Painting I is a studio course that explores ideas using painting media and techniques. Prerequisite: ARTS 1311 and ARTS 1316.

**ARTS 2317 Painting II**

Painting II is a continuation of Painting I with an emphasis on special problems determined by the student in cooperation with the instructor. Prerequisite: ARTS 1311, ARTS 1316, ARTS 2316.

**ARTS 2326 Sculpture I**

This course investigates the use of materials such as clay, stone, wood and plaster to create three dimensional sculptures. Lec 2, Lab 4, Ind 3, Cr 3. Prerequisite: ARTS 1312.

**ARTS 2327 Sculpture II**

Sculpture II is a continuation of Sculpture I, but with a greater emphasis on aiding the student in solving individual problems using sculpture media and techniques. Prerequisite: ARTS 1312 and ARTS 2326.

**ARTS 2333 Printmaking**

Printmaking I is a studio art class which explores visual expression and ideas using printmaking processes. Prerequisite: ARTS 1311 and ARTS 1316.

**ARTS 2334 Printmaking II**

Printmaking II is a continuation of Printmaking I. Students will explore a variety of printmaking processes. Prerequisite: ARTS 1311, ARTS 1316, and ARTS 2333.

**ARTS 2346 Ceramics I**

This course investigates the basic ceramic pre-processes of hand building, throwing, glazing, and the firing of clay. Lec 2, Lab 4, Ind 3, Cr 3. Prerequisite: ARTS 1312.

**ARTS 2347 Ceramics II**

Ceramics II is a continuation of Ceramics I with an emphasis on glaze formulation. Prerequisite: ARTS 1312 and ARTS 2346.

**ARTS 2356 Photography I**

Study of fundamental lighting, posing, camera techniques, composition, processing and printing relating to all shooting with special emphasis on portraits and still life. Lec 2, Lab 4, Ind 3, Cr 3. Prerequisite: ARTS 1311.

**ARTS 2357 Photography II**

Photography II is a continuation of Photography I with an emphasis on extending the student's knowledge of techniques and guides them in developing personal outlooks toward specific applications of the photographic process. Prerequisite: ARTS 1311 and ARTS 2356.

**ARTS 3303 Italian Renaissance 1400-1650**

This course will study the major artists of the Italian Renaissance and will focus on the development of Neoclassicism and Neoplatonicism. Lec 3, Cr 3. Prerequisite: ARTS 1303 and ARTS 1304.

**ARTS 3314 Individual Problems**

Individual Problems is a studio art class which allows the student to work on advanced individual projects to be completed under faculty supervision on a one-to-one basis. This course may be taken for a total of 12 hours of credit. A student will need permission from the Department Chair for admission to this class. Prerequisite: Permission of Department Chair.

**ARTS 3321 Advanced Painting**

Advanced Painting is a studio art class where students undertake advanced problems in painting. This course may be taken four times for a total of 12 hours of credit. Prerequisite: ARTS 2316 and ARTS 2317.

**ARTS 3323 Advanced Drawing**

Advanced Drawing is an upper division studio art class in which students will investigate advanced studio problems in drawing. This course may be taken four times for a total of 12 hours of credit. Prerequisite: ARTS 1316 and ARTS 1317.

**ARTS 3326 Advanced Sculpture**

Advanced Sculpture is a continuation of Sculpture II but with an even greater emphasis on aiding the student in solving individual problems. This course may be taken 4 times for a total of 12 hours of credit. Prerequisite: ARTS 1312, ARTS 2326, and ARTS 2327.

**ARTS 3333 Advanced Printing**

This course is a study in the advanced problems in printmaking with an emphasis on the mastery of technical skills and development of a personal vision. This course may be repeated four times for a total of 12 credit hours.

**ARTS 3338 Fundamentals of Creative and Critical Thinking in Art**

The course offers discussion in synectics, philosophy, and analytical thinking. A topology of creative behavior development is presented along with spatial exercises. Prerequisite: Junior Standing.

**ARTS 3352 Contemporary Art History**

Art history from 19th Century in Europe and America to the present. Development and growth of today's arts and aesthetics. Lec 3, Cr 3. Prerequisite: ARTS 1303 and ARTS 1304.

**ARTS 3356 Advanced Photography**

This course is a study in the advanced problems in Photography. It is an exploration of black and white, color and digital photography as an art form. This course may be repeated four times for a total of 12 credit hours.

**ARTS 3371 Advanced Ceramics**

Advanced Ceramics investigates the advanced studio problems in the ceramics process. This course may be taken four times for a total of 12 hours credit. Prerequisite: ARTS 2346 and ARTS 2347.

**ARTS 3381 Perception and Expression in Art I**

Perception and Expression in Art I will strengthen visual perception and divergent thinking on studio activities for prospective teachers of elementary arts and will emphasize further studies of development in curriculum for teachers of upper elementary. Prerequisite: ARTS 1311, ARTS 1312,

ARTS 1316, ARTS 1317, ARTS 1303 and ARTS 1304.

**ARTS 3382 19th Century European Art**

European painting, sculpture and architecture as social and political events ranging from the French Revolution to 1900. This art history course covers the development of the neoclassicism, romanticism, social realism, impressionism and post impressionism and their international impact. Lec 3, Cr 3. Prerequisite: ARTS 1302 and ARTS 1304.

**ARTS 3383 Art in the Secondary School**

Arts in the Secondary School is a survey of visual education at the secondary level. This course is required for teaching art at the junior and senior high school level. Prerequisite: ARTS 1303, ARTS 1304, ARTS 1311, ARTS 1312, ARTS 1316, and ARTS 1317.

**ARTS 3384 Perception and Expression in Art II**

Perception and Expression II is a continuation of Perceptions and Expressions in Arts I, but with a greater emphasis on art studio activities for teachers of elementary and middle school art. Prerequisite: ARTS 3381, ARTS 1311, ARTS 1312, ARTS 1316, ARTS 1317, ARTS 1303, and ARTS 1304.

**ARTS 4301 Senior Experience in Art**

Senior Experience is a capstone course for art majors. It is designed to make connections of the various elements of the arts degree program. Prerequisite: Permission of Instructor.

**ARTS 4331 Advanced Computer Imaging**

Advanced Computer Imaging is a studio arts course that explores advanced techniques in the uses of the computer as an artistic and graphic medium. This course may be taken four times for a total of 12 hours of credit. Prerequisite: ARTS 2313 and ARTSU 2314.

**ARTS 4334 Advanced Printmaking**

This course consists of advanced studio problems in printmaking. This course may be taken four times for a total of 12 credit hours. Prerequisite: ARTS 2333 and ARTS 2334

## Arts (ARTS)

**ARTS 4337 Internship in Art Studio**

Internship in Arts Studio provides opportunities for students in applied learning related to visual art through local business, government, industry, or institutional organizations. Students will work under faculty direction with periodic and final written reports and a supporting portfolio. May be taken four times for a total of 12 hours of credit. Prerequisite: Permission of Instructor.

**ARTS 4353 American Art History**

History of visual arts in the United States from the 17th century to the present, including the art of the Native Americans. Lec 3, Cr 3. Prerequisite: ARTS 1303 and ARTS 1304.

**ARTS 4354 Latin American Art and Architecture**

Major monuments of Latin-American art and architecture in the New World, 16th century to the present. Emphasizes post-Conquest mixtures of European and Indigenous styles during the colonial period and major developments in modern Latin American art since independence. Lec 3, Cr 3. Prerequisite: ARTS 1303 and ARTS 1304.

**ARTS 4359 Advanced Photography**

This course consists of advanced studio problems in photography. This course may be taken four times for a total of 12 credits. Prerequisite: ARTS 2356 and ARTS 2357

**ARTS 4387 Far East Art History**

This course explores the art and architecture of India, Japan, and China

form ancient times to the early 19th century. It explores the different cultures by analyzing the impact of Brahmanism, Confucianism and Taoism in buildings, paintings, sculptures and tapestries of the Far East. Lec 3, Lec 3. Prerequisite: ARTS 1303 and ARTS 1304.

**ARTS 4391 Studio Art General**

Advanced problems in art of the students' choice and/or partnership with an art professional in the field of interest. This course may be repeated four times for a total of 12 hours credit. Lec 2, Lab 4, Ind 3, Cr 3. Prerequisite: Upper division standing.

**ARTS 4393 Senior Exhibit**

This course requires an art exhibition and a written thesis from all last semester seniors. Students must complete before student teaching. Lec 2, Lab 4, Cr 4. Prerequisite: Permission of Department Chair.

## Auto Body and Repair (ABDR)

**ABDR 1411 Vehicle Measure/Damage Repair Procedures**

Introduction to damaged vehicle measurement and alignment systems. Lec 2, Lab 6, Cr 4.

**ABDR 1431 Basic Refinishing**

An introduction to terms, trade practices, hand tools, power tools, current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Painting of time and replacement parts included. Emphasis on surface preparation. Introduction to masking techniques. Lec 2, Lab 6, Cr 4.

**ABDR 1453 Fiberglass Repair**

A comprehensive course in automotive fiberglass repair including the use of various adhesive fiberglass mat, and resins used for proper repair procedures. Lec 2, Lab 6, Cr 4.

**ABDR 1519 Basic Metal Repair**

Basic current metal working techniques, shop safety, proper tool usage, product application, and skill development utilizing various body features including principles. Lec 3, Lab 6, Cr 5

**ABDR 1541 Structural Analysis & Damage Repair I**

Skills development in the roughing and shaping procedures on automotive sheet metal necessary to make satisfactory minor body repairs. Emphasis on the alignment of component parts such as doors, hood, front-end assemblies, and deck lids. Lec 3, Lab 6, Cr 5

**ABDR 1542 Structural Analysis and Damage Repair II**

Continuation of general repair and replacement procedures for damaged structural parts and collision damaged. Lec 3, Lab 6, Cr 5

**ABDR 2255 Collision Repair Estimating**

An advanced course in collision estimating and development of an accurate damage report. Lec 1, Lab 2, Cr 2.

**ABDR 2257 Collision Repair Shop Management**

A study of methods and equipment use in state of the art repair shops to improve management functions and profitability. Lec 1, Lab 2, Cr 2.

**ABDR 2549 Advanced Refinishing I**

Skill development in multi-stage refinishing including base coat/clear coat techniques. Further development in identification of problems and solutions in color matching and partial panel. Lec 3, Lab 6, Cr 5

## Auto Mechanics (AUMT, VHPA)

**AUMT 1213 Automotive Suspension and Steering**

A study of automotive suspension & steering systems including theory of wheel & tire construction and alignment angles & procedures.

**AUMT 1249 Automotive Electronics Theory**

A course in automotive technology including electrical principles, semiconductor & integrated circuits, digital fundamentals.

**AUMT 1253 Automotive Electrical System Theory**

A course in automotive electrical systems including operational theory, testing and diagnosis of batteries, charging & starting.

**AUMT 1257 Automotive Brake Systems Theory**

Theory and principles related to the design, operation, and servicing of automotive braking systems. Includes disc and drum-type brakes, hydraulic systems, power assist components, anti-lock brake systems and diagnosis and reconditioning procedures.

**AUMT 1266 Practicum**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college & student.

**AUMT 1306 Automotive Engine Removal and Installation**

Fundamentals of engine inspection, removal and installation procedures. May be taught manufacturer specific. Prerequisite: AUMT 2334

**AUMT 1310 Automotive Brake Systems**

Operation and repair of drum/disc type brake systems. Emphasis on safe use of modern equipment. Topics include brake theory, diagnosis, and repair of power, manual, anti-lock brake systems, and parking brakes. May be taught with manufacturer specific instructions. Prerequisite: AUMT 1257

**AUMT 1316 Automotive Suspension & Steering Systems**

A study of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. May be taught manufacturer specific. Prerequisite: AUMT 1213.

**AUMT 1319 Automotive Engine Repair**

Fundamentals of engine operation, engine operation, diagnosis and repair including lubrication systems and cooling systems. Emphasis on overhaul of selected engines, identification and inspection, measurements, and disassembly, repair, and reassembly of the engine. May be taught manufacturer specific. Prerequisite: AUMT 2334.

**AUMT 1341 Automotive Heating & Air Conditioning Theory**

Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis of system malfunctions. Includes manual and electronic climate. Prerequisite: AUMT 1407

**AUMT 1345 Automotive Heating and Air Conditioning**

Theory of automotive air conditioning and heating systems. Emphasis on the basic refrigeration cycle and diagnosis and repair of system malfunctions. Covers EPA guidelines for refrigerant handling and new refrigerant replacements. May be taught manufacturer specific. Prerequisite: AUMT 1407

**AUMT 1405 Introduction to Automotive Technology**

An introduction to the automotive industry including automotive history, safety practices, shop equipment and tools, vehicle.

**AUMT 1407 Automotive Electrical Systems**

An overview of automotive electrical systems, and electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific. Lec 2, Lab 4, Cr 4.

**AUMT 2205 Automotive Engine Theory**

Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods.

**AUMT 2211 Automotive Electronic Controls**

A study of electric principles, semiconductor and integrated circuits, digital fundamentals, microcomputer systems, and electrical test equipment applied to automotive technology. May be taught manufacturer specific.

**AUMT 2215 Automotive Engine Performance Analysis**

Operation & diagnosis of basic engine dynamics including the study of the ignition system, fuel delivery systems, and the use of engine performance diagnostic equipment.

**AUMT 2317 Automotive Engine Performance Analysis I**

Theory, operation, diagnosis, and repair of basic engine dynamics, ignition systems, and fuel delivery systems. Use of basic engine performance diagnostic equipment. May be taught with manufacturer specific instructions.

**AUMT 2321 Automotive Electrical Lighting and Accessories**

Repair of automotive electrical subsystems, lighting, instrumentation, and accessories. Emphasis on accurate diagnosis and proper repair methods using various troubleshooting skills and techniques. May be taught manufacturer specific. Prerequisite: AUMT 1407

**AUMT 2323 Automotive Automatic Transmission and Transaxle Theory**

Theory of operation, hydraulic principles, and related circuits of modern automatic transmissions and related transaxles. Discussion of diagnosis and repair techniques.

**AUMT 2325 Automotive Automatic Transmission**

A study of the operation, hydraulic principles, and related circuits of modern automatic transmissions and automatic transaxles. Diagnosis, disassembly and assembly procedures with emphasis on the use of special tools and proper repair techniques. May be taught manufacturer specific. Prerequisite: AUMT 2323.

**AUMT 2328 Automotive Service**

Mastery of automotive vehicle service and component systems repair. Emphasis on mastering current automotive competencies covered in related courses. May be taught manufacturer specific.

**AUMT 2334 Automotive Engine Performance Analysis II**

A study of diagnosis and repair of emission systems, computerized engine performance systems, and advanced ignition and fuel systems; and proper use of advanced engine performance diagnostic equipment. May be taught manufacturer specific. Prerequisite: AUMT 2317

**AUMT 2388 Internship**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college or the employer.

**AUMT 2413 Automotive Drive Train and Axles**

A study of automotive clutches, clutch operation devices, manual transmissions/transaxles, and differentials with emphasis on the diagnosis and repair of transmissions/transaxles and drive lines. May be taught with manufacturer specific instructions.

**VHPA 1301 Auto Parts Nomenclature**

Overview of automotive parts, principles of operation, and location on the vehicle. Prerequisite: AUMT 1301

**VHPA 1441 Auto Parts Counter Sales**

Skill development in communication, sale and merchandising of auto parts to vehicle owners and repair technicians with an emphasis on customer relations, communication, sales, and merchandising skills. Prerequisite: AUMT 1405



### **VHPA 2331 Auto Parts Management**

A study in managing the inventory of a parts department using manual and computerized programs. Topics include store orders, inventory control practices, database management, and physical inventory. Prerequisite: VHPA 1301

### **VHPA 1391 Special Topics**

Topics address recently identified current events skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student.

## **Bachelor of Applied Technology [BAT] Courses (TECT)**

### **TECT 3301 Foundations of Technology Training**

Study of principles and methods of classroom and laboratory control, teaching and integrating career oriented into educational goals.

### **TECT 3302 Psychology of Technology Training**

The history and system of adolescent and adult psychology. Current research in learning and learner motivation, especially in relation to various aspects of educational processes in technological/industrial settings.

### **TECT 3303 Training Methods in Industry**

An organized course designed to provide instruction and guidance by trained resource persons in selected topics related to technology. The course may be repeated with different topics. Six hours may be applied to an undergraduate degree.

## **Biology (BIOL)**

### **BIOL 1106 General Biology Laboratory I**

Investigations related to BIOL 1306. First Semester of a laboratory required for science majors and minors; also available. Lab 3, Cr 1. Prerequisite: READ 0322, ENGL 0321, MATH 0421 or equivalent as determined by English, Math, and Reading assessment. Corequisite: BIOL 1306 or concurrently enrolled.

### **BIOL 1107 General Biology Laboratory II**

Investigation related to BIOL 1307. Second semester of a laboratory required for science majors and minors; also available to the general student. Lab 3, Cr 1. Prerequisite: READ 0322, ENGL 0321, MATH 0421 or equivalent as determined by English, Math, and Reading assessments. Corequisite: BIOL 1307 or concurrently enrolled.

### **BIOL 1306 General Biology I**

(Formerly BIOL 1406) An introduction to unifying biological principles with emphasis on fundamentals of molecular and cellular biology, genetics, and evolutionary theory. First semester of an integrated course for science majors and minors; also available to the general student. Lec 3, Cr 3. Prerequisite: READ 0322, ENGL 0321, MATH 0421 or equivalent as determined by English, Math, and Reading assessments. Corequisite: BIOL 1106 or concurrently enrolled.

### **BIOL 1307 General Biology II**

Formerly BIOL 1407. A continuation of Biological Principles I with Fundamentals of organism biology, ecology, and biodiversity. Second semester of an integrated course for science majors and minors; also available to the general student. Lec 3, Cr 3. Prerequisite: READ 0320, ENGL 0321, MATH 0421, or equivalent as determined by English, Math, and Reading assessments. Corequisite: BIOL 1107 or concurrently enrolled.

### **BIOL 1322 Human Nutrition**

A study of the basic principles of nutrition in health and disease. Stresses the modern concept of an adequate diet based on the nutritional needs of

the individual. Lec 3, Cr 3.

### **BIOL 2101 Human Anatomy and Physiology Laboratory I**

Cells, tissues, skeletal, muscle, and nervous systems. Includes dissections and instrumentation related to basic hands-on understanding of human anatomy and physiology. Lab 3, Cr 1. Prerequisite: READ 0322, ENGL 0321, MATH 0421 or equivalent as determined by English, Math, and Reading assessment. Corequisite: BIOL 1306 or concurrently enrolled.

### **BIOL 2102 Human Anatomy and Physiology Lab II**

Emphasis on endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems. Includes related dissections and instrumentation design to facilitate basic hands-on understanding of human anatomy and physiology. Lab 3, Cr 1. Prerequisite: BIOL 2301, BIOL 2101, and BIOL 2302 or concurrent enrollment.

### **BIOL 2121 Microbiology Laboratory**

Laboratory application of microbial techniques including staining, microscopy, cultivation of microbes, and handling of aseptic cultures and materials in the laboratory; biochemical aspects of microbes; chemical, physical, and chemotherapeutic control of microbial growth; sanitary analysis of municipal water systems; determination of a bacterial unknown. Lab 4, Cr 1. Prerequisite: BIOL 2321 or concurrent enrollment.

### **BIOL 2301 Human Anatomy and Physiology I**

Formerly BIOL 2401. General biological principles; cellular biology; emphasis on human integumentary, skeletal, muscular, and nervous systems and related topics. Lec 3, Cr 3. Prerequisite: READ 0322, ENGL 0321, MATH 0421 or equivalent as determined by English, Math, and Reading assessment. Corequisite: BIOL 2101 or concurrently enrolled.

### **BIOL 2302 Human Anatomy and Physiology II**

Formerly BIOL 2402. Continuation of Boil 2301; Includes human urogenital, circulatory, respiratory, digestive and endocrine systems; human development; emphasis on nutrition, metabolism, electrolytic and fluid balance. Lec 3, Cr 3. Prerequisite: BIOL 2301, BIOL 2101, and BIOL 2102 or concurrent enrollment.

### **BIOL 2321 Microbiology**

Formerly BIOL 2420. An introduction to the field of microbiology, microbial morphology, cell fine structure, factors controlling growth and reproduction, microbial survey plus viruses; metabolism; microbial genetics, biotechnology, genetic control of microbes; resistance to infection, immunology; transmission of diseases; environmental and applied microbiology. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107, BIOL 1307 or BIOL 2301, BIOL 2302, BIOL 2101, BIOL 2102. Corequisite: BIOL 2121 or concurrent enrollment.

### **BIOL 2428 Comparative Vertebrate Anatomy**

Brief survey of chordates, summary of vertebrate history and development, the development and morphology of vertebrate organ systems; dissection of representative vertebrates. (Primarily for biology major and minors.) Prerequisite: 6 hours of general biology or general zoology.

### **BIOL 3101 Advanced Physiology Laboratory**

Laboratory practice in mammalian physiology, primarily man, which include nervous, muscular, cardiovascular, endocrine, immunity, respiratory, digestive, metabolic, urinary, acid-base balance, and reproductive systems. Prerequisite: BIOL 1306, BIOL 1106, BIOL 1307 and BIOL 1107. Corequisite: BIOL 3301 or concurrently enrolled.

### **BIOL 3102 Comparative Animal Physiology Laboratory**

Laboratory investigations of the diversity of physiological processes employed by a wide variety of animal groups. Prerequisite: BIOL 1306, BIOL 1307, and concurrently enroll with BIOL 3302.

**BIOL 3103 Genetics Laboratory**

This is the genetics laboratory that emphasizes the concepts of modern molecular genetics.

Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3303.

**BIOL 3108 Plant Morphology Laboratory**

This is a laboratory emphasizing the study of the morphology development and relationships of fungi, algae, liverworts, mosses, ferns, gymnosperms and angiosperms. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3308.

**BIOL 3109 Ecology Laboratory**

This is a laboratory for ecology which covers the study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3309.

**BIOL 3112 Cell and Molecular Biology Laboratory**

This is a laboratory study of cell and molecular structure and function with emphasis on bioenergetics, membranes, genes, and genetic control, cell division and its regulation, cellular differentiation. Biochemistry I is highly recommended before taking this course. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3312.

**BIOL 3114 Invertebrate Zoology Laboratory**

This is a laboratory study of the comparative morphology, evolution, systematic, and natural history of the invertebrates. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3314.

**BIOL 3301 Advanced Physiology**

Selective topics of mammalian physiology, primarily man, which include nervous, muscular, cardiovascular, endocrine, immunity, respiratory, digestive, metabolic, urinary, acid-base balance, and reproductive. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307. Corequisite: BIOL 3101 or concurrently enrolled.

**BIOL 3302 Comparative Animal Physiology**

A study of the diversity of physiological processes employed by different animal groups at various level of biological organization from cellular processes to integrated individuals. Prerequisite: BIOL 1306, BIOL 1307, and concurrently enroll with BIOL 3102.

**BIOL 3303 Genetics**

This course is an introduction to genetics with consideration of its application in plant and animal biology and human welfare. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107, and BIOL 1307. Concurrently enroll in or credit for BIOL 3103.

**BIOL 3308 Plant Morphology**

This course is a study of the morphology, development and relationships, of fungi, algae, liverworts, mosses, ferns, gymnosperms and angiosperms. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3108.

**BIOL 3309 Ecology**

This course is a study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3109.

**BIOL 3312 Cell and Molecular Biology**

This course is a study of cell and molecular structure and functions with

emphasis on bioenergetics, membranes, genes, and genetic control, cell division and its regulation, cellular differentiation. Biochemistry I is highly recommended for this course. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3112.

**BIOL 3314 Invertebrate Zoology**

This is a course that covers the comparative morphology, evolution, systematic, and natural history of the invertebrates. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 3114.

**BIOL 4100 Biology Seminar**

The student completes an independent scholarly review of a research topic, makes an oral report on the topic, and discusses current research with faculty and students. Lec 1, Cr 1. Prerequisite: Senior standing and 24 hours of Biology.

**BIOL 4109 Herpetology Laboratory**

The lab and fieldwork will familiarize students with herpetofauna of the lower Rio Grande Valley and with plant and animal associations in a variety of habitats. Students will be required to keep a journal of field observations and a catalog of specimens observed. The instructor will provide keys and relevant scientific journal articles. Lab 3, Cr 1. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307. Corequisite: BIOL 4309 or concurrently enrolled.

**BIOL 4114 Plant Taxonomy Laboratory**

This course covers the laboratory identification of vascular plants with emphasis on native flowering plants is the primary focus of this course. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4314.

**BIOL 4127 Texas Coastal Ecology Laboratory**

This course is a series of laboratory and field investigations emphasizing identification, biology and ecology of local marine organisms. Prerequisite: BIOL 1306, BIOL 1307 and concurrent enrollment in BIOL 4327.

**BIOL 4140 Immunology Laboratory**

(Formerly BIOL 1406) An introduction to unifying biological principles with emphasis on fundamentals of molecular and cellular biology, genetics, and evolutionary theory. First semester of an integrated course for science majors and minors; also available to the general student. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 BIOL 1307 and CHEM 2323 AND CHEM 2325. Corequisite: Enrollment in or credit for BIOL 4340.

**BIOL 4170 Laboratory Topics in Biology**

This course is a series of lab/field investigations in areas not available in other courses. May be repeated for credit when content changes. Lab 3, Cr 1. Prerequisite: BIOL 1306, BIOL 1106, BIOL 1307, BIOL 1107.

**BIOL 4199 Research Problems in Biology**

Research under the supervision of a Biology faculty member. May be repeated for credit but no more than three semester credit hours (\*) may apply toward the Biology major. (\* combinations of 4199, 4299) Lec 1, Cr 1. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, BIOL 1307 and approval of instructor.

**BIOL 4299 Research Problems in Biology**

Research under the supervision of a Biology faculty member. May be repeated for credit but no more than three semester credit hours (\*) may apply toward the Biology major. (\*combinations of 4199, 4299) Lec 2, Cr 2. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, BIOL 1307 and approval of instructor.

**BIOL 4309 Herpetology**

An in-depth study of amphibians and reptiles. Classification according to their types and characteristics as well as collection and field trip techniques for acquiring and preparing museum specimens and their preparation for proper storage and cataloging. A good knowledge of South Texas herpetofauna will be emphasized. Special in-depth study of venomous snakes and current snakebite treatment measures will be surveyed. Lec 3, Cr. 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307. Corequisite: BIOL 4109 or concurrently enrolled.

**BIOL 4314 Plant Taxonomy**

This course deals with the identification of vascular plants with emphasis on native flowering plants. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4114.

**BIOL 4327 Texas Coastal Ecology**

This course examines the major near shore 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, group and/or individual research projects. Prerequisite: BIOL 1306, BIOL 1307, and one course in general Ecology (BIOL 3309) or Zoology (BIOL 3314 or BIOL 4302)

**BIOL 4330 Integrative Biology for Middle School Science Teachers**

This course designed for middle school science teachers is the coordinated thematic integration of biology with physics, chemistry, and earth/space science through a series of lectures, panels, demonstrations, and applied activities. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307.

**BIOL 4331 Integrative Biology for High School Science Teachers**

This course designed for high school science teachers is the coordinated thematic integration of biology with physics, chemistry, and earth/space science through a series of lectures, panels, demonstrations, and applied activities. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307.

**BIOL 4340 Immunology**

(Formerly BIOL 1406) An introduction to unifying biological principles with emphasis on fundamentals of molecular and cellular biology, genetics, and evolutionary theory. First semester of an integrated course for science majors and minors; also available to the general student. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 BIOL 1307 and CHEM 2323 AND CHEM 2325. Corequisite: Enrollment in or credit for BIOL 4140.

**BIOL 4370 Topics in Biology**

Specialized lecture content not available in other courses. May be repeated for credit as topics change but no more than three credit hours may apply toward the Biology major. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307.

**BIOL 4390 Biology 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. Lab 6-8, Cr 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, and BIOL 1307.

**BIOL 4399 Research Problems in Biology**

Research under the supervision of a Biology faculty member. May be repeated for credit but no more than three semester credit hours may apply toward the Biology major. Students enrolling for BIOL 4399 will present

research results in a Department seminar. Lec 3, Cr 3. Prerequisite: BIOL 1106, BIOL 1107, BIOL 1306, BIOL 1307 and approval of instructor.

**BIOL 4440 Immunology**

This course covers the Immune System, cells and organs of the immune system, antigens and antibodies, Immunoglobulin Genes, Major Histocompatibility Complex proteins, cytokines, vaccines, and infectious diseases. Lec 3, Lab 3, Cr 4.

**BIOL 4310 Marine Botany**

This course is a study of local marine flora with emphasis on the microscopic algae forms. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4110.

**BIOL 4320 Plant Anatomy**

This course covers a study of the anatomy of seed plants. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4120.

**BIOL 4325 Plant Physiology**

Plants physiology is an analysis of cell biology, biochemistry, metabolism, ecophysiology, and development of plants. Topics included are water relations, respiration, photosynthesis, nitrogen fixation, mineral nutrition, plant molecular biology, genetic engineering, and the role of environmental signal to plant development. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 BIOL 1307 and CHEM 2323 AND CHEM 2325. Corequisite: Enrollment in or credit for BIOL 4125.

**BIOL 4102 Marine Zoology Laboratory**

This is a laboratory study of the common marine animals, especially invertebrates in local coastal waters, particular attention given to structural and physiological relationships. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4302.

**BIOL 4104 Ichthyology Laboratory**

This lab emphasizes field surveys, taxonomy, and the identification of local marines and freshwater fishes. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4304.

**BIOL 4110 Marine Botany Laboratory**

This course is a laboratory practice emphasizing the collection, preservation and identification of common local marine flora with emphasis on the macroscopic algae forms. Field trips to local marine environments is required. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4310.

**BIOL 4120 Plant Anatomy Laboratory**

This is a laboratory study of the anatomy of seed plants. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4320.

**BIOL 4125 Plant Physiology Laboratory**

This is a laboratory analysis of cell biology, biochemistry, metabolism, ecophysiology, and the development of plants. Topics included are water relations, respiration, photosynthesis, nitrogen fixation, mineral nutrition, plant molecular biology, genetic engineering, and the role of environmental signals to plant development. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 BIOL 1307 and CHEM 2323 AND CHEM 2325. Corequisite: Enrollment in or credit for BIOL 4125.

**BIOL 4150 Ornithology Laboratory**

This course is a laboratory practice concerning the field identification, classification, morphology, ecology, distribution, migration patterns, and behavior of local birds. Field trips are required. Prerequisite: BIOL 1106,

BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4350.

#### **BIOL 4302 Marine Zoology**

This course is a study of the common marine animals, especially invertebrates in coastal waters, particular attention is to be given to structural and physiological relationships. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4102.

#### **BIOL 4304 Ichthyology**

This course covers the classification, evolution, ecology, and biology of fishes. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4104.

#### **BIOL 4350 Ornithology**

This course is a study of the classification, morphology, ecology, distribution, migration patterns, and behavior of birds. Emphasis will be mainly on local species. Field trips are required. Prerequisite: BIOL 1106, BIOL 1306, BIOL 1107 and BIOL 1307. Corequisite: Enrollment in or credit for BIOL 4150.

### **Building Trades (CNBT, CRPT, ELPT, ELTN, PFPB, WDWK)**

#### **CNBT 1301 Introduction to Construction Industry**

This course provides an overview of the construction industry, including: organizational structures and systems, safety regulation and agencies; construction documents; office and field organizations, and the various construction crafts and trades, with special emphasis on 3 areas of specialization: carpenter, electrician, and plumber. The course will also introduce students to skills in communication, employability, workplace literacy and ethics. Field trips will be utilized to reinforce classroom and laboratory instruction.

#### **CNBT 1302 Mechanic, Plumbing, and Electrical Systems in Construction**

The course presents the basic mechanical, plumbing and electrical components in construction from a systems approach and their relationship to the overall construction of a building. The craft of carpentry will also be covered as an integral part of the construction process from the initial installation of forms to the detail finish of a construction project.

#### **CNBT 1305 Residential and Light Commercial Blueprint Reading**

This blueprint reading course covers the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on residential and light commercial construction. A general approach to the mathematical calculations associated with the processes of layout, estimating, and materials take-off will also be covered.

#### **CNBT 1311 Construction Methods and Materials**

This course provides an introduction to construction materials and methods and their applications. Students will identify construction materials and list their applications to various construction methods in the carpentry, electrical, and plumbing trades.

#### **CNBT 1342 Building Codes and Inspections**

This course is an examination of the building codes and standards applicable to building construction and inspection processes will be covered in this course. The course will also deal with the effects of OSHA regulations relative to the construction site. Students will analyze prints and perform facilities inspections for the purpose of applying code and OSHA regulations knowledge.

#### **CNBT 1346 Construction Estimating**

Fundamentals of estimating materials and labor costs in construction.

#### **CNBT 1366 Practicum**

This course provides for general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid.

#### **CRPT 1311 Conventional Roof Systems**

This course is a study of the principles and development of the skills relative to the design and construction of a conventional roof system incorporating gable, hip, and intersections. Emphasis will be placed upon safe work practices and the selection, use, and maintenance of tools, equipment, and materials common to roof construction.

#### **CRPT 1315 Conventional Wall Systems**

This course provides instruction and skill development in the construction of conventional wall systems with emphasis on both wood and metal frame. Topics include identification of components, construction of wood and metal frame wall systems, safe work practices, and the selection, use and maintenance of tools, equipment, and materials typical to wall construction.

#### **CRPT 1323 Floor Systems**

This course is an introduction to common floor systems. Topics include component identification, floor construction, safe work practices, and the selection, use, and maintenance of tools, equipment, and materials used in floor construction.

#### **CRPT 1325 Forms and Foundations I**

This course provides instruction in the construction of basic form and foundation systems typical to residential and light commercial construction. Emphasis will be placed upon safety, building layout, and the selection of tools, equipment, and materials typical to constructing forms and foundations.

#### **CRPT 1341 Conventional Exterior Finish Systems**

This course provides skill development in the installation of exterior finish systems and components including the placement and installation of cornice, windows, doors, siding, and flashing. Emphasis will be placed on safety, maintenance, and the proper selection and use of tools, equipment, and materials.

#### **CRPT 1345 Conventional Interior Finish**

This course provides instruction and skill development in the installation of interior finish systems and components including the placement and installation of doors, trim, floor, wall, and ceiling finishes. Emphasis will be placed upon safe work practices and proper maintenance in addition to the proper selection and use of materials, tools, and equipment typical to interior finish.

#### **ELPT 1311 Basic Electrical Theory**

Basic theory and practice of electrical circuits. Includes calculations as applied to alternating and direct current.

#### **ELPT 1315 Electrical Calculations I**

Introduction to mathematical applications utilized to solve problems in the electrical field. Topics include fractions, decimals, percentages, simple equations, ratio and proportion, and applied geometry.

#### **ELPT 1325 National Electrical Code I**

Electrical Code (NEC) for those employed in fields requiring knowledge of the Code. Emphasis will be on wiring design, protection, methods, materials, equipment, and basic calculations.

**ELPT 1329 Residential Wiring**

This course provides instruction and practice in wiring methods used in the construction of single family, two family and multiple-family dwellings. Students will compute in the circuit sizes needed for the installation of branch circuits, feeders, and service entrance conductors, demonstrate the proper installation of wiring devices, grounding systems, and other residential wiring systems, verifying that all work is performed in accordance to electrical codes.

**ELPT 1345 Commercial Wiring**

This course provides instruction and practice in commercial wiring methods. Students will interpret prints/drawings, computer the circuit sizes and over-current protection for branch circuits, feeders, and service entrance conductors, explain the proper installation of wiring devices according to electrical codes, demonstrate grounding methods, and identify commercial wiring methods including conduit bending.

**ELPT 1349 Electrical Blueprint Reading**

This course is an overview of electrical blueprint reading. Topics include symbols, specifications, panel and lighting schedules, and riser diagrams. Students will identify the common symbols used on blueprints, interpret panel and light schedules, interpret electrical drawings including site plans, floor plans, and details in addition to using architectural and engineering scales.

**ELPT 1364 Practicum**

This course provides for practical general training and experiences in the workplace. The college with the employer develops and documents and individualized plan for the student. The plan relates the workplace training and experiences to students' general and technical course of study. The guided external experiences may be for pay or no pay.

**ELPT 2323 Transformers**

Transformer types, construction, connections, protection, grounding, and associated safety procedures.

**ELTN 1342 Electrical Troubleshooting**

This course provides instruction and practice in the maintenance, theory of operation, troubleshooting, and repair of circuits of various residential, commercial and industrial electrical systems. Students will use multi-meters to perform proper testing on electrical equipment, identify short, open and closed circuits, and troubleshoots various conditions typical to electrical installations and equipment.

**ELTN 1343 Electrical Troubleshooting**

Maintenance, operation, troubleshooting, and repair of circuits of various residential, commercial, and industrial electrical systems.

**PFPB 1345 Common Constructure and Fixture Setting**

This course instructs students in the use of practices and procedures employed by a plumber in the common construction of a commercial building including multi-level drain waste vent systems, water systems, and fixture installation. The student will install the drain water vent, potable water and gas systems common to multi-floor buildings and set and install various types of typical plumbing fixtures.

**PFPB 1421 Plumbing Maintenance and Repair**

This course provides instruction in the practices and procedures employed by a plumber in service work in the field of residential plumbing repairs and includes practice in the area of customer/public relations. The student will identify and repair various types of faucets, leaks in drain and potable water lines, and various plumbing fixtures in addition to practicing general principles of sound customer relations.

**PFPB 2301 Piping Fabrication and Installation I**

This course will provide skill development opportunities in residential and commercial pipe fabrication and pipe support systems. Lec 11, Lab 6, Cr 3.

**PFPB 2408 Piping Standards and Materials**

This course is a study of piping standards and specifications, a survey of the plumbing code, the identification and use of various materials and the application of material take-offs. The student will define and identify metallic non metallic pipe and tubing, interpret pipe specifications, describe and identify various types of valves and fitting, explain valve applications, relate the plumbing code to a variety of plumbing applications, and perform mathematical calculation typical to the material take-off process.

**PFPB 2409 Residential Const Plumbing I**

Skill development in the procedures and techniques employed by a plumber in the rough-in service and top-out stages of a new home or the remodeling of an older home. The student will rough-in drain water and vent pipes, pull copper lines, install gas lines, and set water valves.

**PFPB 2437 Blueprint Reading for Plumbers**

An advanced course in blueprint and sketching for plumbers which includes layout and design of drain waste vent, water pressure, and gas systems for residential and light commercial plumbing. The student will design drawings and material take-off sheets for residential and light commercial drain waste vent, water pressure, and gas systems and perform the mathematical computations typical to those industry processes.

**WDWK 1313 Cabinet Making**

This course covers basic design, construction, and installation of base and wall cabinets for residential kitchens and bathrooms. Emphasis will be placed on safety in the use of hand and power tools (portable and stationary) typical to cabinet construction and installation. The course will provide for proper finish-work skill development in sanding, sealing, staining, and other techniques.

**Business (BUSI)****BUSI 1301 Introduction to Business**

A survey of the various fields of business and their interrelationships, production and distribution systems, finance, accounting, statistics, capital, labor, marketing, taxes, governmental regulations, and other aspects of business necessary for understanding modern business enterprises and organization. Lec 3, Cr 3. BBA degrees require that this course be passed with a C or better.

**BUSI 3117 Bilitery in Business**

This is a two-hour lab course of business readings in Spanish. Readings will be current and derived from professional literature, business periodicals and newspapers. Selections will be provided so that students can match readings with business courses they are enrolled in each semester. Other activities of the lab include lectures, paired study, small group discussions, written reports, formal presentations and experiential interfaces. A sole authored paper written in Spanish is required each time the course is attempted. Lab 2, Cr 1. Prerequisite: Admission to Upper Division. Taught in Spanish.

**BUSI 3335 Organizational Communications**

A systems approach to information processing, the practical and psychological aspects of formal and informal communication in organizations. Stresses inter- and intra-personal communication related to various corporate cultures. Intercultural differences in various communication scenarios are also studied. Lec 3, Cr 3. Prerequisite: ENGL 1301 and ENGL 1302 (with minimum grade of C).

**BUSI 3343 Decision Analysis**

A study of regression, forecasting, and other analytical methods. The format of the course will be lectures and case studies. Students will address problems in context, determine the proper techniques, collect the information, and then solve the problem. Prerequisite: BUSIU 2441 or BUSIU 2341 (with minimum grade of C)

**BUSI 4369 Business Policy**

A broad course in business management designed to integrate earlier studies in business. Comprehensive case problems are studied with student participation in decision making related to business operations under conditions of uncertainty. Lec 3, Cr 3. Prerequisite: ACCT 2401, ACCT 2402, ECON 2301, ECON 2302, FINA 3380, MANA 3361, and MARK 3371. Admission to Upper Division. This course should be taken on the last semester prior to graduation.

**BUSIU 2341 Statistics**

An analysis of descriptive statistics and inference methods with emphasis on business applications. Topics include measures of central tendency and variation, probability distributions, sampling distributions, hypothesis testing, correlation, linear regression, index numbers, nonparametric statistics and other decision making tools. Prerequisite: MATH 1314 (with minimum grade of C). BBA degrees require that this course be passed with a C or better.

**Business Law (BLAW)****BLAW 3337 Business Law I**

The study of the development and functioning of our legal environment. The development of case law and precedents, the application of procedural and substantive law pertaining to civil and penal matters, study and analysis of cases and rules of law relating to basic business practices, governmental regulations of business, property rights, and business ethics. Course also includes torts, contracts, commercial transactions, and agency. Lec 3, Cr 3. Prerequisite: Junior standing

**BLAW 3338 Business Law II**

A continuation and expansion of the study of rules of law, including sales, commercial paper and credit transactions with emphasis on the Uniform Commercial Code; business organization; government regulations; property, wills and trusts; consumer protection; bankruptcy. Lec 3, Cr 3. Prerequisite: BLAW 3337 with minimum grade of C.

**Business Management Information Systems (BMIS, BMISU)****BMISU 1125 Fundamentals of Spreadsheets**

An introductory course designed to familiarize students on how to create, edit, store, and print spreadsheets, databases, and graphics using the Lotus 1-2-3 software program. Introduces the basics of a menu bar, creation of formulas, functions, graphic presentation, and general ease of presenting numeric materials. Lec 1, Cr 1. BBA degrees require that this course be passed with a C or better.

**BMISU 1135 Fundamentals of Access for Windows Software**

This course is designed as an introduction to the fundamentals of creating and using a database. Applications will include entering and editing data, finding and sorting records, working with tables, forms, reports, queries, and working with images and other objects. Lec 1, Cr 1. BBA degrees require that this course be passed with a C or better.

**BMISU 1155 Fundamentals of Powerpoint Presentation Software**

A hands-on introductory course designed to teach students how to create presentations using technology for enhancing material. Introduces design

and color basics, the use of templates, clip art, charting, graphics, the transporting of files, and customizing of presentations. Lec 1, Cr 1. BBA degrees require that this course be passed with a C or better.

**BMISU 1180 Introduction to Income Tax Preparation**

This course will introduce students to automated income tax preparation using Turbo Tax. Lec 1, Cr 1.

**BMISU 1185 Fundamentals of Project Management**

This hands-on introductory course is designed to teach students various project management techniques including: scheduling, budgeting staffing, evaluating, prioritizing, Program Evaluation Review Technique (PERT) and GANTT Charts. The software used in this course is Microsoft Project Management. Lec 1, Cr 1. BBA degrees require that this course be passed with a C or better.

**BMIS 3301 Web Programming with Java**

Introductory level exposure to computer programming concepts and an overview of the uses and application of programming languages used on the Web. Students will be exposed to the nature and organization of the Internet, including the underlying infrastructure of the Web, and distributed and multi-tiered applications. Students will be able to understand the core concepts of computer programming and write stand-alone programs and applets using the Java language. Lec 3, Cr 3.

**BMIS 3302 Database Information Systems**

Students will learn the basis of constructing, managing, and deploying relational databases solution in support of electronic based commerce activities. On completion of this course, participants will understand the requirements of defining and using data in relational databases, and incorporating the collection, management, and use of data as an integral part of successful e-Business endeavors. Lec 3, Cr 3.

**BMIS 3303 E-Commerce Strategies**

This introductory course provides a general view of the elements most important for effective commerce opportunity through the Internet. Topics include strategies and tool within E-Commerce categories, which include Business-to-Consumer, Business-to-Business, Consumer-to-Consumer, technological infrastructure, electronic security, electronic payment mechanisms and virtual communities. Lec 3, Cr 3.

**BMIS 3351 Information Systems in Organizations**

This course addresses issues associated with the expanding role of information systems and accounting information systems in organizations, including their development and use, strategic impact, and international implications. May be counted as either ACCT 3351 or BMIS 3351. Lec 3, Cr 3.

**BMIS 4303 Web Systems Development**

This course surveys the essential elements of World Wide Web systems development as an approach. Focus is on creating professional-quality XHTML, XML, CSS, JavaScript, and server-side Web pages that can take in process, return information. Covers design features and architecture as critical components that contribute to Web site success. Students will be able to design and develop their own interactive sites for the Web.

**BMIS 4304 Systems Analysis E-Business**

Designed for students to learn the fundamentals of e-Business (infrastructure, tools, and applications; to learn Rapid Application Development (RAD) system application life cycles and be able to select an appropriate model; and to demonstrate their learning by building an e-Business site as a team. Prerequisite: BMIS 3301 and BMIS 3302. Lec 3, Cr 3.

**BMIS 4367 Topics in E-Commerce**

The study of significant topics related to Management. Course may be

repeated for credit when topic varies. Prerequisite: Admission to upper division and will vary depending on specific topics and BMIS 3303. Prerequisite: Admission to Upper Division and will vary depending on specific topics and BMIS 3303. Lec 3, Cr 3.

## **Business Technology Courses**

### **ACNT 1329 Payroll and Business Tax Accounting**

This course will cover a study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. Lec 3, Cr 3.

### **ACNT 1331 Federal Income Tax: Individual**

A study of the laws currently implemented by the IRS, providing a working knowledge of preparing taxes for the individual. Lec 3, Cr 3.

### **ACNT 1391 Special Topic: Accounting for Office Professionals**

This course is designed to identify current events, skills, knowledge, and/or attitudes and behaviors; pertinent to the technology or occupation and relevant to the professional development of the student. Lec 3, Cr 3.

### **ACNT 1403 Introduction to Accounting I**

A study of analyzing, classifying, and recording business transactions in a manual and computerized; environment. Emphasis on understanding the complete accounting cycle and preparing financial statements, bank reconciliations and payroll. As an integral part of the course, students will be required to complete a comprehensive accounting practice set designed for both a manual and computerized; accounting system. Lec 4, Cr 4.

### **ACNT 1404 Introduction to Accounting II**

A study of accounting for merchandising, notes payable, notes receivable, valuation of receivables and equipment, valuation of inventories and an introduction to methods of computing depreciation in a; manual or computerized accounting environment. Students are required to complete a comprehensive accounting practice set designed for both a manual and computerized accounting system. Lec 4, Cr 4. Prerequisite: ACNT 1403 with minimum grade of C.

### **ACNT 1411 Introduction to Computerized Accounting**

Introduction to utilizing the computer in maintaining accounting records, making management decisions; and processing common business applications with primarily emphasis on a general ledger package. Students are required to complete a comprehensive practice set designed for a computerized accounting system. Prerequisite: ACCT 2401 or ACNT 1404 with minimum grade of C. Lec 3, Cr 3.

### **ACNT 1413 Computerized Accounting Applications**

A study of utilizing the computer to develop and maintain accounting record keeping systems, make management decisions, and process common business applications with emphasis on utilizing a spreadsheet and/or data base package/program. Lec 4, Cr 4. Prerequisite: ACNT 1403 with minimum grade of C.

### **ACNT 2380 Coop Education- Accounting**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Prerequisite: Approval of Co-op Coordinator or Department Chair. Lec 1, Lab 20, Cr 3.

### **BMGT 1301 Supervision**

A study of the role of the supervisor. Managerial; functions as applied to leadership, counseling, motivation, and human skills are examined. Lec 3, Cr 3.

### **BUSG 2317 Business Law/Commercial**

The relationships of law and business as they relate to commercial transac-

tions. Lec 3, Cr 3.

### **IBUS 1301 Principles of Exports**

Export management processes and procedures. Includes governmental controls and compliance, licensing of products, documentation, commercial invoices, and traffic procedures. Emphasizes human and public relations, management of personnel, finance, and accounting procedures. Lec 3, Cr 3.

### **IBUS 1302 Principles of Imports**

Practices and processes of import management operations. Includes government controls and compliance. Emphasizes the preparation and understanding of import documents such as customs invoices, packing lists, and commercial invoices. Lec 3, Cr 3.

### **IBUS 1305 Introduction to International Business and Trade**

This course will cover the techniques of entering the international marketplace. Emphasis on the impact and dynamics of sociocultural, demographic, economic, technological, and political-legal factors in the foreign trade environment. Topics include patterns of world trade, internationalization of the firm, and operating procedures of the multinational enterprise. Lec 3, Cr 3.

### **IBUS 2339 International Banking and Finance**

This course introduces international monetary systems, financial markets, flow of capital, foreign exchange and financial institutions. Topics include risk analysis, export-import payments and financing, the preparation of letters of credit, related shipping documentation, electronic fund remittance, and foreign investment financing. Lec 3, Cr 3.

### **IBUS 2345 Import Customs Regulations**

A study of the duties and responsibilities of the licensed custom broker. Topics include processes; for customs clearance including appraisalment, bonded warehouse entry, examination of goods, harmonized tariffs, fees, bonding, penalties, quotas, immediate delivery, consumption, computerized system, laws and regulations. Lec 3, Cr 3.

### **IBUS 2380 Co-op Education – International Business/Trade/Commerce**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Prerequisite: Approval of Co-op Coordinator or Department Chair. Lec 1, Lab 20, Cr 3.

### **ITNW 1337 Introduction to the Internet**

Emphasis on using the World Wide Web to locate, transfer, and publish information. Survey of emerging technologies on the Internet. Lec 3, Cr 3.

### **ITSW 1301 Introduction to Word Processing**

An overview of the production of documents, tables, and graphics. The student will identify word processing terminology and concepts; create technical; documents; format and edit documents; use simple tools and utilities; and print documents. Lec 3, Cr 3.

### **ITSW 1304 Introduction to Spreadsheets**

This course offers instruction in the concepts, procedures, and importance of electronic spreadsheets. The student will learn to identify spreadsheets terminology and concepts; create formulas and functions; use formatting features; and generate charts, graphs, and reports. Lec 3, Cr 3.

### **ITSW 1307 Introduction to Database (Microsoft Access)**

This course is an introduction to database theory; and the practical applications of a database. The student will identify database terminology and concepts; plan, define, and design database; design and generate tables, forms, and reports; and devise and process queries. Lec 3, Cr 3.

**ITSW 1310 Introduction to Presentation Graphic Software**

Instruction in the utilization of presentation development. The student will identify presentation; media terminology and concepts; create presentations using text, visual and/or sound elements; use effective compositions and style; prepare presentations for distribution on computers or their media; and modify sequence and slide master. Lec 3, Cr 3.

**ITSW 2331 Advanced Word Processing**

Continuation of the study of word processing including advanced applications in merging, macros, graphics, desktop publishing, and extensive formatting; for technical documents. The student will design and create macros; use advanced formatting features; import data; and use graphic and special functions to enhance documents. Lec 3, Cr 3.

**ITSW 2334 Advanced Spreadsheets**

Design to provide an understanding of advanced functionality of electronic spreadsheets. Prerequisite: ITSW 1304. Lec 3, Cr 3.

**LGLA 1303 Legal Research**

This course provides a working knowledge of the fundamentals of effective legal research. Topics include law library techniques and computer assisted legal research. Prerequisite: LGLA 1307, and POFL 1305. Lec 3, Cr 3.

**LGLA 1305 Legal Writing**

This course provides a working knowledge of the fundamentals of effective legal writing. Topics include briefs, legal memoranda, case and fact analysis, citation forms, and legal writing styles. The student will write clear, concise memoranda and briefs based on legal analysis. Prerequisite: LGLA 1303, LGLA 1307, and POFL 1305. Lec 3, Cr 3.

**LGLA 1307 Introduction to Law and Legal Profession**

This course provides an overview of the law and the legal concepts, systems, and terminology; ethical obligations and regulations; professional trends; and issues with particular emphasis on the paralegal. Lec 3, Cr 3.

**LGLA 1317 Law Office Technology**

Computer technology and software applications within the law office. Lec 3, Cr 3.

**LGLA 1343 Bankruptcy**

This course will introduce fundamental concepts of; bankruptcy law and procedure with emphasis on the paralegal's role. Topics include individual and business liquidation and reorganization. Lec 3, Cr 3.

**LGLA 1344 Texas Civil Litigation**

Fundamental concepts and procedures of Texas civil litigation with emphasis on the paralegal's role. Lec 3, Cr 3.

**LGLA 1349 Constitutional Law**

This course provides an overview of the United States Constitution and its articles, amendments, and judicial interpretations. Topics include separation of powers, checks and balances, governmental structures and process, and individual rights in relation to government. Lec 3, Cr 3.

**LGLA 1353 Wills Trusts and Probate Administration**

This course presents fundamental concepts of the law of wills, trusts, and probate administration with emphasis on the paralegal's role. The student will define and properly use terminology relating to wills, trusts, probate administration; locate, describe, and analyze sources of law relating to wills, trusts, and probate administration; describe; the role and ethical obligations of the paralegal; in wills, trusts, and probate administration. Prerequisite: POFL 1305. Lec 3, Cr 3.

**LGLA 1355 Family Law**

This course presents fundamental concepts of family law with emphasis on the paralegal's role. Topics include formal and informal marriages, divorce, annulment, marital property, and the parent-child; relationship.

The student will define and properly use terminology relating to family law; locate, describe, and analyze sources of law relating to family law; describe the role and ethical obligations of the paralegal in family law; and draft documents commonly used in family law. Lec 3, Cr 3.

**LGLA 1359 Immigration Law**

This course will introduce fundamental concepts of; immigration law with emphasis on the paralegal's role. Topics include substantive and procedural law related to visa applications, deportation, naturalization, and citizenship. Lec 3, Cr 3.

**LGLA 2303 Torts and Personal Injury Law**

This course presents fundamental concepts of tort; law with emphasis on the paralegal's role. Topics include intentional torts, negligence, and strict liability. The student will define and properly; use terminology relating to tort law; locate, describe, and analyze sources of law relating to tort; law describe the role and ethical obligations of; the paralegal in tort law; and draft documents commonly used in tort law. Prerequisite: POFL 1305, LGLA 1307 and word processing skills. Lec 3, Cr 3.

**LGLA 2307 Law Office Management**

This course presents the basic principles and structure of management, administration, and substantive systems in the law office. Topics includes law practice technology as applied to paralegals. Prerequisite: POFL 1305 and word processing skills. Lec 3, Cr 3.

**LGLA 2309 Real Property**

This course presents fundamental concepts of real property law with emphasis on the paralegal's role. Topics include the nature of real property, rights and duties of ownership, land use, voluntary and involuntary conveyances, and the recording of and searching for real estate documents. Prerequisite: POFL 1305, LGLA 1307 and word processing skills. Lec 3, Cr 3.

**LGLA 2313 Criminal Law and Procedure**

Procedures from arrest to final disposition, principles of federal and state law, and the preparation of pleadings and motions as applied to paralegals. Lec 3, Cr 3.

**LGLA 2333 Advanced Legal Document Preparation**

This course offers instruction in the preparation of legal documents by paralegals based on hypothetical situations drawn from various areas including real estate, family law, contracts, litigation, and business organizations. Lec 3, Cr 3.

**LGLA 2337 Mediation**

This course will provide an introduction to alternative dispute resolution with emphasis on mediation. Topics include difference between mediation; and arbitration, the process of mediation, and dispute resolution techniques. Prerequisite: LGLA 1345 and LGLA 1355. Lec 3, Cr 3.

**LGLA 2380 Cooperative Education-Paralegal/Legal Assistant**

Career related activities encountered in the student's area of specialization is offered through a cooperative agreement between the college, employer; and student. Under supervision of the college and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Lec 1, Lab 20, Cr 3. Prerequisite: Approval of Department Chair or Co-op Coordinator.

**MDCA 1443 Medical Insurance**

This course will emphasize accurate ICD-9 and CPT coding of office procedures for payment/reimbursement by patient or third party. Additional topics may include managed care or medical economics. Lec 4, Cr 4.



**MRKG 1311 Principles of Marketing**

Introduction to basic marketing functions, identification of consumer and organizational needs; explanation of economic, psychological, sociological, and global issues; and description and analysis of the importance of marketing research. Lec 3, Cr 3.

**MRMT 1303 Medical Office Procedures**

This course will introduce basic medical office skills including telephone techniques, filing and indexing, mail handling, appointment scheduling, travel arrangements, correspondence and business transactions, and office machines. Emphasis on developing human relations and customer service skills. Lec 3, Cr 3.

**MRMT 1307 Medical Transcription Fundamentals**

This course provides the fundamentals of medical transcription with hands-on experience in transcribing physician dictation including basic reports such as history and physicals, discharge summaries, consultations, operative reports, and other medical reports. Utilities transcribing and information processing equipment compatible with the industry standards. Designed to develop speed and accuracy. Lec 3, Cr 3.

**POFI 2331 Desktop Publishing for Office**

This course provides an in-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis is placed on layout techniques, graphics, and multiple page displays, and business applications. Lec 3, Cr 3.

**POFL 1305 Legal Terminology**

This course offers instruction in spelling, production, and definition of terms and includes an overview of the areas of law and legal professions. The students will develop a legal vocabulary; and explain fundamental legal concepts, procedures, and terminology. Lec 3, Cr 3.

**POFM 1304 Introduction to Health Records**

Introduction to the systems and processes for collecting, maintaining, and disseminating health related information. Instruction in the delivery and organizational structure including content of health records, documentation requirements, registries, indices, licensing, and regulatory agencies. Prerequisite: SRGT 1301. Lec 3, Cr 3.

**POFM 1313 Medical Terminology I**

Instruction in the practical application of a medical vocabulary system. Topics include structure; recognition; analysis; definitions; spelling; pronunciation; and combination of medical terms from prefixes, suffixes, roots, and combining forms. Lec 3, Cr 3.

**POFM 1453 Medical Coding**

This course will provide students with the presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems. Lec 4, Cr 4.

**POFM 2380 Co-op Education – Medical Administration/ Executive Assistance and Medical Secretary**

Career-related activities encountered in the student's area of specialization offered through an individualized agreement among the college, employer, and student. Prerequisite: Approval of Coop Coordinator or Departmental Chair. Lec 1, Lab 20, Cr 3.

**POFT 1192 Special Topics: Portfolio**

Topics address recently identified current events; skills knowledge, and/or occupation and relevant to the professional development of the student. Learning outcomes/objectives are determined by local; occupational need and business and industry trends. Prerequisite: Approval from Department Chair. Lec 1, Cr 1.

**POFT 1301 Business English**

This course will provide students with an introduction to practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. Lec 3, Cr 3.

**POFT 1309 Administrative Office Procedures I**

Study of current office procedures including telephone skills, time management, travel and meeting; arrangements, mail processing, and other duties and; responsibilities in an office environment. The student will develop time management techniques; manage in-coming and out-going mail; demonstrate appropriate telephone techniques; coordinate travel and meeting arrangements; and identify the basic skills of an office professional. Lec 3, Cr 3.

**POFT 1313 Professional Development Office Personnel**

Preparation for the work force including business; ethics. team work, professional attire, and promotability. The student will determine necessary skills for seeking and securing employment; apply problem-solving techniques to complete tasks; attitudes and values that contribute to effective work habits; demonstrate how to work effectively as part; of a team; exhibit business etiquette; and identify professional attire. Lec 3, Cr 3.

**POFT 1319 Records and Information Management I**

Introduction to basic records and information management. Includes the life cycle of a record, manual and electronic records management, and basic filing procedures and rules. The student will identify the stages in the life cycle of a record; file; and retrieve records using alphabetic, numeric, geographic, and subject filing systems; input, index, code, and cross-reference records; use tickler file, requisition and charge-out procedures; and differentiate between manual and electronic filing. Lec 3, Cr 3.

**POFT 1329 Beginning Keyboarding**

This course will provide skill development in the; operation of the keyboard by touch applying proper; keyboarding techniques. Emphasis is placed on development of acceptable speed and accuracy levels; and formatting basic documents. Lec 3, Cr 3.

**POFT 1331 Business Machine Applications**

Skills development in the operation of machines used in a business environment. Emphasis on the development of skills in using electronic calculators and; other office machines such as fax, telephone equipment, and reprographics. The student will describe various machines used in business; develop speed and accuracy using an electronic calculator/keyboard; and operate other business machines. Lec 3, Cr 3.

**POFT 1345 Shorthand/Notetaking I**

An introduction to shorthand/note taking principles. Mastery of accurate reading and writing of notes to produce mailable documents from dictation. The student will read notes at an acceptable minimum speed of 50 words per minute on new material; transcribe notes with 95 percent accuracy; and produce mailable documents from dictation. Lec 3, Cr 3.

**POFT 2303 Speed and Accuracy Building**

Review, correct, improve, and/or perfect touch keyboarding techniques for the purpose of increasing speed and improving accuracy. The student will demonstrate significant increase in keyboarding speed; and accuracy at 40 words per minute (wpm) with minimum proficiency. Lec 3, Cr 3.

**POFT 2312 Business Correspondence and Communication**

This course provides instruction in the development of writing and presentation skills to produce effective business communications. The students will learn to compose, produce, and present effective business documents appropriate to meet industry standards; apply critical evaluation techniques to business documents and demonstrate the importance of coherent, ethical

communication principles in business and industry. Prerequisite: POFT 1302 with minimum grade of C. Lec 3, Cr 3.

**POFT 2380 Cooperative Education-Administrative Assistant/  
Secretary Science**

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college; and the employer, the student combines classroom learning with work experience. Directly related to; a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: Approval of Department Chair or Co-op Coordinator. Lec 1, Lab 20, Cr 3.

**POFT 2381 Cooperative Education-Administrative Assistant/  
Secretary Science**

Career related activities encountered in the student's area of specialization are offered through a cooperative agreement between the college, employer, and student. Under supervision of the college; and the employer, the student combines classroom learning with work experience. Directly related to a technical discipline, specific learning objectives guide the student through the paid work experience. This course may be repeated if topics and learning outcomes vary. Prerequisite: Approval of Department Chair or Co-op Coordinator. Lec 1, Lab 20, Cr 3.

**POFT 2431 Administrative Systems**

Advanced concepts of project management and office procedures utilizing integration of previous learned office skills. Prerequisite: ITSW 1301, ITSW 2331, ITNW 1337, ITSW 1304, ITSW 1310 and ITSW 1307, all with C or better. .

## **Chemistry (CHEM)**

**CHEM 1105 Introductory Chemistry Lab I**

Laboratory practice that illustrates elementary general organic, and biochemical experimental techniques. Lab 3, Cr 1. Corequisite: CHEM 1305 (or prior credit)

**CHEM 1107 Introductory Chemistry Lab II**

Continuation of CHEM 1105, with greater emphasis on organic and biochemical laboratory techniques. Lab 3, Cr 1. Prerequisite: CHEM 1105, CHEM 1305 with grade of C. Concurrent enrollment in HCEM 1307 or prior credit with a minimum grade of C.

**CHEM 1111 General Chemistry Laboratory I**

introduction to laboratory techniques of chemical experimentation. Lab 3, Cr 1. Concurrent enrollment in CHEM 1311 or prior credit with minimum grade of C.

**CHEM 1112 General Chemistry Laboratory II**

Introduction to some basic laboratory techniques used in studying chemical kinetics, chemical equilibrium, electrochemistry, and qualitative inorganic analysis; introduction to instruments used in pH measurement and visible spectrophotometry. Lab 3, Cr 1. Prerequisite: CHEM 1111 with minimum grade of C and CHEM 1312 with minimum grade of C or concurrent enrollment.

**CHEM 1305 Introductory Chemistry I**

A terminal course in chemistry for non-science majors, or technology students. Major topics covered are atomic and molecular structure, chemical bonding, the state of matter, solution calculations, and acid-base concepts; includes a brief introduction to organic chemistry and biochemistry. Lec 3, Cr 3. Concurrent enrollment in CHEM 1105 or prior credit with minimum grade of C.

**CHEM 1307 Introductory Chemistry II**

Continuation of CHEM 1305. Elementary study of organic and biochemistry; the nomenclature, preparation, and reactions of the principle classes of organic compounds by functional group; structure and metabolic reactions of carbohydrates, lipids, and proteins; a look at hormones, enzymes, and biosynthetic pathways; physiological action of drugs, food, nutrition, poisons, and causing agents. Lec 3, Cr 3. Prerequisite: CHEM 1305, CHEM 1105 with minimum grade of C and concurrent enrollment in CHEM 1107, or prior credit with minimum grade of C.

**CHEM 1311 General Chemistry I**

Study of atomic and molecular structure, chemical stoichiometry, chemical bonding, states of matter, solutions and colloids, and acid-base concepts. Lec 3, Cr 3. Prerequisite: MATH 1314 with a minimum grade of C.

**CHEM 1312 General Chemistry II**

Continuation of CHEM 1311. Study of chemical kinetics and equilibrium, electron transfer reactions, electrochemistry, nuclear chemistry, chemical thermodynamics, and some descriptive inorganic chemistry. Lec 3, Cr 3. Prerequisite: CHEM 1311 with minimum grade of C.

**CHEM 2123 Organic Chemistry Laboratory I**

Laboratory application of techniques used in experimental organic chemistry. Lab 3, Cr 1. Prerequisite: CHEM 1112 and CHEM 1312 with a minimum grade of C and concurrent enrollment in CHEM 2323 (or prior credit with minimum grade of C).

**CHEM 2125 Organic Chemistry Laboratory II**

Additional laboratory application of techniques used in experimental organic chemistry. Lab 3, Cr 1. Prerequisite: CHEM 2123 with minimum grade of C and CHEM 2325 (or prior credit with minimum grade of C).

**CHEM 2323 Organic Chemistry I**

Study of the structure, properties, preparations and reactions of aliphatic and aromatic compounds; stereo chemistry, reaction mechanisms, and the use of spectroscopic techniques are included. Lec 3, Cr 3. Prerequisite: CHEM 1312, CHEM 1112 with minimum grade of C.

**CHEM 2325 Organic Chemistry II**

Continuation of CHEM 2323. Includes a brief introduction to the chemistry of polymers, fats, carbohydrates, amino acids and proteins. Lec 3, Cr 3. Prerequisite: CHEM 2323 with minimum grade of C.

**CHEM 3103 Biochemistry Laboratory I**

Laboratory work consists of selected experiments in biochemistry with special emphasis on the chemical interpretation of the structure and function of biological macromolecules. Lab 53, Cr 1. Prerequisite: CHEM 2123, CHEM 2323 with minimum grade of C and concurrent enrollment in CHEM 3303 (or prior credit with minimum grade of C).

**CHEM 3105 Analytical Laboratory**

Laboratory methods in analytical chemistry, including quantitative separation techniques, electrochemistry, and absorption spectroscopy. Lab 4, Cr 1. Prerequisite: CHEM 1111, CHEM 1112 with minimum grade of C. and concurrent enrollment in CHEM 3305 (or prior credit with minimum grade of C).

**CHEM 3110 Physical Chemistry Laboratory I**

The use of modern instrumentation to illustrate physical chemical techniques used to study electrochemistry, molecular structure, calorimetry, and thermodynamics. Lab 3, Cr 1. Prerequisite: CHEM 1111, CHEM 1112 with minimum grade of C, and concurrent enrollment in CHEM 3310 (or prior credit with minimum grade of C).

**CHEM 3112 Physical Chemistry Laboratory II**

The use of modern instrumentation to illustrate physical chemical tech-

niques used to study macromolecules, chemical kinetics, properties of gases. Lab 3, Cr 1. Prerequisite: CHEM 3110 with minimum grade of C and concurrent enrollment in CHEM 3305 (or prior credit with minimum grade of C).

#### **CHEM 3301 Inorganic Chemistry**

An introductory study of the elements other than carbon and their compounds based on the periodic classification and certain related theoretical concepts explaining structure and reactivity. Lec 3, Cr 3. Prerequisite: CHEM 1112, CHEM 1312 with minimum grade of C.

#### **CHEM 3303 Biochemistry I**

Study of the chemical properties of the biomolecules: amino acids, proteins, enzymes, carbohydrates, lipids, nucleic acids, and coenzymes; metabolic energy; the biosynthesis of informational molecules, such as DNA and RNA, will also be discussed. Lec 3, Cr 3. Prerequisite: CHEM 2123, CHEM 2323 with minimum grade of C.

#### **CHEM 3304 Biochemistry II**

A detailed study of the design, integration and control of metabolism. Hormone action and the regulation of gene expression. Lec 3, Cr 3. Prerequisite: CHEM 3303 with minimum grade of C.

#### **CHEM 3305 Analytical Chemistry**

Modern analytical chemistry, including separation methods and quantitative chemistry, introduction to methods of analytics in electrochemistry, absorption and emission spectroscopy. Lec 3, Cr 3. Prerequisite: CHEM 1112, CHEM 1312 with minimum grade of C and concurrent enrollment in CHEM 3105 (or prior credit with minimum grade of C).

#### **CHEM 3306 Chemical Literature**

This course is designed to provide students with a working knowledge of the chemical literature. Students will learn how to obtain information using the libraries in the university system under the supervision of a faculty member in the Chemistry and Environmental Sciences Department. Lec 3, Cr 3. Prerequisite: Junior standing in chemistry and consent of instructor.

#### **CHEM 3310 Physical Chemistry I**

Study of the classical thermodynamics including applications to gases, lipids, solutions and phase equilibrium, ionic equilibrium, and electrochemistry. Lec 3, Cr 3. Prerequisite: MATH 2414, PHYS 1302, CHEM 1312 with minimum grade of C.

#### **CHEM 3312 Physical Chemistry II**

Fundamentals of quantum mechanics, chemical bonding spectroscopy, photochemistry, chemical kinetics, kinetic theory of gases and the transport of both gas and liquid phases. Lab 3, Cr 3. Prerequisite: CHEM 3310 with minimum grade of C.

#### **CHEM 4104 Selected Topics in Biochemistry Lab**

This course will cover the study of contemporary biochemical techniques. Concurrent enrollment in CHEM 4304 (or prior credit with minimum grade of C).

#### **CHEM 4105 Instrumental Methods of Analysis Laboratory**

Introduction to use of electrical and optical measurements in chemical analysis. Interpretation of infrared, ultraviolet, nuclear magnetic resonance, and mass spectra. Lab 4, Cr 1. Prerequisite: CHEM 3305, CHEM 3105 with minimum grade of C and concurrent enrollment in CHEM 4305 (or prior credit with minimum grade of C).

#### **CHEM 4110 Chemistry Seminar**

Students are expected to research a current chemical topics, previously approved by a faculty member in the Chemistry and Environmental Sciences Department, and to present it in a formal seminar to fellow students and faculty members. Lec 3, Cr 3. Prerequisite: Senior standing in chemistry

and consent of instructor.

#### **CHEM 4112 Selected Topics in Physical Chemistry Laboratory**

A laboratory course that will concentrate on applications of an initial quantum chemistry, molecular dynamics, semimprirical methods, and QSPR/QSAR. Concurrent enrollment in CHEM 4312 (or prior credit with minimum grade of C).

#### **CHEM 4123 Selected Topics in Organic Laboratory**

This laboratory involves a comprehensive literature survey of both contemporary and classical organic name reactions. Lec 3, Cr 1. Concurrent enrollment in CHEM 4323 (or prior credit with minimum grade of C).

#### **CHEM 4304 Selected Topics in Biochemistry**

An advanced course in Biochemistry with emphasis on current developments. Prerequisite: CHEM 3304, CHEM 3103 with minimum grade of C.

#### **CHEM 4305 Instrumental Methods of Analysis**

Introduction to the theory and practice of optical and electro-analytical methods of analysis. Interpretation of infrared, ultraviolet, nuclear magnetic resonance, and mass spectra. Lab 3, Cr 3. Prerequisite: CHEM 3305, CHEM 3105 with minimum grade of C. Concurrent enrollment in CHEM 4105 (or prior credit with minimum grade of C).

#### **CHEM 4306 Environmental Chemistry**

This course covers environmental issues and the chemistry associated with these issues. Key areas include energy used and production, the atmosphere, the hydrosphere. Specific topics to be discussed include fossil fuels, nuclear and solar energy, the Greenhouse effect, ozone chemistry, air and water pollution, water resources, nitrogen and food production, and agrochemicals. Prerequisite: CHEM 1311, 1312, and 2323; BIOL 1306 (or 1308) and 1307 (or 1309); and PHYS 1301, all with minimum grade of C.

#### **CHEM 4312 Selected Topics in Physical Chemistry**

An advanced course in Physical Chemistry that includes topics in Computational Chemistry, Molecular Modeling, and Molecular Dynamics. Prerequisite: CHEM 3312, CHEM 3112 with minimum grade of C.

#### **CHEM 4320 Chemistry Problems**

An individual introduction to research which involves both laboratory and library work. Students will work under the direct supervision of a faculty member on a chemistry topic of mutual interest. Lec 1, Lab 6, Cr 3. Prerequisite: Must be a Chemistry major, have 6 hours of advanced Chemistry with minimum grade of C and consent of instructor.

#### **CHEM 4323 Selected Topics in Organic Chemistry**

An advanced course in Organic Chemistry which covers topics in Reaction Mechanisms, Synthesis Design and includes the theory of structure determination. Prerequisite: CHEM 2325, CHEM 2125 with minimum grade of C.

#### **CHEM 4325 Chemistry Internship**

This course is designed to give the Chemistry student the opportunity to gain insight and experience in applying chemistry principles and concepts in an actual work-related environment. The student will perform the internship under the supervision of both a chemistry faculty member and a collaborating member of the participating internship site. This course will provide opportunity for the student to apply prior learning to practical laboratory situations. Prerequisite: Senior standing in Chemistry or consent of instructor.

### **Child Care and Development (CDEC)**

#### **CDEC 1313 Curriculum Resources for E.C. Programs**

This course is composed of fundamentals of early childhood education

focusing on curriculum design, developmentally appropriate practices, types of programs, historical perspectives, ethics, and current issues from the National Association for the Education of Young Children. Lec 3, Cr 3.

**CDEC 1318 Nutrition, Health, and Safety**

This course is a study of nutrition, health, safety, and related activities, including skill development in management of issues, guidelines and practices in nutrition, as well as community health, hygiene, safety, and legal implications. Integration of these principles can be applied to a variety of settings. Lec 3, Cr 3.

**CDEC 1319 Child Guidance**

This course is an exploration of common behavior problems of young children in an early childhood setting. It puts emphasis on positive guidance techniques for effective behavior management and practical application through direct participation in an early childhood setting. Lec 2, Lab 5, Cr 3. Prerequisite: Departmental Approval.

**CDEC 1321 The Infant and Toddler**

A study of appropriate infant and toddler programs (birth to 3 years), including an overview of development, quality care giving routines, appropriate environments, materials and activities, and teaching/guidance techniques. Lec 3, Cr 3.

**CDEC 1354 Child Growth and Development**

This course is a study of the principles of normal child growth and development from conception to adolescence. Focus is placed on physical, cognitive, social, and emotional domains of development. Lec 3, Cr 3.

**CDEC 1356 Emergent Literacy for Early Childhood**

This course is an exploration of principles, methods, and materials for teaching young children language and literacy through a play-based integrated curriculum. Lec 3, Cr 3.

**CDEC 1357 Math and Science for Early Childhood**

This course is an exploration of principles, methods, and materials for teaching young children mathematics and science through discovery and play. Lec 1, Lab 5, Cr 3. Prerequisite: CDEC 1319.

**CDEC 1358 Creative Arts for Early Childhood**

This course is an exploration of principles, methods, and materials for teaching young children movement, music, visual arts, and dramatic play through the process-oriented experience to support divergent thinking. Lec 1, Lab 5, Cr 3. Prerequisite: CDEC 1319.

**CDEC 1359 Children With Special Needs**

This course is a survey of information regarding children with special needs including possible causes and characteristics of exceptionalities, educational interventions, available resources, referral processes, parental involvement and the advocacy role in legislative issues. Lec 3, Cr 3.

**CDEC 1367 Practicum-Child Development**

This course gives practical general training and experiences in the workplace. The college, along with the employer, develop and document an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. These guides of external experiences may be for pay or no pay. The student will also develop a Child Development Associate Professional Resource File. Lec 1, Lab 20, Cr 3. Prerequisite: CDEC 1319.

**CDEC 1396 Special Topics in Distraction of Programs for Children**

This course deals with topics addressed recently, identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lec 3, Cr 3.

**CDEC 2326 Administration of Programs for Children I**

This course is a practical application of management procedures for early care and education programs, including a study of operations, supervising, and evaluating programs. Topics include philosophy, types of programs, policies, physical management, regulations, staffing, evaluation, and communication. Lec 3, Cr 3.

**CDEC 2328 Administration of Programs for Children II**

This course is an in-depth study of the skills and techniques in managing early care and education programs, including legal and ethical issues, personnel management, team building, leadership, conflict resolution, stress management, advocacy professionalism, fiscal analysis and planning parental/partnership, and technical applications in process. Lec 3, Cr 3.

**CDEC 2341 The School Age Child**

This course is a study of appropriate age (5 to 13 years) program, including overviews of development, appropriate environments, materials and activities, and teaching/guidance techniques. Lec 3, Cr 3.

**CDEC 2587 Internship - Early Childhood Provider/Assistant**

This course gives advanced students experience external to the college in a specialized field involving a written agreement between the educational institution and a business or industry. Mentored and supervised by a workplace employee, the student achieves objectives that are developed and documented by the college and that are directly related to specific occupational outcomes. This may be a paid or unpaid experience. This course may be repeated if topics and learning outcomes vary. Lec 1, Lab 20, Cr 5. Prerequisite: CDEC 1319, CDEC 1357, CDEC 1358, and CDEC 1367.

**Chinese (CHIN)**

**CHIN 1311 Beginning Chinese I**

Fundamental skills in listening comprehension, speaking, reading and writing, including basic vocabulary, grammatical structures and culture.

**CHIN 1312 Beginning Chinese II**

Continuation of CHIN 1311.

**Communication (COMM, COMMU)**

**COMM 1129 Publications Laboratory**

Supervised work as a member of the university newspaper staff. The student is expected to learn editing and makeup. A student may register for this course each semester, with a maximum of four semester hours. Lab 3, Cr 1. Prerequisite or concurrent enrollment: COMM 2311, COMM 2315.

**COMM 1307 Survey of the Media**

This course is designed to provide students with an overview of broadcasting and cable casting; history, programming, regulations, and financial structures. Commercial, educational and public radio and television, both in the United States and around the world, will be covered with an emphasis on helping the student be a better-informed, and more critical consumer. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 2311 News Writing for the Mass Media I**

Theory and practice of news gathering and writing with emphasis on effective writing. Assignments cover general news, interviews, speeches, meeting, and other fields of activity. Lec 3, Cr 3. Prerequisite: ENGL 1301 and SPCH 1315 or SPCH 1318

**COMM 2315 News Writing for Mass Media II**

A continuation of COMM 2311, with emphasis on further developing news gathering and reporting skills. Reports about speeches, interviews, meeting, as well as other types of reportorial writing are assigned. Lec 3,

Cr 3. Prerequisite: COMM 2311

**COMM 2316 Interviewing Principles**

This course is designed to improve students' verbal and nonverbal skills in participating in and conducting several types of interviews. Students have the opportunity to develop basic skills in data analysis and techniques such as structuring interviews, techniques, methods of evaluation, and personal presentation. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 2324 Studio Technology I**

Students will produce, engineer, mix, setup, and perform in actual recording sessions. Samples for portfolios may be acquired. Lec 1, Lab 4, Cr 3. Prerequisite: MUSI 2373.

**COMM 2331 Radio/Television Announcing**

Study of voice, diction, pronunciation, phonetics, and delivery in various types of announcing. Lec 3, Cr 3.

**COMM 3310 Communication in Context**

Designed to expose students to significant issues and topics are related to specific contexts in communication: media issues, political communication, health communication, gender communication, and family communication. May be repeated twice for credit. Prerequisite: ENGL 1301, ENGL 1302, SPCH 1315 or SPCH 1318.

**COMM 3315 Methods and Strategies of Social Influence**

Designed to examine persuasive and rhetorical techniques as they apply to effective social influence in interpersonal, small group, and mass communication settings. Emphasis on motivational factors, psychological and rhetorical principles, credibility, image, and theories of attitude change. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3316 Intercultural Communication**

Study of the symbolic and relativistic nature of culture and the resultant problems in attempting to communicate meaning across cultural lines. Lec 3, Cr 3.

**COMM 3317 Interviewing Principles**

Designed to improve students' verbal and nonverbal skills in participating in and conducting several types of interviews. Students have the opportunity to develop basic skills in data analysis and in techniques such as structuring interviews, questioning techniques, methods of evaluation, and person presentation. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3321 Technical and Professional Communication**

Designed to serve students in scientific and technical areas, including business administration, computer science, engineering, biochemistry, and other fields. Provides students with the specific speech communication concepts, principles, and competencies needed to create in listeners an understanding of both the principles and applications of scientifically studied fields of knowledge. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3322 Group Communication and Discussion**

Designed to provide students with the necessary skills to participate in decision making, problem solving, and group discussion effectively. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3323 Theories of Communication**

Designed to provide the student with a comprehensive overview and analysis of the nature, history and goals of communication theories. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3325 Technical and Mediated Communication**

Designed to provide the students with a survey of how modern technology

on interpersonal communication, including an introduction to communication technologies; the influence of technology on interpersonal communication, group decision-making, and mediated communication; and an analysis of argumentation and persuasion in technological issues. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3330 Leadership Communication**

Designed to examine the role appropriate communication skills play in improving students' ability to address management and leadership duties. Emphasis is placed on organizational processes, leadership styles, and interpersonal, presentational, and group communication skills that are useful in business, governmental, and professional settings. Relationships between cultural diversity and leadership and communication are explored. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3335 Mass Communication and Society**

Examines theories and effects of the mass communication process. Emphasis on media as they relate to political systems, radio talk shows, and new communication technologies. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3353 Advanced Public Speaking**

Provides students with intensive application of public speaking principles to various situations. Critical thinking, analysis, reasoning, organization skills, and methods for intensifying presentation impact are stressed. An audience-centered approach to public presentations is the central issue for this course. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 3360 Feature Writing**

Interpreting trends in reader appeal; analyzing feature story structure; finding ideas for gathering materials; writing and selling feature articles. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4303 Special Topics in Communication**

Select topic in an identified area of communication. May be repeated for credit when the topics vary. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4311 Public Relations**

Explores the principles of public relations as practiced in public affairs and private business. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4312 Applied Organizational Communication**

Analysis of organizational communication processes and development of interpersonal, presentational, and group communication skills that are useful in business, governmental, and professional organizations. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4332 Principles of Instruction and Training**

Designed to provide students with exposure to classroom communication patterns, climate, and ecology as they relate to instruction. Student-teacher, teacher-teacher, teacher-administrator, and school-public interaction and examined. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4340 Advertising**

Designed to expose the student to principles of advertising as they are applied and used in differing media. Emphasis is place on writing advertising copy, layout, and design. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4344 Campaign Development**

Designed to provide students with an in-depth study of persuasive and

public relations campaign development. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4345 Communication and Conflict Management**

Theory and research pertaining to management to resolution of conflict across diverse contexts. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMM 4350 Applied Research Methods in Communication**

Designed to develop students' ability to understand, evaluate, and produce social scientific research in the area of communication. Students will be exposed to the major methods of research used in speech communication, journalism, and mass media. Each student is responsible for the successful completion of an individually authored research project. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

**COMMU 2320 Survey of the Media**

Designed to provide students with an overview of broadcasting; history, programming, regulations, and financial structures. Commercial, educational and public radio and TV, both in the United States around the world, will be covered with an emphasis on helping the student be a better-informed and more critical consumer. Prerequisite: ENGL 1301, ENGL 1302, SPCH 1315 or SPCH 1318.

**Computer Information Systems (CIST, IMED, INEW, ITSC, ITSE, ITNW, ITSW, POFI)**

**CIST 4330 Graphics and Digital Imaging**

This course covers fundamental principles of graphics and digital imaging. Topics of this course include graphics acquisition, graphics optimization, image manipulations, masking, layering, compositing, image correction techniques, and video manipulating and filtering techniques. Prerequisite: CIST 3330 and CIST 3380 with a minimum grade of C.

**CIST 4380 Advanced Special Topic in Computer Systems**

This course covers a special topic at the senior level. Different sections of the course may cover different topics in a semester. Special topics chosen will be related to new and state of the art developments in the area of computer information systems. Prerequisite: Senior level standing and approval of instructor.

**IMED 1111 StoryBoard**

This course will introduce the techniques of storyboarding which includes organizing a project's content and arranging it in a visual format.

**IMED 2441 Advanced Digital Video**

Instruction in the use of advanced digital video techniques for post-production. Emphasis on generation and integration of special effects, 2-D animation, and 3-D animation for film, video, CD-ROM, and the Internet. Exploration of new and emerging compression and video streaming technologies. Prerequisite: COSC 1310 and ITSE 2413.

**IMED 2449 Internet Communications**

This course will be an advanced seminar in web server design and maintenance. Topics include scripting, web site planning, testing, security, producing, web site planning, testing, security, production, and marketing. Topics include development in the field of Internet communications. Prerequisite: COSC 1310 and ITNW 2409.

**ITNW 2454 Internet/ Intranet Server**

This course will cover the designing, installing, configuring, maintaining, and managing an Internet server. Prerequisite: COSC 1310 and ITNW 2409.

**ITNW 2459 Web Server Support and Maintenance**

This course will cover the designing, installing, configuring, maintaining,

and managing an Internet server. Prerequisite: COSC 1310, ITNW 2409, and ITNW 2454.

**ITSC 1301 Introduction to Computers**

Overview of computer information systems. Introduces computer hardware, software, procedures, and human resources. Explores integration and application in business and other segments in society. Fundamentals of computer problem-solving and programming may be discussed and applied. Examines applications and software relating to a specific curricular area. Lec 2, Lab 2, Cr 3.

**ITSC 1421 P.C Operating Systems – Windows**

Introduction to Windows-based microcomputer operating systems. Topics include installation and configuration, file management, memory and storage management, peripheral device control, and use of utilities. Lec 3, Lab 2, Cr 4.

**ITSC 2435 Application Problem Solving**

Utilization of current application software to solve advanced problems and generate customized solutions, involving project and software specific curricular area. Lec 3, Lab 2, Cr 4. Prerequisite: ITSC 1409.

**ITSE 1329 Programming Logic and Design**

A disciplined approach to problem-solving with structured techniques and representation of algorithms using appropriate design tools. Discussion of methods for testing, evaluation, and documentation. Lec 3, Cr 3.

**ITSE 1350 System Analysis and Design**

Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. Lec 2, Lab 2, Cr 3. Prerequisite: ITSE 1418.

**ITSE 1411 Web Page Programming**

This course will cover the instruction of Internet Web page programming and related graphic design issues including mark-up languages, Web sites, Internet access software, and interactive topics. May include use of HTML, XHTML, XML, PHP, JAVA, or ASP.

**ITSE 1445 Introduction to Oracle S.Q.L**

This course will be an introduction to the design and creation of relational databases using Oracle. Topics include storing, retrieving, updating, and displaying data using Structured Query Language (SQL). Prerequisite: COSC 1310

**ITSE 2451 Advanced Cobol Programming**

Further applications of programming techniques using COBOL, including file access methods, data structures and modular programming, program testing and documentation. Lec 3, Lab 2, Cr 4. Prerequisite: ITSE 1418

**ITSE 2456 Oracle Database Administration I**

This course will cover the fundamentals of the tasks and functions required of a database administrator using Oracle. Prerequisite: COSC 1310 and ITSE 1445.

**CIST 3316 Web Programming and Design**

This course focuses on web programming and the underlying Internet client server paradigm. Techniques to be studied include dynamic content with client-side and server-side scripting languages. Issues on security, session management and integration with databases are discussed in detail along with an overview of the fundamentals of e-Commerce. Prerequisite: COSC 1437 with minimum grade of C.

**CIST 3330 Networking and Database Management**

This course provides detailed view of networking and database management systems. Networking topics include ISO/OSI layer models, study of LANs and standards, Internetworking, and network security. Database topics

include access methods, data models, query languages and optimization, concurrency control, recovery, security, integrity, client-server architecture, and distributed database systems. Prerequisite: Junior level standing, COSC 1437 and MATH 3362. Recommended courses COSC 2312, MATH 1316, and MATH 1348.

**CIST 3340 Concepts and Methods of Education Technology**

This course will provide an understanding of learning models and the impact of technology in enhancing in the learning process. This includes the application of teaching and learning strategies that integrate technology in the classroom environment.

Prerequisite: CIST 3316 with minimum grade of C.

**CIST 3380 Special Topics in Computer Systems**

This course covers a special topic at the junior level. Different sections of the course may cover different topics in a semester. Special topics chosen will be related to new and state of the art developments in the area of computer information systems. Prerequisite: Junior level standing and approval of instructor.

**CIST 4310 Operating Systems Management**

This course introduces applied operating system concepts. Operating System theory and application are explored using various environments. Topics include: operating system installations, configuration and troubleshooting, process management, communication and synchronization, memory and device management, directory and file management, system administration and security including user account management. Prerequisite: CIST 3330 with minimum grade of C.

**CIST 4313 Advanced Computer Networking**

This course provides computer networking topics based on the OSI seven layers. Networking topics include advanced administration techniques, advanced security, adding components, trouble-shooting techniques and network management. Students will install and administrate current networking operating systems in servers and clients in a lab environment. Prerequisite: CIST 3330 or consent of instructor.

**CIST 4340 File Structures**

This course introduces physical data representation in files, file processing operations and file structures. Topics covered include searching, sorting, merging, indexing, hashing and trees. Prerequisite: MATH 3373 and COSC 2318 with a minimum grade of C.

**CIST 4346 Systems Analysis and Design**

This course provides an understanding of the system development cycle. It enables students to evaluate and choose a system development methodology. Topics include systems survey, functional specifications, interface specification, data design, program design, system testing and implementation. Prerequisite: COSC 1437 and it is recommended CIST 4340.

**CIST 4360 Computer Graphics and Digital Imaging**

This course introduces basic concepts of designing, creating, editing and manipulating the layout of photographic-quality animation sequences, professional images, and multi-media slide presentations and how to integrate them within the web environment. Image and audio formats, compression techniques and transmission techniques are also discussed. Prerequisite: CIST 3316 with minimum grade of C.

**IMED 2309 Internet Commerce**

This course will be an overview of the Internet as a marketing and sales tool with emphasis on developing a prototype for electronic commerce. Topics include database technology, creating web sites in order to collect information, and performing, on-line transactions, and generating dynamic content. Prerequisite: COSC 1310 and ITNW 2409.

**INEW 2434 Advanced Web Page Programming**

This course will cover advanced applications for Web authoring. Topics include Perl Scripts, Common Gateway Interface (CGI), Database and Interaction, Active Server Pages, Java Applets, JavaScript, HTML, and/or interactive elements. Prerequisite: COSC 1310 and ITSE 1411.

**ITNW 2409 Network Administration for Intranet**

This course will enable the student to perform the role of network administrator or system manager in an Intranet network. Prerequisite: COSC 1310.

**ITSC 1409 Integrated Software Applications I**

Integration of applications form popular business productivity software suites. Instructions in embedding data, linking and combining documents using word processing, spreadsheets, database, and/or; presentation media software. Lec 3, Lab 2, Cr 4.

**ITSC 1409 Integrated Software Applications Laboratory I**

Integration of applications form popular business productivity software suites. Instructions in embedding data, linking and combining documents using word processing, spreadsheets, database, and/or; presentation media software. Lec 3, Lab 2, Cr 4.

**ITSC 1413 Internet/ Web Page Development**

This course concentrates in the instruction in the use of Internet server and the fundamentals of web page design and web site development. Prerequisite: COSC 1315 or ITSC 1409.

**ITSC 1425 Personal Computer Hardware**

A study of current personal computer hardware including personal computer assembly and upgrading, setup and configuration, and troubleshooting. Local Area Network, hardware and software installation, configuration and troubleshooting will also be covered in this course. Lec 3, Lab 2, Cr 4. Prerequisite: ITSE 1431.

**ITSE 1418 Introduction to Cobol Programming**

Introduction to computer programming using COBOL. Emphasis on the fundamentals of structured design, development, testing, implementation, and documentation. Includes language syntax, data and structures, input/output devices, and file

**ITSE 1431 Introduction to Visual Basic Programming**

A introduction to computer programming using Visual BASIC. Emphasis on the fundamentals of structural design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Lec 3, Lab 2, Cr 4.

**ITSE 2409 Introduction to Database Programming**

Application development using database applications using a structures query language; create queries and reports from database tables, and create documentation. Lec 3, Lab 2, Cr 4.

**ITSE 2449 Advanced Visual Basic Programming**

Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures and modular programming, program testing and documentation. Lec 3, Lab 2, Cr 4. Prerequisite: ITSE 1431.

**ITSW 2365 Practicum-Data Processing Tech/Technician**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individual plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics and learning outcomes vary. Lec 3, Cr 3. Prerequisite: ITSE 1350, ITSE 2451.

**POFI 2431 Desktop Publishing for Office**

In-depth coverage of desktop publishing terminology, text editing, and use of design principles to create publishing material using word processing desktop publishing features. Emphasis on layout techniques, graphics, multiple page displays, and business applications. Prerequisites: ITSC 1409.

**POFI 2431 Desktop Publishing for Office-Laboratory**

In-depth coverage of desktop publishing terminology editing, and use of design principles to create publishing material using word processing desktop features. Emphasis on layout techniques, graphics, and multiple page displays. Lec 3, Lab 2, Cr 4.

**ITSE 2413 Web Authoring**

This course will cover the instruction of designing and developing web pages that incorporates text, graphics, and other supporting elements using current technologies and authoring tools.

**Computer Sciences (COSC)****COSC 1310 Computer Literacy**

A descriptive introduction to the organization and use of computers in the modern age: Computer as a tool for acquiring, representing, distributing, and processing information. Organization of computers and their different components. Concepts of hardware, software, algorithms, processes, languages, operating systems database systems, systems analysis and design, data communications, multiprocessing and distributed processing. Students learn the application of computer-based information through projects involving word processing, databases, spreadsheets, file-handling, and general novice programming. Students are required to attend scheduled lab beyond lecture sessions. Lec 3, Cr 3. Prerequisite: MATH 0322 with minimum grade of C.

**COSC 1336 Programming Fundamentals I**

This course is an introduction to logic and programming. Topics include propositional calculus and Boolean algebra, numeric systems and their arithmetic, software development methodology, data types, control structures, functions, arrays, and the mechanisms of running testing and debugging. This course satisfies computer literacy requirements. Prerequisite: MATH 1314 with minimum grade of C.

**COSC 1437 Programming Fundamentals II**

This programming intensive course uses a high level language to review controls structures subroutines, structured and abstract data types, file input and output, the object oriented paradigm, software engineering techniques, syntax and semantics, compilation, libraries, basic searching and sorting techniques, and elementary analysis of algorithm. Prerequisite: COSC 1336 with minimum grade of C or consent of instructor.

**COSC 2310 Discrete Structures**

This course is a study of proof techniques, asymptotic notations for growth function analysis, common functions found in algorithm analysis, manipulating and bounding summations, different methods to solve recurrences including alteration and generating functions, combinatorial analysis, number theory, binomial coefficients, sets, graphs, and trees. Prerequisite: MATH 2313 with minimum grade of C.

**COSC 2312 Foundations of Computer Science**

This course covers Boolean algebra applied to digital logic including normal form representation, resolution, simplification of design and combination circuits. Introduction to internal data representation, machine architecture, assembly language, principles of programming languages automata and formal languages including regular and context-free languages are studied. Prerequisite: COSC 1336 and COSC 2310 with minimum grade of C. Lec 3, Cr 3.

**COSC 2316 Web Programming and Design**

This course focuses on the design of multimedia programs and Web applications using languages such as JAVA and HTML. The course will develop the student's skills in developing multimedia applications integrated with Web designs through the use of programming languages. Lec 3, Cr 3. Prerequisite: COSC 1437 with minimum grade of C.

**COSC 2317 Signals and Systems**

An introduction to signals and systems including discrete and multi-dimensional signals. Random variables and representation of signals in the time and frequency domains will be covered, including filter design and analysis. Prerequisites: COST and MATH 2414 with minimum grade of C. Lec 3, Cr 3..

**COSC 2325 Machine Language and Computer Organization**

This assembly language intensive course covers machine cycle, digital representation of data and instructions, assemblers, loaders, macros, subroutines, and program linkages. Concepts of computer organization, operating systems, concurrent processes, synchronization and communication are introduced. Prerequisite: COSC 2312 and COSC 2336 with minimum grade of C. Lec 3, Cr 3.

**COSC 2336 Programming Fundamentals III**

This programming intensive course deepens the concepts of file input/output, recursion backtracking, analysis of algorithms, and data structures including queues, stacks, linked lists, trees, hash tables, trees and graphs. Software engineering techniques for modularity, reusability, documentation, testing, error detection and recovery are covered. Prerequisites: COSC 1437, COSC 2310, and MATH 1342, all with minimum grade of C.

**COSC 3330 Introduction to Networks and Databases**

A modern operating system is used to enable students to perform exercises in distributed database management systems and networking. Computer networking, network programming, database management system, database query languages, and database programming concepts are introduced. Lec 3, Cr 3. Prerequisite: COSC 2312, COSC 2336, MATH 2314, and PHYS 2426 with minimum grade of C.

**COSC 3345 Data Structures and Algorithm Analysis**

Concepts of creating, storing, retrieving, ordering, and manipulation of data structures are introduced via programming intensive projects. Formal specification of data structures in programming languages is studied in depth. Algorithms used are analyzed for their space and time complexity. This course satisfies the computer science requirements for Math majors. Students majoring or minoring in both Mathematics and Computer Science cannot receive dual credit for this course. Lec 3, Cr 3. Prerequisite: COSC 2336 and MATH 2414 with minimum grade of C.

**COSC 3355 Principles of Programming Languages**

Theory of programming languages is dealt with: Syntax and semantics of a language, scoping, binding, storage allocation, procedures and data objects, data-directed programming, object-oriented programming, and other modern programming concepts. Lec 3, Cr 3. Prerequisite: COSC 2312 and COSC 2336 with minimum grade of C.

**COSC 3380 Special Topic**

A special topic will be covered in this course at the junior level Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of computer science will be offered. Lec 3, Cr 3.

**COSC 4190 Senior Project**

Students will develop a project and give a presentation to a faculty committee under the guidance of a faculty project advisor. Lab 3, Cr 1. Prerequisite:



27 hours in computer science.

### **COSC 4300 Compiler Construction**

Different phases of compiler construction are studied: lexical, syntax, semantics, and code generation. Projects leading to the complete construction of a computer for a miniset of a language are given. Lec 3, Cr 3. Prerequisite: COSC 2325, COSC 3345, and COSC 3355 with minimum grade of C.

### **COSC 4310 Operating Systems**

The student is familiarized with the services common to most operating systems. Issues in CPU scheduling, concurrent processes, deadlocks, memory management, file management, and distributed systems are dealt with. Students are given relevant projects to support the theoretical aspects learned in class. Prerequisite: COSC 2325 and COSC 3345 with minimum grade of C. Lec 3, Cr 3.

### **COSC 4313 Computer Networking**

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. Lec 3, Cr 3.

### **COSC 4315 Advanced Computer Networks**

This course covers the design of networks and their performance. 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 2317 and COSC 4313 with a grade of minimum grade of C. Lec 3, Cr 3.

### **COSC 4330 Computer Graphics**

The student is familiarized with structured graphical objects. The algorithms for transforming, clipping, and projecting objects are put into practice via several projects. Hidden line/surface removal, shading/lighting models, and the problem of aliasing are studied. Prerequisite: COSC 3345 with minimum grade of C. Lec 3, Cr 3.

### **COSC 4332 Graphical User 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 with a grade of minimum grade of C. Lec 3, Cr 3.

### **COSC 4333 Digital Image 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. Prerequisite: COSC 2336 and MATH 2314 with a grade of minimum grade of C. Lec 3, Cr 3.

### **COSC 4335 Computer Vision**

This course covers the fundamental and advanced ideas of developing computerized procedures to extract numeric and symbolic information from images. Key ideas includes image formation, acquisition, calibration, object recognition, video understanding, stereo imaging, optical flow and classification methods. System implementation and applications in communication, medicine, robotics and manufacturing are introduced. Prerequisite: COSC 2336 and MATH 2314 with minimum grade of C. Lec 3, Cr 3.

### **COSC 4342 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: COSC 3330 and COSC 3345 with minimum grade of C. Computer Sciences (COSC)

### **COSC 4343 Data Mining**

This course gives the fundamentals of applying artificial intelligence techniques for analysis, learning and prediction of information using data extracted from 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. Lec 3, Cr 3. Prerequisite: COSC 4342 with a grade of minimum grade of C.

### **COSC 4346 Software Engineering**

The scope of systems analysis, systems investigation and analysis, input and output design, storage devices, file organization, sorting and merging, factors affecting file design, system design, the program specifications, design strategy, and financial applications are studied. Lec 3, Cr 3. Prerequisite: COSC 1437 with minimum grade of C.

### **COSC 4349 Computer Architecture**

This course covers classical and modern computer architectures. Techniques such as microprogramming and counter-decoder methods will be included. Other topics that will be studied include parallel computing architectures, their performance and programming. Lec 3, Cr 3. Prerequisite: COSC 3325 with a grade of minimum grade of C.

### **COSC 4350 Artificial Intelligence**

This course discusses the theoretical and practical foundations of Artificial Intelligence. Principles of reasoning, perception, deduction, planning, learning, knowledge representation and problem resolution are some of the areas covered. Lec 3, Cr 3. Prerequisite: COSC 3345 with a grade of minimum grade of C.

### **COSC 4355 Expert Systems**

This course covers the theoretical and practical principles of modern Expert Systems construction. Prerequisite: COSC 4350 with a grade of minimum grade of C. Lec 3, Cr 3.

### **COSC 4360 Numerical Methods**

The topics include root finding, interpolation and numerical differentiation, polynomial interpolation, estimating derivatives, numerical integration, systems of linear equations, approximation by spline functions, and smoothing of data. This course satisfies the computer science course requirements toward a major in mathematics. Lec 3, Cr 3. Prerequisite: COSC 2336 and MATH 2314 with a grade of minimum grade of C.

### **COSC 4380 Special Topics**

A special topic will be covered in this course at the senior level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of computer science will be offered. Lec 3, Cr 3.

## **Criminal Justice (CJSA, CRIJ)**

### **COSCU 2317 Signals and Systems**

An introduction to signals and systems including discrete and multi-dimensional signals. Random variables and representation of signals in the time and frequency domains will be covered including filter design and analysis. Prerequisite: COSC 2336 and MATH 2314 with minimum grade of C.

**CJSA 2388 Internship-Criminal Justice Studies**

Provides the student with real-world experience, problem solving, and practitioner supervision in criminal justice agencies related to the interest of the student. Students are required to work for a minimum of 112 hours during the semester, must submit weekly activity logs, and meet with the intern coordinator weekly. Lec 1, Lab 7.5, Cr 3. Prerequisite: 6 hours of English with minimum grade of C. Concurrent enrollment will be accepted with approval of instructor.

**CRIJ 1301 Introduction to Criminal Justice**

Provides an overview of the history and philosophy of criminal justice and ethical considerations; defines crime and its nature and impact; provides an overview of the criminal justice system, law enforcement, the court system, prosecution and defense, the trial process, and corrections. Lec 3, Cr 3.

**CRIJ 1306 The Courts and Criminal Procedures**

Presents the judiciary in the criminal justice system, including the right to counsel, pretrial release, grand juries, the adjudication process, types and rules of evidence, and sentencing. Lec 3, Cr 3.

**CRIJ 1307 Crime in America**

Introduces American crime problems in historical perspective; social and public policy factors affecting crime; the impact of crime; crime trends; social characteristics of specific crime; and prevention of crime. Lec 3, Cr 3.

**CRIJ 1310 Fundamentals of Criminal Law**

Presents the nature of criminal law and its philosophical and historical development; major definitions, concepts and classifications of crime; elements of crime and penalties, using Texas statutes as illustrations; criminal responsibility. Lec 3, Cr 3.

**CRIJ 1313 Juvenile Justice System**

Provides an overview of the juvenile justice system in the United States, including theories of juvenile delinquency, justice system policy toward juvenile offenders, the structure of juvenile courts, juvenile detention, and juvenile rehabilitation efforts; emphasis will be placed on understanding and applying the Texas Family Code, Title III to juvenile processed through Texas juvenile courts. Lec 3, Cr 3.

**CRIJ 2313 Correctional Systems and Practices**

Introduces corrections in the criminal justice system; organization of correctional systems; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation, and current and future issues. Lec 3, Cr 3. Prerequisite: ENGL 1302 or ENGL 2311 with minimum grade of C. Concurrent enrollment will be accepted with approval of instructor.

**CRIJ 2328 Police Systems and Practices**

Presents the police profession, the organization of law enforcement systems, the police role, police discretion and ethics, police community interaction, and current and future issues. Lec 3, Cr 3. Prerequisite: ENGL 1302 or ENGL 2311 with minimum grade of C. Concurrent enrollment will be accepted with approval of instructor.

**CRIJ 3302 Current Literature and Research in Criminal Justice**

Reviews current literature and examines selected problems affecting the criminal justice system; offers instruction in steps involved in the scientific approach to problem solving; discusses research techniques and paper writing and applications or research in criminal justice. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 3303 Nature of Crime**

Provides an overall perspective of the crime problem with special emphasis

given to philosophical and theoretical ideas pertaining to crime and its control, including examining of the victim and criminal topologies. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 3315 Legal Aspects of Evidence**

Critically examines the legal controls on police offices, with special attention to current court decisions related to such issues as arrest, search and seizure, confessions, wiretapping and eavesdropping, right to counsel, and self-incrimination. Focuses on issues relating to elements of proof for major criminal offenses. Presents an understanding of the concepts of reasonable suspicion and probable cause which direct and control police responses to crime situations. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 3341 Probation and Parole**

The philosophy, history and principles of probation, parole and other community-based treatment programs, the philosophy of punishment and rehabilitation; trends, practices and current research in probation and parole, including methods of analysis, selection and prediction. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 3345 Correctional Administration**

Fundamental concepts of management, organization, and administration as specifically applicable to correctional institutions, field services, and community-based corrections. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4301 Practicum Field Experience**

Teaches job interview techniques and resume writing and requires placement in a criminal justice (or related) agency for on-the-job training for a minimum of 120 hours. Students are evaluated by agency critiques, daily logs, and a weekly meeting with the intern coordinator. Lec 3, Cr 3. Prerequisite: Senior Standing, ENGL 1301, ENGL 1302 or ENGL 2311 and ENGL 2332 or ENGL 2333.

**CRIJ 4312 Principles of Law Enforcement Supervision**

Examines the principles involved in law enforcement supervision; principles of leadership; psychology involved in handling grievances and in building morale; duties and responsibilities of command level personnel; law enforcement budgeting procedures, supervisory problems and responsibilities relating to discipline; and internal affairs investigations. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4313 Seminar of Issues in Law Enforcement**

Analyses and discusses contemporary issues in policing with particular attention to current developments, service delivery, and the changing police role; integration established scientific knowledge with practical police experiences in various areas of policing. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4341 Correctional Casework and Counseling**

Examines the role and techniques of casework in corrections with emphasis on integrating casework and counseling responsibilities and procedures. The course includes examining of therapy techniques and processes in various correctional settings and studying of service delivery programs tailored to the specific needs of correctional clients. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4361 International Study of Crime and Justice**

Studies criminal justice programs and institutions outside of the United States through in-country visitations supplemented by assigned readings,

papers, discussion, and dialogue with leading in-country criminal justice personnel. The course permits students to obtain a realistic comparative study of criminal justice in countries other than the United States through first hand experiences. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4362 Special Topics in Criminal Justice**

Gives advanced undergraduate studies the academic flexibility and opportunity to study contemporary issues in crime and criminal justice. May be retaken once for credit upon approval of the department chair. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4363 Gangs and Gang Behavior**

This course introduces the student to street and prison gangs; it explores gang structure, organization, and characteristics. Official response to gang problems is also analyzed. Prerequisite: 9 hours of ENGL, 1000 level or above.

**CRIJ 4370 Senior Seminar - Policy Issues**

Provides a capstone course for criminal justice students nearing the completion of the baccalaureate degree (more than 100 semester credit hours). This course is designed to explore current criminal justice policy issues from individual student interest and integrate Material learned in the criminal justice curriculum, transcending the parochial view of the crime phenomenon from an agency perspective (police, courts, juvenile justice, and corrections) This course allows the student to explore topical criminal justice policy issues as they effect each agency, from the micro to the macro perspectives and to assess the intended and unintended consequences of criminal justice policies throughout the system and society. Lec 3, Cr 3. Prerequisite: Senior Standing, ENGL 1301, ENGL 1302 or ENGL 2311 and ENGL 2332 or ENGL 2333.

**CRIJ 2301 Community Resources in Corrections**

Introduces the role of community corrections, including community programs for adults and juveniles, administration of community programs; legal issues, and future trends in community treatment. Lec 3, Cr3. Prerequisite: ENGL 1302 or ENGL 2311 with minimum grade of C. Concurrent enrollment will be accepted with approval of instructor.

**CRIJ 2314 Criminal Investigation**

Introduces investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation. Lec 3, Cr 3. Prerequisite: ENGL 1302 or ENGL 2311 with minimum grade of C. Concurrent enrollment will be accepted with approval of instructor. Must be a Criminal Justice Major.

**CRIJ 3314 Public and Private Security**

Studies of security measures taken by industry, retail stores, private policing agencies, military services, and the United States Government, distinguishing between law enforcement and security responsibilities. Prerequisite: 6 hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor.

**CRIJ 3331 Legal Aspects of Corrections**

Legal problems and principles from conviction to release, including consideration of convictions, imprisonment, sentencing, conditional release, post conviction procedures, prisoners' rights, probationers' right, and validity of conviction. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CRIJ 4311 Advanced Police Organization and Administration**

In-depth discussion of organizational and administrative theory, comparative discussion of philosophies utilized in business and public ad-

ministration with potential relationships to police organizations, and the methodology of societal trends affecting criminal justice administration. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311 and ENGL 2332 or ENGL 2333.

**CRIJ 4330 Psychology and the Legal Systems**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student. Prerequisite: CRIJ 3302 or PSYC 3301 or SOCI 4305.

**CRIJ 4343 Seminar of Issues in Corrections**

Analyses and discusses contemporary correctional systems, including discussion of recent research concerning correctional institutions and various corrections field services. Emphasis is given to administrative and treatment concerns in corrections. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302 or ENGL 2311, and ENGL 2332 or ENGL 2333.

**CJSA 1312 Crime in America**

American crime problems in historical perspective; social and public policy factors affecting crime; impact and crime trends; social characteristics of specific crimes; prevention of crime.

**CJSA 1322 Introduction to Criminal Justice**

History and philosophy of criminal justice and ethical considerations; crime defined; its nature and impact; overview of criminal justice system; law enforcement; court system; prosecution and defense; trial process

## Diagnostic Medical Sonography (DMSO)

**DMSO 1166 Practicum-Diagnostic Medical Sonography Technician**

7 hours per week (21 hours per week in summer)

**DMSO 1167 Practicum-Diagnostic Medical Sonography Technician**

7 hours per week (21 hours per week in summer)

**DMSO 1302 Basic Ultrasound Physics**

Basic acoustical physics and acoustical waves in human tissue. Emphasis on ultrasound transmission in soft tissues, attenuation of sound energy, parameters affecting sound transmission, and resolution of sound beams.

**DMSO 1342 Intermediate Ultrasound Physics**

A continuation of the study of acoustical physics. Topics include interaction of ultrasound with tissues, the mechanics of ultrasound production and display, various transducer designs and construction, quality assurance, bioeffects, image artifacts, and methods of Doppler flow analysis. The student will describe pulse-echo principles and actions; recognize instruments options and transducer selection; interpret methods of Doppler flow analysis; identify elements of a quality assurance program; recognize common image artifacts; and describe potential bioeffects. Lec 3.

**DMSO 1355 Sonography Pathophysiology**

A study of the pathology and pathophysiology of the abdominal structure visualized with ultrasound examination including the urinary and reproductive systems and superficial parts. The student will recognize abnormal sonographic patterns of the abdomen, reproductive and urinary systems, and superficial parts; and recognize pathologic processes in identified organ structures. Lec 3.

**DMSO 1367 Diagnostic Medical Sonography**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

**DMSO 1441 Introduction to Abdominopelvic Sonography**

Basic sonographic cross-sectional anatomy as it relates to the abdomen and pelvis. Normal anatomy and physiology of the abdominal/pelvic cavities

as related to scanning techniques, transducer selection, and scanning protocols. Lec 3, Lab 4

#### **DMSO 2245 Advanced Sonography Practices**

Advanced sonographic procedures and special topics. Review of previously covered material is included. Vascular methodology, case studies, and film critique are discussed. The student will describe various advanced sonographic practices and procedures; and identify and describe methods of vascular imaging and testing. Lec 2

#### **DMSO 2253 Sonography of Superficial Structures**

Detailed study of normal and pathological superficial structures as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. The student will identify sonographic appearance of normal and abnormal superficial structure; demonstrate appropriate scanning techniques using accepted protocol guidelines; evaluate patient history and laboratory data as it relates to ultrasound; and select appropriate transducer for area of interest. Lec 1, Lab 2

#### **DMSO 2342 Sonography of High Risk Obstetrics**

This course emphasized normal and abnormal maternal/fetal development as it relates to scanning techniques, patient history and laboratory data, transducer selection and scanning protocols. The student will identify and describe normal and abnormal fetal and maternal structures; demonstrate pertinent measurement techniques and scanning techniques using accepted protocols; evaluate history and laboratory data as it relates to ultrasound; and select appropriate transducer for area of interest. Lec 2, Lab 4

#### **DMSO 2343 Advanced Ultrasound Physics**

Advanced course emphasizing the use of ultrasound instruments including modes of operation, operation control options, techniques for recording static and dynamic images, and advances in transducer design. The student will apply principles of ultrasound instruments and modes of operation; utilize operator control options; summarize techniques for recording sonographic images; and relate advances in transducer designs. Lec 2, Lab 4

#### **DMSO 2366 Diagnostic Medical Sonography**

Practical, general workplace training supported by an individualized learning plan developed by the employer, college, and student.

#### **DMSO 2405 Sonography of Obstetrics and Gynecology**

Detailed study of the pelvis and obstetrics/gynecology as related to scanning techniques, patient history and laboratory data, transducers selection, and scanning protocols.

#### **DMSO 2441 Sonography of Abdominopelvic Pathology**

This course emphasizes pathologies and disease states of the abdomen and pelvis as related to scanning techniques, patient history and laboratory data, transducer selection, and scanning protocols. Endocavitary sonographic anatomy and procedures including pregnancy may be discussed. The student will identify abnormal abdominal/pelvic structure; demonstrate appropriate scanning techniques using accepted protocol guidelines; evaluate patient history and laboratory data as it relates to ultrasound; and select appropriate transducer for area of interest. Lec 3, Lab 4

## **Diesel Mechanics (DEMR)**

#### **DEMR 1413 Fuel Systems**

In-depth coverage of fuel injector pumps and injection systems with emphasis on rebuilding and calibration. Lec 2, Lab 6, Cr 4.

#### **DEMR 1423 Heating Ventilation and A/C Troubleshoot**

Introduction to heating, ventilation, and air conditioning theory, testing, and repair. Emphasis on refrigerant reclamation, safety procedures, specialized tools, and repairs. Lec 2, Lab 6, Cr 4.

#### **DEMR 1491 Special Topics in Diesel Engine Mech/Rep**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lec 3, Lab 4, Cr 4.

#### **DEMR 1505 Basic Electrical Systems**

An introduction to the basic principles of electrical systems of diesel powered equipment with emphasis on starters, alternators, batteries, and regulators. Lec 3, Lab 6, Cr 5

#### **DEMR 1506 Diesel Engine I**

An introduction to the basic principles of diesel engines and systems. Lec 3, Lab 6, Cr 5

#### **DEMR 1510 Diesel Engine Testing and Repair I**

An introduction to testing and repairing diesel engines including related systems specialized tools. Lec 3, Lab 6, Cr 5

#### **DEMR 1516 Basic Hydraulics**

Fundamentals of hydraulics including components and related systems. Lec 3, Lab 6, Cr 5

#### **DEMR 1521 Power Train I**

Introduction to fundamentals, repair, and theory of power trains including clutches, transmissions, drive shafts, and differentials. Emphasis on inspection and repair. Lec 3, Lab 6, Cr 5

## **Drafting (DFTG)**

#### **DFTG 1405 Technical Drafting**

Introduction to the principles of drafting to include terminology and fundamentals, including size and shape descriptions, projection methods, geometric construction, sections, auxiliary views, and reproduction processes. Lec 3, Lab 3, Cr 4.

#### **DFTG 1409 Basic CAD**

An introduction to basic computer-aided drafting. Emphasis is placed on drawing setup, creating and modifying geometry, storing and retrieving predefined shapes; placing, rotating, and scaling objects, adding text and dimensions, using layers and coordinate systems, input and output devices. Lec 3, Lab 3, Cr 4.

#### **DFTG 1417 Architectural-Residential**

Architectural drafting procedures, practices, and symbols, including preparation of detailed working drawings for residential structures with emphasis on light frame construction methods. Lec 3, Lab 3, Cr 4. Prerequisite: DFTG 1405, DFTG 1409.

#### **DFTG 1491 Special Topics: Cad Applications**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the student. Lec 3, Lab 3, Cr 4. Prerequisite: DFTG 2432

#### **DFTG 2310 Structural Drafting**

Discussion of detail drawings of structural shapes for fabrication with emphasis on framed and seated connectors and beam and column detailing. Designed to the standards of the American Institute of Steel Construction, including units on concrete detailing conforming to American Concrete Institute standards. Prerequisite: DFTG 1417

#### **DFTG 2317 Descriptive Geometry**

Graphical solutions to problems involving points, lines, and planes in space. Prerequisite: DFTG 1405

#### **DFTG 2323 Pipe Drafting**

A study of pipe fittings, symbols, specifications and their applications to

a piping process system. Creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. Prerequisite: DFTG 2440

### **DFTG 2328 Architectural-Commercial**

Architectural drafting procedures, practices, and symbols including the preparation of detailed working drawings for a commercial building, with emphasis on commercial construction methods. Prerequisite: DFTG 1417

### **DFTG 2348 Plane Surveying**

Plane surveying includes use of surveying instruments, basic measuring procedures, vertical and horizontal control, and traverse closure. Prerequisite: DFTG 2421.

### **DFTG 2350 Geometric Dimensioning and Tolerancing**

Geometric dimensioning and tolerancing, according to standards, application of various geometric dimensions and tolerances to production drawings. Prerequisite: DFTG 1409

### **DFTG 2386 Internship-Drafting**

A work-based learning experience that enables the student to apply specialized occupational theory, skills and concepts. A learning plan is developed by the college and the employer. Prerequisite: Departmental approval.

### **DFTG 2421 Topographical Drafting**

Plotting of surveyors field notes, plotting elevations, contour drawing, plan and profiles, and laying out traverses. Prerequisite: DFTG 1405 and DFTG 1409.

### **DFTG 2432 Advanced CAD**

Use of advanced techniques, including the use of a customized system and the principles of data manipulation for drawing production enhancement. Presentation of advanced drawing applications, such as three-dimensional modeling and linking graphics entities to external non-graphic data. Prerequisite: DFTG 1405 and DFTG 1409.

### **DFTG 2440 Solid Modeling/Design**

A computer-aided modeling course. Development of three-dimensional drawing and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Lec 3, Lab 3, Cr 4. Prerequisite: DFTG 1405, DFTG 1409.

## **Drama (DRAM)**

### **DRAM 1310 Introduction to Theater**

Fundamentals of dramatic art, structural techniques, character analysis and interpretation; makeup, costuming, set design, construction, and lighting; and participation in plays. Lec 3, Lab 3, Cr 3.

### **DRAM 1351 Introduction to Acting**

Introductory study and analysis of acting, with emphasis on stage movement, spatial awareness, behavioral techniques, and character development. Lec 3, Lab 3, Cr 3.

### **DRAM 2361 History of the Theater**

A study of the history of the theatre including critical review and analysis of selected plays from Greek antiquity to the present. Lec 3, Cr 3.

## **Economics (ECON, ECONU)**

### **ECON 1303 Consumer Economics**

The structure and function of the American economy as it affects the consumer. A survey of problems facing consumers including credit, insurance, investments, home ownership, renting, consumer protection, advertising, health care, and low-income consumers. Lec 3, Cr 3.

### **ECON 2301 Macroeconomics**

Introduction to national income analysis. Topics include an introduction

to supply and demand analysis; the economic functions of government; the determinants of output, employment, and the general price level; national income accounting; classical, Keynesian and neoclassical models of the economy; the Federal Reserve; fiscal and monetary policy; the balance of payments. Lec 3, Cr 3. BBA degrees require that this course be passed with a C or better.

### **ECON 2302 Microeconomics**

Introduction to price theory. Topics include elasticity; consumer behavior, the behavior of the firm under perfect and imperfect competition, government regulation, natural resources, labor, international trade, and the distribution of income and wealth. Open only to students who have completed all required development courses in reading and/or writing as assessed by the University. Lec 3, Cr 3. BBA degrees require that this course be passed with a C or better.

### **ECON 3352 Intermediate Microeconomic Theory**

The theory of the firm. Supply and demand analysis, distribution theory and imperfect competition. Lec 3, Cr 3.

### **ECON 4345 North American Economic History**

A survey of North American economic growth and development from the pre-colonial era to the present. May be counted as ECON 4345 or HIST 4345. Lec 3, Cr 3.

### **ECON 4399 Current Topics in Economics**

## **Education - Bilingual Education/Spanish (BILS, EDBI)**

### **BILS 3316 Assessment Bilingual Classroom**

This course will focus on the cognitive and psychosocial issues in assessing bilingual learners. Students will practice identifying strengths and approximations in Spanish and English with formal and informal assessment instruments to design instruction. Field-based experience is required. Lec 3, Cr 3.

### **BILS 3310 Emergent Literacy Bilingual Classroom (Spanish)**

Formerly READ 3310. This course focuses on how children learn to read in the native language. Emphasis is on research-based approaches for teaching reading in bilingual classroom. Taught in Spanish. Prerequisites: Admission to Teacher Education and SPAN 4316 or concurrent enrollment in SPAN 4316. Field experience is required. Lec 3, Cr 3. Prerequisite: SPAN 4316 or concurrent enrollment and Admission to Teacher Education.

### **BILS 3312 Teaching Reading in the Bilingual Classroom (Spanish)**

Formerly BILC 4325. Students will be given the opportunity to learn the developmental process involved in biliteracy. This course focuses on methods and techniques for integrating teaching, and assessing reading skills in the Spanish/English bilingual classroom. Taught in Spanish. Prerequisites: BILS 3310 and SPAN 4368 or concurrent enrollment in SPAN 4368. Lec 3, Cr 3. Prerequisite: BILS 3310.

### **BILS 3314 Content Area Methodology in the Bilingual Classroom (Spanish)**

Formerly READ 3326. This course examines reading processes across text types and subject-specific vocabulary at the EC-4 level. Students learn and practice a variety of planning, managing and learning strategies for all students including those with special needs. Taught in Spanish. Prerequisites: BILS 3312 or concurrent enrollment in BILS 3312. Lec 3, Cr 3. Prerequisite: BILS 3312 or concurrent enrollment.

### **EABL 3312 Teaching Reading in the Bilingual Classroom**

Students will be given the opportunity to learn the developmental process

involved in biliteracy. This course focuses on methods and techniques for integrating teaching and assessing reading skills in Spanish-English bilingual classroom. Taught in Spanish) Lec 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student. EACI 4324 or taken concurrently.

**EDBI 4608 Student Teaching EC-4 Bilingual Generalist**

Formerly EDCI 4611. Student teaching occurs in a bilingual classroom under the guidance of EC-4th grade classroom teachers and a university supervisor. Enhancing professional development and preparation for state required certification examinations will be emphasized in a seminar format. Prerequisite: Approval of the Student Teaching Committee.

**Education - Curriculum and Instruction (EACI)**

**EACI 4324 Designing Instruction and Assessment to Promote Student Learning - A.C.P**

Knowledge of student diversity and learning goals and objectives will be emphasized. This knowledge will be applied to effective instructional planning and assessment for all students. Field-based course. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**Education - Curriculum and Instruction (EAIN, EDCI)**

**EAIN 4320 Elementary/ Secondary Internship I-A.C.P**

This course involves supervised classroom teaching and seminars designed to relate classroom teaching/learning experience to corresponding educational theory applicable to all educational levels. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**EAIN 4321 Elementary/ Secondary Internship II-A.C.P**

This course involves supervised classroom teaching and seminars designed to relate classroom teaching/learning experience to corresponding educational theory applicable to all educational levels. Prerequisite: Alternative Certification Program departmental approval to enroll student and EAIN 4320.

**EDCI 3304 Fulfilling Professional Roles and Responsibilities**

Major components covered include reflecting on teaching, maintaining accurate records, communicating with families, contributing to the school and district, growing and developing professionally, and showing professionalism and advocacy for students. Students will understand the legal and ethical requirements in the State of Texas. Field Observation is required. Prerequisite: Admission to Teacher Education.

**EDCI 3336 Topics in Education**

This course will emphasize topics related to education and pedagogy. Topics will vary and may be repeated for elective credit.

**EDCI 4203 Technology and School Curriculum**

Students will understand the use of technology applications in classroom administration, instruction and evaluation. They will use technologies as learning media to enhance instructional learning in all content areas. Learning with technology and using it as a tool are emphasized. This course is a prerequisite for admission to Teacher Education. Lec 2, Lab 0, Cr 2.

**EDCI 4301 Foundations of Education Diverse Society**

This course focuses on the principles of education and historical, philosophical, cultural, and legal foundations of education in a multicultural society. The course will stress the structure and function of local, state, and federal roles in education and the interplay of language, gender, ethnicity, exceptionalities, and diversity of the American educational system. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education.

**EDCI 4302 Educational Psychology in the Elementary School**

The principal focus of this course is on major theories of the teaching-learning process and human growth and development as they relate to the elementary school. It includes the effect of multicultural differences on teaching as well as the needs of special learners. Measuring and evaluating student achievement are examined. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education.

**EDCI 4304 Instructional Planning/ Curriculum Development**

Formerly EDCI4305. This field-based course presents principles curriculum organization and planning based on learners' needs. The students will learn the scope, sequence and materials for teaching the curriculum to design instruction for long-range and daily lessons. They will learn to incorporate instructional media and community resources. Field experience is required. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education. EDCI 4301, EDCI 4302, and concurrent enrollment in EDCI 4305.

**EDCI 4305 Instructional Methodology and Classroom Management**

Formerly EDCI4306. This field-based course focuses on teaching methods that emphasize practical application of teaching-learning theories and principles of classroom organization and discipline. Best practices for developing higher-level thinking skills are stressed. Field experience is required. Lec 3, Lab 3, Cr 3. Prerequisite: EDCI 4301, EDCI 4302, and concurrent enrollment in EDCI 4306.

**EDCI 4306 Instructional Methodology and Classroom Management**

The field based course focuses on teaching methods emphasize practical application of teaching-learning theories and principles of classroom organization and discipline. Strategies for giving basic instructions and developing higher-level thinking skills are stressed. The scope, sequence, materials and methods for teaching the elementary school curriculum are studied. Course requires 3 hour lab per week. Prerequisite: EDCI 4301, EDCI 4302, and concurrent enrollment in EDCI 4305.

**EDCI 4309 Content Area Methodology**

This course focuses on current methods of planning and teaching of elementary math, science, and social studies curriculum. Emphasis is placed on an interdisciplinary approach to content area instruction. Through field-based experiences, students will gain expertise in unit and lesson planning, use of instructional materials and technology, and actual classroom instruction. Internship in classroom is required. Prerequisite: EDCI 4302, EDCI 4305, EDCI 4306, and concurrent enrollment in SPED 4372.

**EDCI 4311 Student Teaching E.C- 4th**

Formerly EDCI 4311 and 4312. The student teacher will have the opportunity to design and implement instruction, and practice classroom management techniques. Weekly seminars and individual conferences are required. Students will be assigned a half-semester, all day, Monday through Friday placement. This course is required for all level certifications (PK-12:Kinesiology, Art, Music, Special Education) Lec 1, Cr 3. Prerequisite: Approval by the Teacher Education Committee. Corequisite: Concurrent enrollment in SPED 4313 or EDSC 4398.

**EDCI 4315 Principles of Teaching Workshop for Elementary/ Secondary Teachers**

This workshop course is designed to give people entering teaching a theoretical and practical base for their introduction to teaching and for planning learning activities. Special permission must be given before enrollment in the course. Lec 3, Cr 3. Prerequisite: EDCI 4302, EDCI 4303, Paraprofessional status.

**EDCI 4322 Human Development and Instruction**

Major theories of the teaching-learning process and human growth and development as they relate to the EC-4 learner will be addressed. Areas emphasized are cultural differences, needs of special learners, developmental appropriateness, and linguistically diverse populations. Prerequisite: EDCI 3304 or EDCI 4301 or concurrent enrollment in EDCI 3304.

**EDCI 4323 Creating a Positive Productive Classroom Environment**

This course is about creating an environment of respect and rapport, establishing a culture for learning, managing classroom procedures, managing student behavior, and organizing physical space. Future teachers will learn to create a professional atmosphere where routines and procedures are handled efficiently and student behavior is cooperative and nondisruptive. Field experience required. Prerequisite: EDCI 4322 or EDCI 4302 or concurrent enrollment in EDCI 4322.

**EDCI 4324 Designing Instruction and Assessment to Promote Student Learning**

Knowledge of student diversity and learning goals and objectives will be emphasized. This knowledge will be applied to effective instructional planning and assessment for all students. To be taken concurrently with EDCI 4325. Field-based course. Prerequisite: EDCI 4323 and concurrent enrollment in EDCI 4325.

**EDCI 4325 Implementing Responsive Instruction and Assessment**

This class emphasizes communication, instruction and assessment strategies, and technology. This knowledge will be implemented to create responsive instruction and assessment which actively engages all students in the learning process. Taken concurrently with EDCI 4324. Prerequisite: EDCI 4323 and concurrent enrollment in EDCI 4324.

**EDCI 4328 Method/Tech of Teach Music Elementary**

This general music course provides an introduction to the following elementary music methods and approaches: Kodaly, Orff, Delacroze, Music memory, and CM (Comprehensive Musicianship) It also surveys the national standards in Music Education and the National Assessment of Music Education in the public schools. Lec 3, Cr 3. Prerequisite: MUSI 1308, MUSI 1312.

**EDCI 4336 Topics in Education**

This course covers current issues and topics related to the field of education. Field or labwork may be required. The course may be repeated twice for credit for a total of 9 SCHS when the topic is different. Prerequisite: Departmental approval.

**EDCI 4608 Student Teaching EC-4 E.S.L Generalist**

Formerly EDCI 4311 and 4312. Student teaching occurs in an ESL classroom under the guidance of EC-4th grade classroom teachers and a university supervisor. Enhancing professional development and preparation for state required certification examinations will be emphasized in a seminar format. Prerequisite: Approval by the Student Teaching Committee. Prerequisite: Approval by the Teacher Education Committee.

**EDCI 4611 Directed Teaching - Elementary**

This course consists of observation, limited participation in teaching then full teaching responsibility in an elementary public school classroom to which the student is assigned. This work is done under the guidance of the teacher of the class to which the student is assigned and the supervision of a college professor who makes periodic observations and evaluations of the student's progress. Seminars and individual conferences are required. Students are assigned to the public school classroom every class day for one full semester. Prerequisite: Approval by the Teacher Education Com-

mittee.

**EDCI 4620 Internship Elementary / Secondary School**

Full-time supervised classroom teaching with seminars designed to relate the classroom teaching/learning experience to corresponding educational theory. Applicable to both elementary and secondary majors. May not substitute for student teaching. Prerequisite: Baccalaureate Degree and acceptance into the UTB/TSC Alternative Certification Program.

**EDCI 4621 Internship Elementary / Secondary Schools**

Full-time supervised classroom teaching with seminars that relate the classroom teaching and learning experience to educational theory Applicable to both elementary and secondary majors. May not substitute for student teaching. Prerequisite: EDCI 4620.

**EDCIU 2101 School and Society**

This education course introduces students to the teaching profession. Students will explore their professional interest in the various teaching fields, grade levels and school settings. Students will organize a portfolio as a learning and assessment tool. Students must complete this course prior to admission to teacher education. Field experience required. Lec 3, Cr 3.

**Education - Early Childhood (EAEC, EDEC)****EAEC 4385 Growth and Development of Young Children-A.C.P**

Emphasis on developmental and growth characteristics for birth through the eighth year. Affective development, psychomotor development, social and emotional development. Cultural dynamics of family relationships and the family and school are emphasized. Observations, reading, lectures; class activities include day care as well as TEA accredited schools for pre-kindergarten and kindergarten children. Field experience required. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**EDEC 4385 Growth and Development of Young Children**

Emphasis on developmental and growth characteristics from birth through the eight year. Affective development, psychomotor development, social and emotional development. Cultural dynamics of family relationships and the family and school are emphasized. Observations, reading, lectures; class activities include day care as well as TEA accredited schools. Environments will be developmentally appropriate inclusion models. Fifteen hours of field experience required in addition to the 45 contact hours of classroom instruction. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education

**EDEC 4386 Basic Skills in Early Childhood Education**

Emphasis on informal unstructured experiences that prompt socio-emotional and linguistic growth. Readiness for first and second language acquisition will be addressed. Plan as a medium for growth and development will be addressed. Parent education, parent involvement in the schools will be included in the course. Fifteen hours of field hours of field experiences required in addition to the 45 contact hours of classroom instructions. Prerequisite: EDEC 4385.

**EDEC 4387 Language, Creativity and Self-Expression In Early Childhood**

Materials, equipment, supplies and activities to be used with young children will be studied. Research and development theories will be addressed with special emphasis to language and culture. Materials in children's literature and fine arts will be developed. developmental stages of language and dramatic play will be addressed. Fifteen hours of field experience will be required in addition to the 45 contact hours of classroom instruction. Prerequisite: EDEC 4385, EDEC 4386.

**EDEC 4388 Play Theory and Development**

The role of the young child's play in promoting educative processes and

the use of appropriate materials in instructional settings are examined. cognitive internationalist, behavioral analysis and maturationist orientations will be stressed. Indoor and out door play environments will be examined with respect to the child's development needs, interests and abilities. Prerequisite: EDEC 4385.

#### **EDEC 4389 The Environment and Early Childhood**

Formerly EDEC4391. This focuses on an examination of appropriate learning environments for young children. It includes the relationship between curriculum and the design by addressing issues of development, assessment, classroom guidance, interdisciplinary lesson planning, culture, language and special needs. Prerequisite: EDEC 4385. Prerequisite: EDEC 4385

#### **EDEC 4395 Seminar and Practicum in Early Childhood**

Emphasis on integrating and using the knowledge and skills gained from all previous courses. Field experience in a TEA accredited Pre-K or Kindergarten setting is required. At least 30 clock hours of field experience are required. Classroom must reflected developmentally appropriate practices and inclusion models. Seminars will be held to guide students in reflective teaching strategies, use of portfolio assessment, and professional development. Prerequisite: EDEC 4385, EDEC 4386, EDEC 4387, EDEC 4388, EDEC 4389 (only one course may be taken concurrently with Seminar and Practicum)

### **Education - General Education (EDUC)**

#### **EDUC 2301 Introduction of Special Programs**

This education course introduces students to issues related to characteristics of special needs populations as well as classroom strategies for instruction of diverse populations. Students will also be introduced to the legal issues related to students with special needs. Field experience required. Lec: 3, Cr. 3. Prerequisite: EDUC 1301

### **Education - Literacy (EALI)**

#### **EALI 3323 Beginning Literacy for E.S.L Learner: 2nd-4th Grade-A.C.P**

Students focus on word analysis and decoding, reading fluency, reading comprehension and writing conventions. Students plan and present literacy lessons using techniques appropriate for English language learners. Field experience required. Lec 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student. EACI 4324 or taken concurrently if in ESL Generalist Certification Program.

#### **EALI 4329 Literacy and Assessment-A.C.P.**

Participants understand the basic principles of formative and summative assessment and use a variety of literacy assessment practices to plan and implement instruction for students. Evaluation of strengths, needs and interests using standardized and alternative assessments will be included. Prerequisite: Alternative Certification Program departmental approval to enroll student, EAMG 4324 or take concurrently.

#### **EALI 4351 Content Area Literacy-A.C.P.**

This course focuses on explicit strategies to teach and monitor content area reading comprehension, vocabulary development and study skills for all learners. Factors influencing reading comprehension as well as a variety of reading materials and formats will be highlighted. Teachers will also learn ways to encourage students to read for pleasure and be lifelong learners. Field-based course. Lec 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student, EAMG 4324 or taken concurrently.

#### **EALI 4367 Teaching Reading to the English Language Learner-A.C.P.**

This course offers the student the opportunity to develop knowledge and instructional strategies for teaching reading to students of diverse cultural-linguistics backgrounds. Special emphasis will be placed on developing oral language proficiency as a prerequisite skill to reading and on instructional strategies designed specifically to meet the needs of such learners. Prerequisite: Alternative Certification Program departmental approval to enroll student, EAMG 4324 or taken concurrently.

### **Education - Literacy (EDLI)**

#### **EDLI 3310 Emergent Literacy for E.S.L Learners: Early Childhood - 1st Grade**

Formerly READ 3310. Early development of oral language, phonological and phonemic awareness, the alphabetic principle, and writing will be explored in this course. Students will tutor young children in these areas based multi-sensory, developmentally appropriate, and English as a second language principles. Field experience required. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education.

#### **EDLI 3323 Beginning Literacy for E.S.L Learners:2nd-4th Grades**

Students focus on word analysis and decoding, reading fluency, reading comprehension, and writing conventions. Students plan and present literacy lessons using techniques appropriate for English language learners. Field experience required. Lec 3, Cr3. Prerequisite: EDLI 3310 or concurrent enrollment.

#### **EDLI 3324 Fluent Literacy 3rd-4th Grades**

Students focus on using reading, writing, oral language, and viewing to learn. Students plan and teach research-based lessons using reading, writing, and multicultural children's literature across the curriculum. They apply comprehension strategies, the written conventions, and teaching methods for English as a Second Language in designing lessons. Field experience is required. Lec 3, Cr 3. Prerequisite: EDLI 3323.

#### **EDLI 3329 E.S.L. Literacy and Assessment**

Formerly READ3329. Participants will learn the basic principles of assessment and use a variety of literacy assessment practices to plan and implement literacy instruction for young ESL learners. Evaluation of strengths, needs, and interests using standardized and alternative assessments will be included. Field experience is required. Lec 3, Cr 3. Prerequisite: EDLI 3323 or concurrent enrollment and BILS 3312 or concurrent enrollment.

#### **EDLI 3340 E.S.L. Language Arts and Literature**

This class focuses on developing the language arts skills of English language learners through reading, writing, listening, viewing and representing. The reading/writing workshop model includes the writing process, reading quality children's literature in various genres, and responding to the literature. Prerequisite: EDCI 3323.

#### **EDLI 3341 Children's Literature**

Formerly READ3341. A survey of books and related materials for the elementary/middle school age; principles of book selection; intensive reading of books required. Lec 3, Cr 3. Prerequisite: Must be taken with EDLI 3324.

#### **EDLI 3343 Foundation of Beginning Literacy**

Students learn the importance of oral language and early literacy development and apply explicit instructional strategies. Students design and teach mini-lessons using a wide range of fiction and nonfiction for beginning readers. Field-based experience is required. Lec 3, Cr 3. Prerequisite: EDCI 4301, EDCI 4203, EDMG 4341 EDMG 4342, EDMG 4343.



**EDLI 4329 Literacy and Assessment**

Participants understand the basic principles of formative and summative assessment and use a variety of literacy assessment practices to plan and implement instruction for all students. Evaluation of strengths, needs and interests using standardized and alternative assessment will be included. Lec 3, Cr 3. Prerequisite: EDLI 3343.

**EDLI 4347 Teaching L.A. to Student/Different Needs**

Formerly READ3327. This course will help teachers meet the different instructional needs of students, including English Language learners and students with disabilities. Teachers will learn to identify and understand individual variations in oral language, reading, speaking, writing, viewing and representing. Field-based experience is required. Lec 3, Cr 3. EDLI 3343; Admission to Teacher Education Program

**EDLI 4350 Adolescent Literature**

Formerly READ3351. This course focuses on different genres of literature in multicultural society. It highlights purposes for reading, including reading for pleasure and lifelong learning. Additionally, it emphasizes modeling reading and adapting materials for all learners. Ways to enhance comprehension before, during and after reading are emphasized. Field-based experience is required. Lec 3, Cr 3. Prerequisite: EDLI 4329, Admission to Teacher Education.

**EDLI 4351 Content Area Literacy**

This course focuses on explicit strategies to teach and monitor content area reading comprehension, vocabulary development, and study skills for all learners. Factors influencing reading comprehension, as well as a variety of reading materials and formats, will be highlighted. Teachers will also learn ways to encourage students to read for pleasure and be life-long learners. Field-based experience is required. Lec 3, Cr 3. Prerequisite: EDMG 4324 or EDSC 4324.

**EDLI 4355 Developing Critical Reading Skills**

Teaching inferential, interpretive and evaluative comprehension skills through the use of text is the focus of this course. Teaching study and inquiry skills and their significance to student learning is included in this inclusive course. Field-based experience is required. Lec 3, Cr 3. EDCI 43301; For Middle School Majors EDMG 4342, EDMG 4343, EDMG 4344

**EDLI 4367 Teaching Read to the English Language Learner**

Formerly READ4367. This course offers the student the opportunity to develop knowledge and instructional strategies for teaching reading to students of diverse cultural/linguistic backgrounds. Special emphasis will be placed on developing oral language proficiency as a prerequisite skill to reading and on instructional strategies designed specifically to meet the needs of such learners. Lec 3, Cr 3.

**Education - Middle Grades (EAMG, EDMG)****EAMG 4323 Creating a Positive, Productive Classroom Environment: 4th-8th Grade-A.C.P.**

This course is about creating an environmental of respect and rapport, establishing a cultural for learning, managing classroom procedures, managing student behavior and organizing physical space. Future teachers will learn to create a professional atmosphere where routines and procedures are handled efficiently and student behavior is cooperative and nondisruptive. Field-based course. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**EAMG 4324 Designing Instruction and Assessment to Promote Student Learning: 4th-8th Grades-A.C.P.**

Knowledge of students, learning goals and objectives will be empha-

sized. This knowledge will be applied to effective instructional planning and assessment for all students. Field-based course. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**EAMG 4325 Implementing Responsive Instruction and Assessment: 4th-8th Grades-A.C.P**

This class emphasizes communication, instruction and assessment and technology. This knowledge will be implemented to create responsive instruction and assessment that actively engages all students in the learning process. Field-based course. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student, EAMG 4324 or taken concurrently.

**EDMG 3301 Fulfilling Professional Roles and Responsibilities**

Major components covered include reflecting on teaching, maintaining accurate records, communicating, with families, contributing to the school and district, growing and developing professionally, and showing professionalism and advocacy for students. Students will understand the legal and ethical requirements in the State of Texas. Field experience required. Prerequisite: EDCIU 2101 and admission to the School of Education.

**EDMG 4322 Human Development and Instruction**

Major theories of the teaching-learning process and human growth and development as they relate to the middle grade learner will be addressed. Areas emphasized are cultural differences, needs of special learners, developmental appropriateness, and linguistically diverse populations. Field experience required. Prerequisite: EDCI 3304 or EDCI 4301 or concurrent enrollment.

**EDMG 4323 Creating a Positive Productive Classroom Environment**

This course is about creating an environment of respect and rapport, establishing a culture for learning, managing classroom procedures, managing student behavior, and organizing physical space. Future teachers will learn to create a professional atmosphere where routines and procedures are handled efficiently and student behavior is cooperative and nondisruptive. Field experience required. Prerequisite: EDMG 4322 or EDCI 4302 or concurrent enrollment.

**EDMG 4324 Designing Instruction and Assessment to Promote Student Learning**

Knowledge of students, learning goals and objectives will be emphasized. This knowledge will be applied to effective instructional planning and assessment for all students. Field-based course. Prerequisite: EDMG 4323 and concurrent enrollment in EDMG 4325.

**EDMG 4325 Implementing Responsive Instruction and Assessment**

This class emphasizes communication, instruction and assessment strategies, and technology. This knowledge will be implemented to create responsive instruction and assessment which actively engages all students in the learning process. Field-based course. Prerequisite: EDMG 4323 and concurrent enrollment in EDMG 4324.

**EDMG 4341 Understanding Learners in Middle Grade**

Formerly EDCI 4302. This course focuses on the major theories of the teaching-learning process and human growth and development as they relate to the middle school learner. It includes the effect of cultural differences on teaching and learning as well as the needs of special learners. Measure and evaluating student achievement are examined. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education, Paraprofessional status.

### **EDMG 4342 Instructional Planning and Curriculum in Middle Grades**

This field-based course presents principles of curriculum organization and planning based on learners' needs. Students will design instruction to enable middle grade students to reach educational goals and objectives. Long-range planning, lesson planning, and using instructional media and community resources are stressed. The scope, sequence and materials for teaching the middle grades curriculum are studied. Field experiences is required. Lec 3, Cr 3. Prerequisite: EDMG 4341.

### **EDMG 4343 Methods/ Classroom Management in Middle Grades**

Formerly EDCI 4306. This field-based course focuses on practical application of teaching methods based on learning theories and principles. Included in this course are principles of classroom management and organization. Students develop materials to address the learning needs of diverse middle grade learners and procedures for the development of effective learning environments. Field experience is required. Lec 3, Cr 3. Prerequisite: EDMG 4341.

### **EDMG 4345 English Lang Arts Middle Grade**

Formerly EDCI4309. This field-based course integrates theories and best practices in the language arts. Students will develop and implement materials for writing workshops, shared literature, among other materials. Learning to assess student performance and to design instruction based on student needs are emphasized. Field experience is required. Lec 3, Cr 3. EDMG 4341, EDMG 4342, EDMG 4343.

### **EDMG 4347 English Lang Learner Middle Grade**

The focus of this course is on major theories of second language acquisition and best practices in teaching English language learners in the middle grades. Emphasis is on developing proficiency in English across the content areas. Lec 3, Cr 3. EDMG 4341, EDMG 4342, EDMG 4343, ENGL 4328.

### **EDMG 4377 Teaching Science in 4-8 Classrooms**

An intensive examination of various strategies and techniques, specifically related to teaching 4-8 school science. The course will provide a foundation in learning theories, assessment techniques, teaching with various tools, and designing and implementing mathematics lessons for a diverse student population. Prerequisite: EDMG 4322.

### **EDMG 4378 Teaching Mathematics in 4-8 Classrooms**

An intensive examination of various strategies and techniques, specifically related to teaching 4-8 school mathematics. This course will provide a foundation in learning theories, assessment techniques, teaching with various tools, and designing and implementing mathematics lessons for a diverse student population. Prerequisite: EDMG 4322

### **EDMG 4648 Student Teaching in the Middle Grade**

This course places students in the middle grades classroom settings as a practicing teacher to demonstrate teacher competencies. The student teacher will have the opportunity to design and implement instruction, and practice classroom management techniques. Weekly seminars and individual conferences are required. Students will be assigned a full-semester, all day, Monday through Friday placement. Lec 1, Cr 6. Approval by the Teacher Education Committee

## **Education - Reading (READ)**

### **READ 3310 Reading Acquisition**

Psychological, sociological, cultural, physical, and linguistic factors related to reading acquisition; K-3 will be covered in this course. Students will learn how literacy, including listening, speaking, reading and writing, develops

in the young child. Phonemic awareness, phonics, language experience approach, invented spelling, and other instructional strategies will be discussed. Twelve clock hours of observation required. Lec 3, Cr 3.

### **READ 3313 Literacy in the Secondary School**

This course will offer the teacher of secondary reading the opportunity to comply with the essential knowledge skills for reading grades 7 through 12, to include strategies for work attack, vocabulary development, comprehension, and study skills applied to a variety of practical situations. Application of the skills to the teaching of reading in the secondary classroom will also be emphasized. Students will spend 15 clock hours of field experiences observing the teaching of reading in the actual classroom setting. Prerequisite: Minimum 60 hours and passing TASP scores.

### **READ 3323 Literacy in the Elementary School**

The nature of the reading process, beginning reading, appropriate strategies for the acquisition of basic reading skills is the focus of this course. Provisions will be made for the teaching of reading to children who are culturally and linguistically diverse. Students will spend 15 clock hours of field experiences observing the teaching of reading in the actual elementary classroom setting. Prerequisite: READ 3310.

### **READ 3326 Reading Across the Curriculum Elementary**

Analysis of research, study and library skill; examination of reading as applied to the various content areas at the elementary level with focus on effective reading processes across text types and subject-specific vocabulary. Prerequisite: Minimum 60 hours and passing TASP scores.

### **READ 3327 Reading and the Exceptional Child**

Examination of the affective, cognitive, cultural and linguistic correlates of reading disabilities; examination of the characteristics of readers with special needs; analysis of the principles of assessment and relationships to both remediation and enrichment. Prerequisite: READ 3313 or READ 3323 or departmental approval.

### **READ 3329 Diagnosing and Correcting Reading**

This course requires the student to analyze reading difficulties encountered during regular classroom instruction. Early identification and correction are emphasized. An appraisal of materials and techniques useful to classroom teachers are also included. Prerequisite: READ 3313 or READ 3323 or departmental approval.

### **READ 3335 Language Arts in the Elementary School**

This field-based course will focus on reading as an integral part of the language art process and the study the relationships of listening, speaking, writing, reading and language. Elements of the writing process will also be addressed. Students will learn and apply strategies identified as best practices that will support and enhance the interrelated nature of listening, speaking, reading, and writing. Prerequisite: READ 3323, READ 3341.

### **READ 3341 Children's Literature**

A survey of books and related materials for the elementary/middle school age; principles of book selections; intensive reading of books required. Prerequisite: Minimum 60 hours and passing TASP scores.

### **READ 3351 Young Adult Literature**

Emphasis is on the reading and evaluation of literature written for young adults (middle, junior and senior high school students) The selection and reading of a variety of literary genre for the young adult that encompasses literature reflecting cultural, ethnic, and social diversity within a multi-cultural society will be included. Prerequisite: Minimum 60 hours and passing TASP scores.

### **READ 4351 Reading Across Curriculum-Secondary**

This course requires students to analyze the developmental nature of the

reading process for students in secondary schools within a multi-cultural society. Students will be required to apply the appropriate reading strategies to teaching in various content areas in secondary schools. Prerequisite: Minimum 60 hours and passing TASP scores.

**READ 4367 Teaching Reading to Children**

This course provides eight hours of field-based experience each week for 15 weeks. Students will apply knowledge and skills from prerequisite courses in the reading specialization program to determine appropriate instructional strategies to encourage the development of literacy. Prerequisite: READ 3313 or READ 3323 or departmental approval.

**READ 4369 Reading Practicum**

This course provides eight hours of field-based experience each week for 15 weeks. Students will apply knowledge and skills from prerequisite courses in the reading specialization program to determine appropriate instructional strategies to encourage the development of literacy. Prerequisite: Departmental approval.

**Education - Secondary Education (EASC, EASL, ED SL)**

**EASC 4323 Creating a Positive, Productive Classroom Environment: 8th-12th Grade-A.C.P.**

This course is about creating an environment of respect and rapport, establishing a culture for learning, managing classroom procedures, managing student behavior and organizing physical space. Future teachers will learn to create a professional atmosphere where routines and procedures are handled efficiently and student behavior is cooperative and non-disruptive. Field-based course. Lec 3, Lab 3. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**EASC 4324 Designing Instruction and Assessment to Promote Student Learning: 8th-12th Grades-A.C.P**

Knowledge of students, learning goals and objectives will be emphasized. This knowledge will be applied to effective instructional planning and assessment for all students. Field-based course. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**EASC 4325 Implementing Responsive Instruction and Assessment: 8th-12th Grades-A.C.P.**

This class emphasizes communication, instruction and assessment strategies and technology. This knowledge will be implemented to create responsive instruction and assessment that actively engages all students in the learning process. Field-based course. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student, EDSC 4324 or taken concurrently.

**EASL 4307 Foundations of E.S.L.-A.C.P.**

Students will learn the foundations of an English as a second language program. Current research on first and second language acquisition, methods, ESL programs, theories and models will be emphasized. Field experience is required. Lec 3, Lab 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student, EACI 4324 or taken concurrently.

**EDSC 3301 Fulfilling Professional Roles and Responsibilities**

Major components covered include reflecting on teaching, maintaining accurate records, communicating with families, contributing to the school and district, growing and developing professionally, and showing professionalism and advocacy for students. Students will understand the legal and ethical requirements in the State of Texas. Field experience required. Prerequisite: EDCIU 2101 and admission to the School of Education.

**EDSC 4303 Understanding Learners 8-12**

Formerly EDCI4303. The principal focus of this course is on major theories of the teaching-learning process and human growth and development as they relate to the secondary school. It includes the effect of cultural differences upon teaching as well as the needs of special learners. Measuring and evaluating student achievement are examined. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education Program.

**EDSC 4322 Human Development and Instruction**

Major theories of the teaching-learning process and human growth and development as they relate to the secondary student will be addressed. Areas emphasized are cultural differences, needs of special learners, developmental appropriateness, and linguistically diverse populations. Field experience required. Prerequisite: EDSC 3304 or EDCI 4301 or concurrent enrollment.

**EDSC 4323 Creating a Positive Productive Classroom Environment**

This course is about creating an environment of respect and rapport, establishing a culture for learning, managing classroom procedures, managing student behavior, and organizing physical space. Future teachers will learn to create a professional atmosphere where routines and procedures are handled efficiently and student behavior is cooperative and nondisruptive. Field-experience required. Prerequisite: EDSC 4322 or EDCI 4302 or EDSC 4303 or concurrent enrollment.

**EDSC 4324 Designing Instruction and Assessment to Promote Student Learning**

Knowledge of students, learning goals and objectives will be emphasized. This knowledge will be applied to effective instructional planning and assessment for all students. Field-based course. Prerequisite: EDSC 4323 and concurrent enrollment in EDSC 4325.

**EDSC 4325 Implementing Responsive Instruction and Assessment**

This class emphasizes communication, instruction and assessment strategies, and technology. This knowledge will be implemented to create responsive instruction and assessment which actively engages all students in the learning process. Filed-based course. Prerequisite: EDSC 4323 and concurrent enrollment in EDSC 4324.

**EDSC 4329 Meth/Tech of Teach Music Secondary School**

This course provides an introduction to basic choral literature for intermediate and secondary school choirs, small ensemble literature, solo vocal repertoire: jazz/show choir choreography, concert programming, sight reading methods, and texts. It also surveys the rules, regulations and competitions of the University Interscholastic League and the Texas Choral Directors Association. Prerequisite: MUSI 1308, MUSI 1312, MUSI 3289.

**EDSC 4374 The Secondary Curriculum**

The emphasis of this course is on instructional planning, recent instructional trends, and the various uses of technology and its effects on the curriculum. This course provides the necessary knowledge and techniques to develop a curriculum and effective assessment and evaluation program for diverse learners. Field experience is required. Lec 3, Cr 3. Prerequisite: EDCI 4301, EDSC 4303.

**EDSC 4375 Methods and Techniques of Teaching in Secondary Schools**

This course focuses on the implementation of effective teaching techniques for individual and group settings at the secondary school. The course provides a repertoire of teaching strategies to motivate and engage students in the learning process with use of appropriate educational media and technology. The instructional needs of a diverse student population

are emphasized. Opportunities to practice effective teaching techniques are offered. Field experience is required. Lec 3, Cr 3. Prerequisite: EDCI 4301, EDSC 4303.

**EDSC 4376 Ethical Standards and Classroom Management 8-12**

This course will provide students the necessary knowledge and skills to establish a positive learning environment, manage the classroom effectively, and promote positive relationships with students, parents and the community. Best practices in the classroom management and ethical standards regarding professional conduct are stressed throughout the course. Field experience is required. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education.

**EDSC 4377 Methods and Techniques of Teaching Art in Secondary Schools**

This course introduces the methods and techniques of presenting art materials at the secondary level including audiovisual technology and content including historical background, public school curriculum, philosophical implications, testing and evaluation. Prerequisite: ARTS 1304, ATRS 1312, ARTS 1316, ARTS 3381, ARTS 3382.

**EDSC 4378 Teaching Math in 8-12 Classrooms**

This course exams issues, strategies and techniques, specifically related to teaching 8-12 school mathematics. The course also provides a foundation in learning theories, assessment techniques, teaching with various tools, and designing and implementing mathematics lessons for a diverse student population. Lec 3, Cr 3. Prerequisite: Admission to Teacher Education.

**EDSC 4379 Teaching Science in 8-12 Classroom**

This course allows students to synthesize learning, the code of ethics, history and philosophy of education and legal issues in education. Emphasis is also given to classroom management and motivation. This course will also focus on characteristics and assessment requirements of student with special needs in an inclusive setting. Current issues dealing with the assessment of diverse learners will be addressed. A minimum of six hours of field experience per week is required. Prerequisite: Acceptance in Teaching Education.

**EDSC 4380 Teaching E.S.L 8-12**

This course introduces the principles, methods for teaching English language learners. Students will apply the principles at the secondary level. It emphasizes cognition, sociolinguistics, and multiculturalism in lesson presentations, unit planning and assessment. Lec 3, Cr 3. Prerequisite: EDSC 4375

**EDSC 4398 Student Teaching All Level**

Formerly EDCI 4398. This course places students in the 8-12 classroom settings as a practicing teacher to demonstrate teacher competencies. The student teacher will have the opportunity to design and implement instruction, and practice classroom management techniques. Weekly seminars and individual conferences are required. Students will be assigned a full-semester, all-day, Monday through Friday placement and must be enrolled in EDCI 4311. Lec 1, Cr 3. Prerequisite: Approval by the Teacher Education Committee and concurrent enrollment in EDCI 4311.

**EDSC 4641 Student Teaching, Secondary**

Formerly EDCI4641. Student teaching for one teaching field of 36 hours requires a complete semester of full-day student teaching in an approved, accredited school, and weekly seminars. Lec 1, Cr 6. Prerequisite: Approval by the Teacher Education Committee.

**EDSC 4676 Educational Experience At Secondary Level**

This course allows students to synthesize learning, the code of ethics, history and philosophy of education and legal issues in education. Emphasis is also given to classroom management and motivation. This course will

also focus on characteristics and assessment requirements of student with special needs in an inclusive setting. Current issues dealing with the assessment of diverse learners will be addressed. A minimum of six hours of field experience per week is required. Prerequisite: EDCI 4301, EDSC 4303, EDSC 4374, EDSC 4375.

**EDSL 4306 Content Area Method in E.S.L. Classroom**

This course focuses on the current methods and theories of planning and teaching elementary math, science, and social studies or English language learners with a strong emphasis on an interdisciplinary approach to instruction. Linguistic and cognitive issues for language minority students are addressed. Field-experience is required. Prerequisite: EDCI 4322 or EDCI 4302.

**EDSL 4307 Foundations of E.S.L.**

Students will learn the foundations of an English as second language program. Current research on first and second language acquisition, ESL programs, theories, and models will be emphasized. Field experience is required. Lec 3, Cr 3. Prerequisite: EDCI 3304 or EDCI 4301 and EDCI 4322 or EDCI 4302

**EDSL 4308 Teaching E.S.L. in 2nd-4th Grade**

This course focuses on research-based best practices for teaching second language learners in 2nd-4th grade including instruction in sheltered English strategies, CALLA and other appropriate methodology. Students will learn to assess biliteracy development and also analyze the cognitive, psycholinguistic, and social factors that affect second language learning. Lec 3, Cr 3. Prerequisite: EDCI 4301, EDCI 4302.

## **Education - Special Education (SPED, SPEA)**

**SPEA 3390 Introduction to Except Child-A.C.P**

This course examines the philosophical, historical and legal foundations of special education. Emphasis is placed on the characteristics and needs of individuals with disabilities from early childhood through the transition into adulthood. Specific needs for individualization such as assistive technology and related services are addressed. Prerequisite: Alternative Certification Program departmental approval to enroll student.

**SPEA 4320 Legal Roles of Special Education-A.C.P**

This course examines legal and ethical issues of special education. Roles and responsibilities of special educators, administrators and related support personnel are discussed in addition to the relationship between assessment and instructional planning for students at different levels (EC-12) An emphasis is placed on collaboration during key transition periods. Lec 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student, SPEA 3390 or taken concurrently.

**SPEA 4330 Problems in Language and Literacy for Individuals With Special Needs-A.C.P.**

This course examines monolingual and bilingual language development and literacy acquisition for students at different levels (EC-12), with emphasis on common communication disorders. Emphasis will be placed on assessment of culturally and linguistically diverse populations, the need for assistive technology and social skills interventions. Lec 3, Cr 3.

**SPEA 4380 Classroom Instruction for Individuals With Special Needs-A.C.P**

This course will examine assessment and instructional methods, techniques and strategies used in special education to promote academic performance in all content areas including math, language arts and reading. Emphasis is placed on facilitating achievement in a variety of settings and situations for students at different levels (EC-12). Lec 3, Cr 3. Prerequisite: Alternative Certification Program departmental approval to enroll student; SPEA

4330 or taken concurrently.

**SPED 3390 Introduction to Exceptional Children**

This course is an introduction to the physical and psychological characteristics of the exceptional child. Emphasis is on the theory, characteristics, and educational planning for learners with special needs. Prerequisite: Admission to Teacher Education and EDCI 3304.

**SPED 4302 Cognitive Development Association With Exceptional Children**

This course studies theories of cognitive development and their application to children's critical thinking and problem-solving skills. Individual differences associated with mild and moderate exceptionalities will be emphasized. Lec 3, Cr 3. Prerequisite: SPED 3370, may be taken concurrently with SPED 4301, SPED 4385, SPED 4372.

**SPED 4307 Field Experiences in Generic Special Education**

This course will provide students with field experience teaching mentally retarded, learning disabled and emotional disturbed children. Training for parents of exceptional children will be included. Lec 3, Cr 3. Prerequisite: SPED 3370.

**SPED 4313 Directed Teaching - Generic Special Education**

This course must be taken by all undergraduate students working toward special education certification. The course requires observing and teaching in a public school special education classroom all day, Monday through Friday, for six weeks. This work is done under the direction of a fully certified teacher of the class to which the student is assigned and under the supervision of a college professor who observes and evaluates the student's process. Seminars and individual conferences are a required part of the course. Lec 3, Cr 3. Prerequisite: 18 hours of upper level special education courses. Approval by the Teacher Education Committee. Students must also be enrolled in EDCI 4311, EDSC 4398 or EDSC 4641.

**SPED 4320 Legal Roles and Responsibilities of the Special Educator**

This course examines the legal and ethical issues of special education. The roles and responsibilities of special educators, administrators, and related support personnel are discussed in addition to the relationship between assessment and instructional planning for students at different levels (EC-12). An emphasis is placed on the need for collaboration during key transition periods in an individual's life. Prerequisite: SPED 3390 or may be take concurrently.

**SPED 4330 Problems in Language and Literacy for Individuals With Special Needs**

This course examines monolingual and bilingual language development and literacy acquisition for students at different levels (EC-12), with an emphasis on common communication disorders. Issues related to assessment, such as the needs of culturally and linguistically diverse populations, will be addressed. Related issues and common problems such as the need for assistive technology or social skills interventions will also be addressed. Prerequisite: SPED 3390 or may be taken concurrently.

**SPED 4370 Foundations of Special Education**

Formerly SPED 4372. This course addresses the characteristics of students with disabilities, especially as these characteristics influence the teaching/learning process in the general education classroom. The roles and responsibilities for general educators and special educators, as outlined by the major laws and litigation, are discussed. In addition to assessment and identification procedures for second language learners suspected of having a disability. The dynamic relationship among school, family, and community, especially as they relate to culturally and linguistically diverse students with disabilities, and also examined. Lec 3, Cr 3.

**SPED 4375 Testing and Assessment of Exceptional Children**

For General Education Teachers. This course examines formal and informal procedures used to identify the academic and behavioral needs of exceptional learners. An emphasis is placed on the nonbiased assessment of the bilingual child. Lec 3, Cr 3. Prerequisite: SPED 3370, SPED 4301, SPED 4302, SPED 4385, may be taken concurrently with SPED 4395.

**SPED 4380 Classroom Instruction for Individuals with Special Needs**

This course will examine the assessment and instructional methods, techniques and strategies used in special education to promote an individual's academic performance in all content areas including math, language arts, and reading. An emphasis is placed on facilitating achievement in a variety of settings and situations for students at different levels (EC-12). Prerequisite: SPED 4320 and SPED 4330.

**SPED 4386 Modifications Inclusive Setting**

For General Education Teachers. This course focuses on instructional and behavioral strategies for teaching students with mild/moderate disabilities in inclusive settings. Emphasis is placed on techniques and strategies that enhance language and literacy development. Modifications related to language arts, mathematics, and science instruction, as well as various behavior management strategies, are addressed. Lec 3, Cr 3.

**SPED 4395 Practicum in Generic Special Education**

Formerly SPED 4309. This course provides field experiences in working with learners with exceptional needs. Students practice assessment procedures, teaching strategies and classroom management techniques under the supervision of a certified classroom teacher and university instructor. Lec 3, Cr 3. Prerequisite: SPED 4380.

**Education (EDUC, EDUCU)**

**EDUC 1301 Introduction to the Teaching Profession**

This course introduces students to education in society by analyzing historical, social, political, economic, cultural, global, and legal issues in education.

**Electrical Engineering Technology (ELET, INMT)**

**EECT 1367 Practicum-Electronics I**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. This course may repeat the practicum as EECT 2366 or EECT 2367 if topics and learning outcomes vary. Cr 3.

**EECT 2366 Practicum-Electronics II**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. Cr 3.

**EECT 2367 Practicum-Electronics III**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be for pay or no pay. Cr 3.

**ELETU 2140 Electronic Instrumentation Laboratory**

This is a practical survey course in electronic laboratory instruments.

Students learn trouble-shooting techniques using multimeters, digital oscilloscopes, digital waveform generators, and precision power supplies. Issues in accuracy and precision of measurements are defined and tested. Lab 3, Cr 1. Prerequisite: ELETU 2460.

#### **ELET 3314 Instrumentation and Control**

Computer-based instrumentation and control systems including transducers, sensors, signal conversion and conditioning, amplification, filtering and offsetting. Lec 2, Lab 3, Cr 3. Prerequisite: ENGT 1409 or ENGT 1402.

#### **ELET 3350 Special Topic: Electronics Engineering Technology Junior Level**

A special topic is offered as an elective in Electronic Engineering Technology at the junior level. Different sections may cover different topics in a semester, under special topics, courses related to new developments in the area of electronic engineering technology will be offered. Cr 3.

#### **ELET 3412 Introduction to Microprocessors**

Architecture, hardware signals, instruction sets, addressing modes and assembly language programming on 16 and 32 bit processors. Topics include memory and serial and parallel I/O interfacing, wait state analysis, sub-routine and interrupt processing. Lec 3, Cr 3. Prerequisite: ELET 2401 or ENGT 1407 and ELETU 2415 and INMT 1291. Lec 3, Lab 3, Cr 4.

#### **ELET 3413 Microprocessor Interfacing**

Techniques for system development using microprocessors. Hardware interfacing and C language programming of microprocessor-based data acquisition and control systems. Lec 3, Lab 3, Cr 4. Prerequisite: ELET 3412.

#### **ELET 3431 Introduction to Telecommunications**

Introduction to telecommunications principles including analysis of modulation and multiplexing, transmission media, switching techniques and modern communications models and standards. Lec 3, Lab 3, Cr 3. Prerequisite: ELET 2430 and ENGT 3303 or PHYS 3392

#### **ELET 3440 Electric Machinery**

This is Calculus-based exploration of electric machinery and electronic control or machinery. Topics include: electrical circuits and machines, circuit elements, voltage, current and power, transient, poly-phase circuits, types and characteristics of DC motors, AC motors and transformers. Speed control of various motor types will be presented. This course is hands-on with an electrical machinery laboratory. Prerequisite: ENGT 1402 or ENGT 1409 and MATH 2414. Lec 3, Lab 3, Cr 4.

#### **ELET 4350 Special Topics: Electronics Engineering Technology Senior Level**

A special topic is offered as an elective in electronic engineering technology as the senior level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of electronic engineering technology will be offered. Cr 3.

#### **ELET 4423 Control Systems**

Study of the classical closed-loop control systems. Major topics include Laplace and z-transforms, second order plants, compensation, proportional-integral-derivative control, continuous and discrete time domain analysis and design and computer-based design and analytical tools. Lec 3, Lab 3, Cr 4. Prerequisite: ELET 3303 or PHYS 3392. Lec 3, Lab 3, Cr 4.

#### **ELET 4424 Power Distribution**

General considerations in the transmission and distribution of electrical energy as related to power systems. Topics will also include survey of commercially available components and systems, safety requirements and safety techniques. Lec 3, Lab 3, Cr 4. Prerequisite: ELET 3440. Lec 3,

Lab 3, Cr 4.

#### **ELETU 1150 Electronic Fabrication Laboratory**

Students will fabricate a low voltage power supply or other circuit. They will develop skills in component identification and electronic assembly, which includes lead cutting, bending and soldering. They will learn use of a voltmeter and ohmmeter. They will see the operation of their circuits displayed on an oscilloscope, and become familiar with AC and DC waveforms. Lec 0, Lab 3, Cr 1.

#### **ELETU 2410 Electronics I: Semiconductor Devices**

Electrical characteristics of silicon, fabrication of silicon devices, and operation of bipolar junction diodes and transistors are the main topics of this course. Diode circuits and applications are described, built, and investigated. Transistor Biasing is the third topic of this course. Electronic devices are investigated both in the classroom and in the laboratory. Prerequisite: MATH 2413 and concurrent enrollment in ENGT 1402. Lec 3, Lab 3, Cr 4.

#### **ELETU 2415 Programming for Technologists**

This is the second course in programming for technologists. Students will be introduced to C/C++ and will learn to write and implement C/C++ applications typical of engineering technology. The course will be taught "hands-on" in one of the Engineering Technology computer laboratories. Prerequisite: MEETU 1301. Lec 3, Lab 3, Cr 4.

#### **ELETU 2430 Electronics II -Semiconductor Circuits**

This course is the second course of a two-semester electronics sequence. The course begins with a study of bipolar junction transistor (BJT) amplifier circuit configurations. Other transistor types, including FET and MOS, are then studied with circuit applications. Differential amplifiers are built studied, leading to a study of integrated circuit operational amplifiers (OPAMPS) and applications. Active filters are studied and built. Prerequisite: ELETU 2410, ENGT 1402 and MATH 2414. Lec 3, Lab 3, Cr 4.

#### **INMT 1291 Special Topics in Industry/Mfg Tech/Tech**

Topics address recently identified current events, skills, knowledge, and/or attitudes and behaviors pertinent to the technology or occupation and relevant to the professional development of the students. This course serves as a capstone experience to integrate the learning from the first three semesters of the Associate degree in Engineering Technology by the solution of an industrial problem or equivalent. Problems will focus on Mechanical or Manufacturing issues and will include problem solving, design, development, fabrication and testing tasks.

### **Emergency Medical Technology (EMSP)**

#### **EMSP 1019 C.P.R. Basic Life Support**

Instruction in lifesaving skills of respiratory (choking and near-drowning) and cardiac emergencies involving adults, children, and infants. Must meet requirements of certifying agency. Lec 0, Lab 2, Credit 0

#### **EMSP 1147 Pediatric Advanced Life Support**

A course in the management of the pediatric patient experiencing difficulties in medical and/or trauma related emergencies.

#### **EMSP 1149 Pre-Hospital Trauma Life Support**

Intense skill development in emergency field management, systematic rapid assessment, resuscitation, packaging, and transportation of patients. Includes experience necessary to meet initial certification requirements. Lec 0 Lab 3 Cr 1.

#### **EMSP 1208 Emergency Vehicle Operations**

Instruction, demonstration, and driving range practice to prepare drivers of emergency vehicles to operate their vehicles safely in the emergency and

non-emergency mode. Lec 2, Lab 0, Cr 2.

### **EMSP 1209 Emergency Medical Dispatching**

Study of principles and procedures used in emergency medical dispatching. Emphasis on general principles of information exchange and communication theory including various types of emergency medical service communication systems and their operating principles and procedures. Lec 2, Lab 0, Cr 2.

### **EMSP 1266 Practicum/EMT/Technician I**

Practical general training and experiences in the workplace. The college with the employer develops and documents and individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 16, Cr 2.

### **EMSP 1267 Practicum/E.M.T/ Technician II**

Practical general training and experiences in the workplace. The college with the employer develops and documents and individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 16, Cr 2.

### **EMSP 1356 Patient Assessment and Airway Management**

A detailed study of knowledge and skills required to reach competence in performing patient assessment and airway management. Lec 2, Lab 2, Cr 3.

### **EMSP 1401 Emergency Medical Technician-Basic**

Introduction to the level of Emergency Medical Technician (EMT). Basic includes all the skills necessary to provide emergency care at a basic level with an ambulance service or other specialized services. Lec 3, Lab 4, Cr 4.

### **EMSP 2135 Advanced Cardiac Life Support**

Skill development for professional personnel practicing in critical care units, emergency departments, and paramedic ambulances. Establishes a system of protocols for management of the patient experiencing cardiac difficulties. Lec 0, Lab 3, Cr 1.

### **EMSP 2243 Assessment Based Management**

The capstone course of the EMSP program. Designed to provide for teaching and evaluation comprehensive, assessment-based patient care management. Lec 1 Lab 2 Cr 2.

### **EMSP 2266 Practicum/E.M.T/Technician III**

Practical general training and experiences in the workplace. The college with the employer develops and documents individualized plan for the students. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 16, Cr 2.

### **EMSP 2267 Practicum/E.M.T/Technician IV**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course maybe repeated if topics and learning outcomes vary. Lec 0, Lab 16, Cr 2.

### **EMSP 2345 E.M.S Supervision/Management**

Instruction, literary review group discussion, and case study on topics pertinent t the emergency medical service (EMS) field supervisor or manager. Lec 2 Lab 2 Cr 3.

### **EMSP 2434 Medical Emergencies**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of ill or injured patients with medical

emergencies. Lec 3, Lab 2, Cr 4.

### **EMSP 2444 Cardiology**

A detailed study of the knowledge and skills necessary to reach competence in the assessment and management of patients with cardiac emergencies. Lec 3, Lab 4, Cr 4.

## **Engineering (ENGR)**

### **ENGR 1101 Introduction to Engineering**

Introduction to engineering as a discipline and a profession. The course includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefits of society. Lec 1, Lab 0, Cr 1.

### **ENGR 1201 Introduction to Engineering**

Engineering as a career, considering the various fields of engineering, history, and professionalism. Basic engineering analysis and problem solving, introducing calculators and computers. Lec 2, Cr 2. Prerequisite: MATH 1316 or MATH 1348 or MATH 2312.

### **ENGR 1204 Engineering Graphics I**

Introduction to spatial relationships, multiview projection and sectioning, dimensioning, graphical presentation of data, and fundamental of computer graphics. Lec 1, Lab 3, Cr 2.

### **ENGR 1205 Engineering Graphics II**

Introduction to spatial relationships, multiview projection and sectioning, dimensioning, graphical presentation of data, and fundamentals of computer graphics. Prerequisite: ENGR 1204. Lec 1, Lab 3, Cr 2.

### **ENGR 2301 Engineering Mechanics I – Statics**

This course is a calculus-based study of composition and resolution of focuses, equilibrium of forces system, friction, centroids, and moments of inertia. Prerequisite: PHYS 1401 and MATH 2313. Corequisite: MATH 2314. Lec 3, Lab 0, Cr 3.

### **ENGR 2302 Engineering Mechanics II - Dynamics**

This course is a calculus-based study of dynamics of rigid bodies, force-mass-acceleration, work-energy, and impulse-momentum computation. Prerequisite: ENGR 2301. Corequisite: ENGT 3301.

### **ENGR 2332 Mechanics of Materials**

Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses are the main topics of this course. Prerequisite: ENGR 2301. Lec 3, Lab 0, Cr 3.

### **ENGR 3303 Thermodynamics**

This course covers the zeroth, first and second laws of thermodynamics, fluid properties, conduction, convection and radiant heat transfer. Prerequisite: Calculus II. Lec 3, Lab 0, Cr 3.

### **ENGR 3304 Mechanics of Materials**

This course is on stresses, deformations, stress-stain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses. Prerequisite: ENGR 2301. Lec 3, Lab 0, Cr 3.

### **ENGR 3320 Linear Circuits**

Signal and device models and laws used in the analysis of linear circuits are introduced. Topics include Ohm's Law, Kirchoff's Laws, the power law, node and mesh analysis, superposition, Thevinin and Norton equivalents, phasor representation, Laplace transform analysis, and frequency- and s-domain analysis, including pole/zero plots and transfer functions. Prerequisite: PHYS 2326, PHYS 2126, and MATH 2321. Lec 3, Lab 0, Cr 3.

### **ENGR 3405 Engineering Materials**

This course is an introduction to the structure, properties, processing,

destructive and non-destructive testing, and engineering applications of ferrous and non-ferrous metals, plastics, polymers, composites and ceramics. The laboratory includes mechanical and physical testing, metallographic procedures, heat treatment, surface treatment and failure analysis. An emphasis is placed on material selection, testing, and validation. Prerequisite: MATH 2413, CHEM 1311 and CHEM 1111. Lec 3, Lab 3, Cr 4.

#### **ENGR 3421 Electronics I**

The electrical characteristic of silicon, fabrication of silicon devices, and operation of bipolar junction diodes and transistors are the main topics of this course. Diode circuits and applications are described, built, and investigated. Transistor biasing is the third topic of this course. Electronic devices are investigated both in the classroom and in the laboratory. Prerequisite: ENGR 3320 and MATH 2413. Lec 3, Lab 3, Cr 4.

#### **ENGR 4242 Senior Design Project I**

This course begins with project definition, task analysis and planning, and project control, for an industry-based major design project. It concludes with the beginning of work on the project. Prerequisite: Senior standing and consent of advisor. Lec 0, Lab 6, Cr 2.

#### **ENGR 4243 Senior Design Project II**

This course is the continuation of ENGR 4242. Completion of industry-based design project. Prerequisite: ENGR 4242. Lec 0, Lab 6, Cr 2.

#### **ENGR 4308 Design Graphics With Solid Modeling**

This course is an introduction to spatial relationships, multiview projection and sectioning, geometric dimensioning and tolerancing, graphical presentation of data, and fundamentals of computer graphics, and solid modeling. Prerequisite: Consent of advisor. Lec 2, Lab 3, Cr 3.

#### **ENGR 4309 Mechanical Subsystem Design**

This course deals with the selection and computer-aided graphical representation of mechanical subsystems for the transmission of mechanical power and/or generation of mechanical motion. Component selection of gears, cams, belt and chain drives, clutches and transmissions will use data sources of contemporary manufacturers ranging from vendor catalogs to computerized databases. Prerequisite: ENGR 2302. Lec 2, Lab 3, Cr 3.

#### **ENGR 4322 Electronics II**

The course begins with a study of bipolar junction transistor (BJT) amplifier circuit configurations. Other transistor types, including FET and MOS, are then studied with circuit applications. Differential amplifiers are built and studied, leading to a study of integrated operational amplifiers (OPAMPS) and applications. Active filters are studied and built. Prerequisite: ENGR 3421. Lec 3, Lab 0, Cr 3.

#### **ENGR 4326 Power Electronics**

Power Electronics deals with power diodes and transistors; static converters; d c power supplies; power transistor circuits; silicon-controlled rectifiers classical and modern forced-commutation inverters; choppers, cycloconverters, and applications in power. Prerequisite: ENGR 4322. Lec 3, Lab 0, Cr 3.

#### **ENGR 4406 Mechanics III**

This course deals with the analysis and applications of fluid mechanics and fluid power to mechanical systems, components and control of hydraulic and pneumatic systems. Prerequisite: ENGR 3304.

#### **ENGR 4407 Manufacturing Process Technologies**

This course is an introduction to manufacturing process including metal cutting, measurements and metrology, deformation processes, casting, welding, joining, and composites. Prerequisite: ENGR 3405 and ENGR 4308.

#### **ENGR 4423 High Frequency Engineering**

High Frequency Engineering deals thoroughly with the particular problems faced when working with microwave frequencies, from microwave devices to satellite communications. Prerequisite: PHYS 2326, PHYS 2126, MATH 2321, and ENGR 3421. Lec 3, Lab 3, Cr 4.

#### **ENGR 4424 Electric Machinery**

This course is an exploration of electric machinery and electronic control of machinery. Topic include: electric circuits and machines, circuit elements, voltage, current, and power, transients, poly-phase circuits, types and characteristics of DC motors, AC motors, and transformers. Speed control of various motor types will be presented. This course is hands-on with an electrical machinery laboratory. Prerequisite: ENGR 3320. Lec 3, Lab 3, Cr 4.

#### **ENGR 4425 Analog and Digital Communications**

This course is an introduction to telecommunications principles including analysis of modulation and multiplexing, transmission media, switching techniques and modern communications models and standards. Prerequisite: ENGR 4322 and PHYS 3490. Lec 3, Lab 3, Cr 4.

#### **ENGR 4441 Control Systems**

Classical closed-loop control systems are studied. Major topics include Laplace and Z-transforms, second order plants, compensation, proportional-integral-derivative control, continuous and discrete time domain analysis and design, and computer-based design and analytical tools. Prerequisite: PHYS 3490. Lec 3, Lab 3

### **Engineering Technology (ENGT)**

#### **ENGT 1101 Introduction to Engineering Technology**

An introduction to the concepts and tools of engineering technology, and engineering technology careers. Includes team based and individual projects in understanding mechanical systems, problem analysis, problem management and problem solving techniques, an introduction to computer usage, communication, visualization, graphics and illustration, machine and hand shop tools and safe practices in machine, tool and lab usage. Lec 0, Lab 3, Cr 1.

#### **ENGT 1401 Circuits I**

Fundamental concepts including potential, current and power in electric circuits. Ohm's law, the power law, equivalent circuit theorems, phasor notation, and frequency analysis applied to circuits and networks of resistors, capacitors, inductors, and sources. Magnetism and single-frequency concepts introduced. Circuit simulation software, test and measurement will be introduced. Prerequisite: High School Trigonometry or MATH 1316 or MATH 1412 or MATH 2413, PHYS 1301 or PHYS 1401 or PHYS 2425. Lec 3, Lab 3, Cr 4.

#### **ENGT 1402 Circuits II**

Complex AC circuits including transient analysis. Network theorems are applied to the solution of AC circuits. Resonance, filters, AC power and three-phase circuits are covered in detail. Continued applications of calculators and computer design and analysis of circuits. Use of standard instrumentation for testing and measurement of AC circuits and systems. Prerequisite: ENGT 1401. Lec 3, Lab 3, Cr 4.

#### **ENGT 1407 Digital Fundamentals**

Analysis, design, and simulation of combinational and sequential systems using: classical Boolean algebra techniques, laboratory hardware experiments and computer simulation. Introduction to programmable logic devices (PLDs) and application-specific integrated circuits using software tool to the design and analysis of digital logic, circuits and systems. Standard instrumentation used in testing digital circuits and systems will be intro-



duced. Prerequisite: MATH 1316 or MATH 1412. Lec 3, Lab 3, Cr 4.

#### **ENGT 1409 Introduction to Electrical Technology**

Fundamentals of DC circuits and AC circuits operation including Ohm's law, Kirchoff's law, networks, transformers, resonance, phasors, capacitive and inductive and circuit analysis techniques. Prerequisite: MATH 1316 or MATH 1412 OR MATH 2413, PHYS 1302 or PHYS 1402 or PHYS 2426 or concurrently enrolled, or approval of instructor. Lec 3, Lab 3, Cr 4.

#### **ENGT 2130 Engineering Communications**

Application of modern computer tools to analysis and presentation of engineering and technical information. Emphasis on critical thinking techniques in group communication settings. Lab 3, Cr 1. Prerequisite: ENGL 1301, ENGT 1101, MEET 1301, and ENGL 1302 or concurrent enrollment. Lec 0, Lab 3, Cr 1.

#### **ENGT 2303 Probability and Statistics**

Introduction to concepts of variation, randomness, distribution analysis and probability theory with applications in quality control and reliability. Lab 3, Cr 1. Prerequisite: MATH 2413. Lec 3, Lab 0, Cr 3.

#### **ENGT 2341 Applied Mathematics for Technology I**

Application of interactive and computer based software for solving problems in dynamic systems. May not taken for credit toward graduation by students pursuing baccalaureate degree in Engineering Technology. Lec 2, Lab 3, Cr 3. Prerequisite: MATH 1348. Lec 2, Lab 3, Cr 3.

#### **ENGT 2342 Applied Mathematics for Technology II**

Continuation of ENGT 2341. Prerequisite: ENGT 2341. Lec 2, Lab 3, Cr 3.

#### **ENGT 2401 Engineering Materials**

This course is an introduction to the structure, properties, processing, destructive and non-destructive testing and engineering technology applications of ferrous and non-ferrous metals, plastics, polymers, composites and ceramics. Laboratory includes mechanical and physical testing, metallographic procedures, heat treatment, surface treatment and failure analysis. Emphasis on Material selection, testing and validation. Prerequisite: MATH 1412, CHEM 1311, CHEM 1111. Lec3, Lab 3, Cr 4.

#### **ENGT 3301 Advanced Analytical Mathematics**

Application of computer systems for the solution of advanced calculus and differential equation problems. Lec 2, Lab 3, Cr 3. Prerequisite: MATH 2314. Lec 2, Lab 3, Cr 3.

#### **ENGT 3303 Analysis for Technologists**

Analytical and computer software methods for the practical solutions of physical models of electromechanical systems. Solutions of differential equations of the first and second order, homogeneous and non-homogeneous, emphasizing linear equations with constant coefficients, harmonic analysis through Fourier series, applications of Laplace transforms and applications to probability and statistics. Emphasis on the application of mathematical models to the understanding of engineering systems and problem solving. Lec 3, Cr 3. Prerequisite: ENGT 3301. Lec 3, Lab 0, Cr 3.

#### **ENGT 3320 Engineering Economics**

Analysis of the economic performance of Manufacturing systems, analysis of projects and selections from among alternatives. Covers cost classifications, profit and productivity, internal rate of return and time value concepts. Lec 3, Lab 0, Cr 3.

#### **ENGT 3325 Junior Laboratory and Directed Research**

Special research or laboratory project carried out under the direction of a member of the Engineering Technology Faculty. Prerequisite: Consent of advisor and supervising faculty member. Cr 3.

#### **ENGT 3350 Special Topics: Engineering Technology Junior Level**

A special topics is offered as an elective in engineering technology at the junior level. Different topics in a semester. Under special topics, courses related to new developments in the area of engineering technology will be offered. Lec 3, Cr 3.

#### **ENGT 4140 Classical Foundations**

Classical writers of various cultures with a focus on those contributing to modern thought, especially that of science and technology, including Archimedes, Aeschylus, Thucydides, Newton, and others and examples of engineering and technical development in various cultures. Prerequisite: Senior standing and consent of advisor. Lec 1, Lab 0, Cr 1.

#### **ENGT 4241 Senior Design Project I**

Project definition, task analysis and planning, project control. Begins work on industry-based major design project. Prerequisite: INMT 1291, Senior standing and consent of advisor. Lec 0, Lab 6, Cr 2.

#### **ENGT 4242 Senior Design Project II**

Continuation of ENGT 4241. Completion of industry-based design project. Prerequisite: ENGT 4241. Lec 0, Lab 6, Cr 2.

#### **ENGT 4320 Senior Lab and Directed Research**

Special research or laboratory project carried out under the direction of a member of the Engineering Technology faculty. Requires consent of advisor and permission of supervising faculty member. Prerequisite: Consent of advisor and supervising faculty member. Lec 0, Lab 9, Cr 3.

#### **ENGT 4350 Topics in Engineering Technology**

Topics vary to meet student and employer needs. May be taken twice for credit provided topics are different. Lec 3, Lab 0, Cr 3.

#### **ENGTU 2350 Special Topic: Engineering Technology Sophomore Level**

A special topic is offered as an elective in engineering technology at the sophomore level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of engineering technology will be offered.

### **English (ENGL)**

#### **ENGL 0101 Writing Lab**

Developmental course. Practice in expository and argumentative essay writing for students who have failed the portion of TASP but who are not qualified for ESOL 0388, ENGL 0320, or ENGL 0321. Students will write at least one full essay a week and will complete exercises as individually assigned in order to develop particular skills of idea generation, sentence style, word choice, and organization patterns. May be repeated as ENGL 0102, 0103, 0104. Lab 2, Cr 1.

#### **ENGL 0320 College Writing Skills I**

Developmental course. Practice in the fundamentals of written English. The emphasis is on functional writing for successful completion of assignments. Fundamentals of grammar, mechanics, and organization are stressed in the production of clear sentences, paragraphs, and multi-paragraph themes to address specific audiences. Students may be required to attend sessions at the Writing Lab. Students must enroll for READ 0320 or READ 0321 concurrently or demonstrate appropriate assessment scores in reading. Lec 3, Cr. Prerequisite: ESOL 0318 with minimum grade of C, or appropriate assessment score in writing.

#### **ENGL 0321 College Writing Skills II**

Developmental course. A continuation of practice in fundamental skills begun in ENGL 0320. Continued practice in audience analysis, organization, and affective sentences. Students may be required to attend sessions

at the Writing Lab. Students must enroll for READ 0320 or READ 0321 concurrently or demonstrate appropriate reading assessment scores. Lec 3, Cr 3. Prerequisite: ENGL 0320 with minimum grade of C, or appropriate assessment score in writing.

### **ENGL 1301 Composition I**

Expository writing with emphasis on thinking and composing skills required to write full-length essays on topics of personal experience, current issues, and Material in published essays. Students will practice some research skills and produce a documented paper employing in-text citations. Lec 3, Cr 3. Prerequisite: A in ENGL 0320, ENGL 0321 with minimum grade of C, or placement based on assessment scores.

### **ENGL 1302 Composition II**

Continuation of ENGL 1301. This course is a continuation of ENGL 1301 and emphasizes analytical writing in response to literature. A research essay is required. Prerequisite: ENGL 1301.

### **ENGL 2311 Technical Writing**

Technical writing adapted to students in programs leading to bachelor's degrees in Engineering and Business Administration. Topics for reports, statistical tables and graphs, business letters, memoranda and primary and secondary research are normally related to student's field of study. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302.

### **ENGL 2322 British Literature I**

Study of the development of English literature. Readings of major representative works form the Anglo-Saxon period to the beginning of the Romantic Movement. Research paper required. Prerequisite: ENGL 1301, ENGL 1302.

### **ENGL 2323 British Literature II**

Continuation of the study, in chronological sequence, of English literature. Readings of major works representative of the Romantic and Victorian periods and from selected 20th century authors. Research paper required. Prerequisite: ENGL 1301, ENGL 1302.

### **ENGL 2332 World Literature to 1660**

Studies of English translations of selected masterpieces from ancient civilizations through the period of the Renaissance. Additional readings from classics of the English-speaking people. Research paper required. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302.

### **ENGL 2333 World Literature Since 1660**

Studies of English translations of selected continental European masterpieces from the time of Renaissance to the modern period. Parallel readings from English and American literature. Research paper required. Lec 3, Cr 3. Prerequisite: ENGL 1301, ENGL 1302.

### **ENGL 3301 Medieval Literature**

A study of various types of medieval literature, including epic, romance, and allegory, with special emphasis on Middle English writers. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3302 Literary Analysis**

A course introducing students to the methodologies and techniques of reading and writing about literature and literary criticism through the study of works representative of various genres from different literary periods. Lec 3, Cr 3. Prerequisite: ENGL 2332 or ENGL 2333.

### **ENGL 3304 Eighteenth Century British Literature**

A study of the major works of English writers of the neoclassical period, including Dryden, Congreve, Pope, Swift, Sterne, and Johnson. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3306 British Novel to 1900**

Chronological study of the development of the English novel from Defoe

and Fielding to Hardy with special emphasis on significant 19th century novelists such as Thackeray, Eliot, Dickens, and Austen. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3309 Major British Authors**

A course that introduces students to the characteristics of major historical periods through the study representative British literary works. Lec 3, Cr 3. Prerequisite: ENGL 2332 or ENGL 2333.

### **ENGL 3312 Survey of American Literature**

A chronological study of the principal authors, their works and the trends in American literature, from the Colonial period to the Civil War. Lec 3, Cr 3. Prerequisite: ENGL 2332 or ENGL 2333.

### **ENGL 3313 Survey of American Literature**

A chronological study of the principal authors, their works and trends in American literature from the Civil War to the present. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3319 Introduction to Descriptive Linguistics**

An introduction to linguistic science, primarily phonetics, phonology, syntax, morphology, and the history of English. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3322 Business Communications**

This course provides an introduction to the fundamentals of business writing, including memos, reports, and proposals. Prerequisite: ENGL 1301, ENGL 1302, and either ENGL 2332 or ENGL 2333.

### **ENGL 3324 Victorian and Modern Poetry**

A study of British poetry from 1832 to the present. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3330 English Grammar**

Theories of grammar with practical applications. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3331 History of the English Language**

A study of the history and development of the English language from the Anglo-Saxon period into the 20th century. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3343 American Realism and Naturalism**

A study of American writing from 1865 to 1925 with an emphasis on fictions, Dreiser, and Anderson. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3344 American Poetry to 1900**

A study of American poetry from Anne Bradstreet to Emily Dickinson. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 3346 American Novel**

A study of major American novelists and the genre since 1900. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 4300 Special Topics in English**

This course will cover a variety of topics related to English studies and may be repeated once for credit as topics may vary. Prerequisite: Completion of the ENGL 1301 and ENGL 1302 sequence and ENGL 2332 or ENGL 2333.

### **ENGL 4301 Shakespeare**

A study in representative plays in comedy, history, and tragedy. Lec 3, Cr 3. Prerequisite: 9 hours of English.

### **ENGL 4316 Mexican American Literature**

A study of the literature by and about the Mexican Americans, with emphasis on the literary techniques and the cultural reflection in this literature. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4317 Literature by Women**

A critical study of literature written by women, focusing on works from 1901 to the present. The course will introduce women's literature and the female literary tradition that has coexisted with, revised, and influenced male models. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4318 Science Fiction**

A chronological survey of science fiction through a critical study of selected short stories and novels in their literary, social, and philosophical contexts. This course will examine definitions and prototypes of the genre. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4322 Creative Writing I**

A course in writing poetry. Students will explore the elements of poetry by writing original poems and examining published. At the professor's discretion, students may have the opportunities to practice writing in other genres, such as short fiction and short drama. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4323 Creative Writing II**

A course in writing short fiction. Students will explore the elements of short fiction by writing original stories and examining published stories. At the professor's discretion, students may have the opportunity to practice writing in other genres, such as poetry and short drama. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4324 Argument and Persuasion**

A course that emphasizes the use of logical conventions and analysis of other rhetorical elements to produce persuasive essays on the current cultural and ethical concerns. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4325 Composition Techniques**

An advanced course in formal English composition stressing effective communication with special emphasis on the exposition of abstract ideas and internal logic. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4328 Introduction to English As a Second Language**

A study of the process of learning English as a second language. Special attention is given to problems encountered in reading, writing, and comprehending English. Lec 3, Cr 3. Prerequisite: 9 hours of English.

**ENGL 4350 English Studies**

A capstone course for senior English majors aimed at integrating students' knowledge of language, literature, and composition. The course also provides guidance in assembling a portfolio and in preparing for the state teacher certification exam in English. Lec 3, Cr 3. Prerequisite: 24 hours of upper-level English.

**English as a Second Language (ESOL)****ESOL 0321 Intermediate Conversational Grammar**

This course broadens the grammatical concepts and prepares the student for developing writing assignments in various tenses. Spelling rules for verbs and nouns and their irregularities are also covered.

**ESOL 0322 High Intermediate Conversational Grammar**

This course involves the students in higher level and more complex grammatical elements for oral and written practice. The content of this course also prepares the students to improve his/her capacity to write formally and informally.

**ESOL 0323 High Intermediate Reading**

This course gives the student higher levels of fluency in English reading while increasing vocabulary and analytical skills.

**ESOL 0324 High Intermediate Writing**

This course prepares the student to develop complete essays through various

writing techniques. At the same time, the student learns to determine the focus and structure of essays by applying fundamental writing criteria.

**ESOL 0325 High Intermediate Conversation and Listening Skills**

The objective of this course is to give students stronger communication skills by enhancing their listening capacity. At the same time, this course will focus on oral interactive activities for individual or public speaking skills development.

**ESOL 0326 Advanced Conversational Grammar**

This course poses more complex grammatical concepts with various oral and written activities in order to help students achieve higher listening, writing, and speaking skills.

**ESOL 0327 Advanced Writing**

This course focuses on the determining factors of writing such as purpose, technique, development along the research and essay writing on controversial issues.

**ESOL 0328 Advanced Conversation**

This course will help students develop confidence when speaking before a group; improve their use of eye contact, posture, gestures, and voice; orally present information, ideas, and opinions; listen critically; and improve their understanding of interpersonal communication.

**ESOL 0329 Advanced Reading**

This course will expose students to themes and ideas in literary pieces. Students will also develop reading comprehension skills through evaluation of main ideas and topics in conjunction with discussions and interpretations of the selections.

**Environmental Sciences (ESCI, ESCIU)****ESCI 1101 Introduction to Environmental Science Laboratory**

This course provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course (ESCI 1301). Lab 3, Cr 1. Prerequisite: Concurrent enrollment in ESCI 1301 (or prior credit with minimum grade of C).

**ESCI 1301 Introduction to Environmental Science**

This course provides students with an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air and water management, sustainability, energy, and environmental policy issues. Lec 3, Cr 3. Prerequisite: Concurrent enrollment in ESCI 1101 (or prior credit with minimum grade of C).

**ESCI 3105 Oceanography Laboratory**

This course includes the practical application of oceanographic principles, marine water property distribution, rock identification and depositional environment interpretation, geologic and bathymetric map interpretation, and geological data analysis. Lab 3, Cr 1. Concurrent enrollment in ESCI 3305 (or prior credit with minimum grade of C).

**ESCI 3305 Oceanography**

An introduction to the nature and origin of the world's oceans. Topics will cover geological, chemical, physical and biological processes throughout the oceans. Lec 3, Cr 3. Prerequisite: GEOL 1301, GEOL 1103 and (GEOL 1304 and GEOL 1104) or (BIOL 1307 and BIOL 1107), all with minimum grade of C.

**ESCI 3334 Conservation of Natural Resources**

A survey of the distribution of natural resources, with special emphasis on new solutions to problems of resource scarcity. Topics include: energy, water, air and food resources, and other selected components of the lithosphere,

hydrosphere, atmosphere and biosphere. Economic, demographic, and political issues are considered as they affect natural resources. Lec 3, Cr 3. Prerequisite: GEOL 1301, GEOL 1103 and (GEOL 1304 and GEOL 1104) or (BIOL 1307 and BIOL 1107), all with minimum grade of C.

### **ESCI 3410 Environmental Geology**

This course will explore hazardous earth processes, including landslides, subsidence, coastal processes, earthquakes and volcanic eruptions, as well as, the nature and effects of human interaction with the environment. Other topics include air pollution and global changes to the environment. Lec 3, Lab 3, Cr 4. Prerequisite: GEOL 1303, GEOL 1103, CHEM 1311, and CHEM 1111 with minimum grade of C.

### **ESCI 4301 Environmental Regulations**

An overview of pertinent state, national and international environmental regulations, policies and treaties. Topics include: common law liability, the Clean Air and Water Acts, sustainable development, stratospheric ozone, global warming, endangered species, environmental justice hazardous waste and much more. An emphasis will be placed on U.S./ Mexico specific issues. Lec 3, Cr 3. Prerequisite: ESCI 1301 with minimum grade of C, or permission of instructor.

### **ESCI 4325 Environmental Science Internship**

This course will give environmental sciences students the opportunity to gain experience by applying by principles and concepts in an actual work-related environment. The student will perform the internship under the supervision of both an environmental sciences faculty member and a collaborating member of the participating internship site. Lec 3, Cr 3. Prerequisite: Junior standing with 12 hours of ESCI courses or consent of the instructor.

### **ESCI 4370 Topics in Environmental Sciences**

Specialized lecture content not available in other courses. May be retaken for credit as topics changes but no more than three credit hours may apply toward the Environmental Science major. Lec 3, Cr 3. Prerequisite: Junior standing, with 12 hours of ESCI courses or consent of instructor.

### **ESCI 4399 Research Problems in Environmental Sciences**

Research under the supervision of an Environmental Sciences faculty member. May be repeated for credit but no more than three semester credit hours may apply toward the Environmental Science major. Students enrolling for ESCI 4399 will present research results in a Department seminar. Lec 3, Cr 3. Prerequisite: Junior standing, completion of three advanced courses in ESCI (nine upper-division semester credit hours) and approval of instructor.

## **Experiential (EXPL)**

### **EXPL 2301 Analysis of Learning and Competencies**

Instruction in the preparation of a portfolio documenting college-level learning gained through non-college experience. Focus is on defining goals, exploring. Prerequisite: Attendance at prior learning orientation.

## **Finance (FINA)**

### **FINA 3380 Managerial Finance**

This course covers the impact on the value of the firm of various financial decisions made by the financial manager, particularly in the areas of working capital management, capital budgeting, capital structure theory and dividend policy. Lec 3, Cr 3. Prerequisite: ACCT 2401, ACCT 2402, ECON 2301, ECON 2302. Admission to Upper Division.

### **FINA 3381 Money and Banking**

The components, nature, functions, creations and destructions of money and credit; financial institutions and their functions; introduction to

monetary theory and policy for the purpose of establishing the framework of the monetary economy. Lec 3, Cr 3. Prerequisite: Admission to upper division.

### **FINA 3382 Investment Principles**

This course covers the basics of investigating in stocks, bonds, and derivatives as well as portfolio creation, management and performance measurement. The main focus of the course is the trade-off between risk and return. Prerequisite: FINA 3380 and admission to upper division. Lec 3, Cr 3.

### **FINA 4380 Intermediate Managerial Finance**

This course covers topics in finance managerial not usually covered in a basic managerial finance course such as working capital management, capital structure and dividend policy, derivatives, bankruptcy, mergers, multinational financial management, and other advanced topics. Prerequisite: FINA 3380; admission to upper division. Lec 3, Cr 3.

### **FINA 4382 Portfolio Management**

this course continues and expands upon the material covered in Investment Principles (FINA 3382) in a theoretical as well as practical manner. The main focus of the course is the trade-off between risk and return. Additional Material covered includes investment in preferred stock and convertible securities, mutual funds, derivative securities (including stock options and futures contracts) and portfolio creation, management and performance measurement. Prerequisite: FINA 3382; admission to upper division. Lec 3, Cr 3.

### **FINA 4385 Financial Institutions and Markets**

The dynamics of financial markets and their interaction with suppliers of funds, particularly financial intermediaries. Prerequisite: FINA 3381. Admission to upper division. Lec 3, Cr 3.

### **FINA 4387 Topics in Finance**

The study of significant topics related to Finance. Course may be repeated for credit when topic varies. Lec 3, Cr 3. Prerequisite: Will vary depending on specific topics; admission to upper division.

### **FINA 4389 Commercial Banking**

The principles and policies affecting the services, organization and management of funds in the commercial bank; policy formulation is emphasized; coordination with general economic and money market conditions is covered. Lec 3, Cr 3. Prerequisite: FINA 3381. Admission to upper division.

## **French (FREN)**

### **FREN 1311 Elementary French I**

A course designed to develop the ability to understand, speak, read, and write the French language. Lec 3, Cr 3.

### **FREN 1312 Elementary French II**

A continuation of FREN 1311. Lec 3, Cr 3. Prerequisite: FREN 1311 or consent of instructor.

### **FREN 2311 Intermediate French I**

A review of the grammar. Emphasis on reading and writing. Lec 3, Cr 3. Prerequisite: FREN 1312 or equivalent skills.

### **FREN 2312 Intermediate French II**

A continuation of FREN 2311. Lec 3, Cr 3. Prerequisite: FREN 2311 or equivalent skills.

## **Geography (GEOG)**

### **GEOG 1301 Elements of Physical Geography**

The earth's external features; landscape development under the influence of volcanism and mountain-building forces, rivers and their work, under-

ground waters, waves and currents, and the wind; the principle soil groups as related to landscape and climate. Lec 3, Cr 3.

### **GEOG 1303 General World Geography**

Landscapes and peoples of continents, the major culture realms and nations, their resources, land-use, and industries. Lec 3, Cr 3.

### **GEOG 2301 Economic Geography**

Analysis of production at local, regional, and national scales. Agricultural and industrial location and the growth and influence of central places are discussed. Lec 3, Cr 3.

### **GEOG 2302 Cultural Geography**

Study of human culture hearths, the distribution of language and religion, environmental perception, cultural ecology, and human settlement patterns. Lec 3, Cr 3.

### **GEOG 3320 Cultural Geography for Educators I**

The study of the interaction between humans and the natural environment. The course is historical in context in that it will examine the relationship from the historical past to the present time. Major emphasizing the course is given to human cultural diversity. Topics discussed include population distribution and demography, agricultural practices and regions, pattern and processes of religions and their spatial distributions, ethnicity and nations, urban geography and the development of cities, and natural resources an team management. Lec 3, Cr 3.

### **GEOG 3333 Latin American Geography**

A regional study of geography of Mexico, the Caribbean Central and South America. Includes an investigation of the physical, cultural and economic factors of various regions and how these affect present day conditions. Lec 3, Cr 3.

### **GEOG 3334 Conservation of Natural Resources**

A survey of distribution of natural resources, with special emphasis on new solutions to problems of resource scarcity. Topics include: energy, water, air and food resources, and other selected components of the lithosphere, hydrosphere. Economics, demographic, and political issues are considered as they affect resources. Lec 3, Cr 3.

### **GEOG 4310 Earth Science for Educators I**

This is the first part of a hands-on Earth Science course designed for education. 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 on the Earth's surface. Lec 3, Cr 3.

### **GEOG 4320 Earth Science for Educators II**

This is the second part of a hands-on Earth Science course designed for education majors enrolled in the EC-8 program. The 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 on the Earth's surface. Lec 3, Cr 3. Prerequisite: GEOL 4310 or GEOG 4310.

### **GEOG 4440 Geographic Information Systems**

This course covers the basics of Geographic Information Systems (GIS) concepts and software such as Arc View and ArcGIS. Special attention will be given to digital data acquisition, processing, data management and generation of base maps for various applications in the field-based sciences. Lec 3, Lab 2, Cr 4.

### **GEOG 4441 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)**

### **GEOL 1101 Principles of Earth Sciences Laboratory**

Laboratory practice that illustrates the formation of earth materials, processes of plate tectonics and of atmosphere. Lab 3 Cr 1. Concurrent enrollment in GEOL 1301 (or prior credit with minimum grade of C.)

### **GEOL 1103 Physical Geology Laboratory**

Laboratory practice which illustrates the types of earth materials, basic principles of structural geology, processes of hydrosphere and of plate tectonics. Lab 3, Cr 1. Concurrent enrollment in GEOL 1303 (or prior credit with minimum grade of C.)

### **GEOL 1104 Historical Geology Laboratory**

Laboratory practice that illustrates the basic principles of stratigraphy, paleontology, origin and evolution of earth through time. Concurrent enrollment in GEOL 1304 (or prior credit with minimum grade of C.)

### **GEOL 1147 Meteorology Laboratory**

This course is a laboratory study of the weather variables, atmospheric motion, precipitation, and topics in modern weather science. Exercises are based on local weather data. This course will served as a lab component to the Meteorology course. Lab 3, Cr 1. Concurrent enrollment in GEOL 1347 (or prior credit with minimum grade of C.)

### **GEOL 1301 Principles of Earth Sciences**

Topics are selected from geology, geophysics, meteorology, and oceanography in order to illustrate the philosophy and methods of science. Other topics include earth materials, processes of plate tectonics and atmosphere. Lec 3, Cr 3.

### **GEOL 1303 Physical Geology**

The classification and analysis of geologic agents responsible for the origin, structure, and sculpturing of the earth's crust, including a comprehensive description of materials comprising the earth. Lec 3, Cr 3.

### **GEOL 1304 Historical Geology**

The geologic history of the earth and its inhabitants as revealed by fossil record with emphasis on North America. Lec 3, Cr 3.

### **GEOL 1347 Meteorology**

This course will introduce the student to the study of the observation and distribution of weather variables, atmospheric motion, precipitation. and topics in modern weather science. Lec 3, Cr 3.

### **GEOL 2309 Mineralogy**

A study of the physical and chemical properties of minerals. Lab consists of hand specimen identification of rock formations and ore minerals. Lec 2, Lab 4, Cr 3. Prerequisite: GEOL 1403, CHEM 1312 or concurrent enrollment.

### **GEOL 3105 Oceanography Laboratory**

This course includes the practical application of oceanographic principles, marine water property distribution, rock and mineral identification and depositional environment interpretation, geologic and bathometric map interpretation, and geological data analysis. Lab 3, Cr 1. Prerequisite: Credit or concurrent enrollment in GEOL 3305 or ESCI 3305.

### **GEOL 3305 Oceanography**

An introduction to the nature and origin of the world's oceans. Topics will cover geological, chemical, physical and biological processes throughout the oceans. Lab 3, Cr 1. Prerequisite: GEOL 1303, GEOL 1103 and (GEOL 1304 and GEOL 1104) or (BIOL 1307 and BIOL 1107) all with minimum grade of C.

### **GEOL 3310 Environmental Geology**

This course is an advanced undergraduate course in Environmental

Geology. The objective of this course is to give the students a thorough understanding of hazardous earth processes, nature and effects of human interaction with the environment and exploitation of mineral and energy resources and their effect on the environment. Other topics include air pollution and global changes in the environment. Lec 3, Cr 3. Prerequisite: GEOL 1303, GEOL 1103, CHEM 1311 and CHEM 1111.

#### **GEOL 3336 Hydrology and Water Resources**

This course will explore the circulation of water in earth systems. Surface water processes studied will include runoff, routing, evapotranspiration, infiltration, and flooding. Groundwater process will include the basics of groundwater flow, aquifer characteristics, and others. Global, national, and regional aspects of water resources management will also be introduced. Lec 3, Cr 3. Prerequisite: GEOL 1303, GEOL 1103, and MATH 2413 all with minimum grade of C.

#### **GEOL 3340 Geomorphology**

Geomorphology is the study of landforms. This class will emphasize the physical, chemical, and biological processes that create and modify landforms. This course covers the history of landform evolution and the climatic and tectonic conditions that influence landform development. Lec 3, Cr 3. Prerequisite: GEOL 1303 GEOL 1103 and MATH 1412, all with minimum grade of C.

#### **GEOL 3410 Environmental Geology**

This course will explore hazardous earth processes, including landslides, subsidence, coastal processes, earthquakes and volcanic eruptions, as well as, the nature and effects of human interaction with the environment. Other topics include air pollution and global changes to the environment. Lec 3, Lab 3, Cr 4. Prerequisite: GEOL 1303, GEOL 1103, CHEM 1311, and CHEM 1111 all with minimum grade of C.

#### **GEOL 4310 Earth Science for Educators I**

This is the first part of a 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 on the Earth's surface. Lec 3, Cr 3. Prerequisite: GEOL 1303, GEOL 1103 and GEOL 1304, GEOL 1104, all with minimum grade of C.

#### **GEOL 4320 Earth Science for Educators II**

This is the second part of a hands-on Earth Science course designed for education majors enrolled in the EC-8 program. The 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 on the Earth's surface. Lec 3, Cr 3. Prerequisite: GEOL 4310 or GEOG 4310 all with minimum grade of C.

#### **GEOL 4350 Geoscience Field Excursion**

A study of the geology of a selected region Texas or Mexico with several 1-2 day field trips in order to map and study the field trips in order to map and study the field relationship of the geologic features. Special emphasis is given to stratigraphic, geomorphologic, structural and/or tectonic relationships of the designated study area. Lec 3, Cr 3. Prerequisite: GEOL 1303 and GEOL 1103, or GEOL 1304 and GEOL 1104 all with minimum grade of C, or permission of the instructor.

#### **GEOL 4360 Plate Tectonics**

This course will cover plate tectonic processes of past and present in detail with an emphasis on their effects on the earth's environment. The student will learn about large scale dynamics of the earth's surface that involve growth and shrinking of oceans, drift of continents, growth and evolution of mountain belts. Lec. 3, Cr. 3.

#### **GEOL 4411 Sedimentation and Stratigraphy**

This course will explore the formation of sediments and sedimentary rocks. Students will learn to interpret depositional environments and sequences of stratigraphic beds using multiple tools. Lec 3, Lab 3, Cr 4. Prerequisite: GEOL 1303, GEOL 1103, GEOL 1304 and GEOL 1104 with minimum grade of C.

#### **GEOL 4431 Coastal Geology**

This course explores the sedimentary features and stratigraphy of the Gulf of Mexico coastline. The exploration of the impact of geology on humans and the impact of humans on the geologic features will be emphasized. Lec 3, Lab 3, Cr 4. Prerequisite: GEOL 1303, GEOL 1103, GEOL 1304 and GEOL 1104 with minimum grade of C.

#### **GEOL 4440 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 digital data acquisition, processing, data management and the generation of base maps for various applications in the field-based sciences. Lec 3, Lab 3, Cr 4.

#### **GEOL 4441 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.

### **German (GERM)**

#### **GERM 1311 Elementary German I**

A study of the essentials of German grammar, pronunciation, elementary conversation and prose reading. Lec 3, Cr 3.

#### **GERM 1312 Elementary German II**

A continuation of GERM 1311. Lec 3, Cr 3. Prerequisite: GERM 1311 or equivalent skills.

#### **GERM 2311 Intermediate German I**

A review of the German language structure with emphasis on the development of aural comprehension and speaking ability. Selected readings based on everyday subjects and cultural Material. Also includes dictation and simple composition exercises. Lec 3, Cr 3. Prerequisite: GERM 1312 or equivalent skills.

#### **GERM 2312 Intermediate German II**

A continuation of GERM 2311. Lec 3, Cr 3. Prerequisite: GERM 2311 or equivalent skills.

### **Government (GOVT)**

#### **GOVT 2301 American Government I**

A survey of the fundamental principles of political science of the American system of government, and of the origins, development and structure of the constitutions and government of the United States and Texas. Lec 3, Cr 3.

#### **GOVT 2302 American Government II**

A survey of the inputs and outputs of the American government including political participation, civil rights and liberties, public economics and foreign policy. Lec 3, Cr 3.

#### **GOVT 2304 Introduction to Political Science**

An introductory survey of the field of Political Science, with emphasis on basic concepts, public law, theory and organization of the modern state, political dynamics, and institutions. Open to freshmen. Lec 3, Cr 3.

**GOVT 3314 American State Government**

A study of the basic functions, structure, procedures and problems of American and local government with an emphasis upon intergovernmental relations. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 3322 Politics of Developing Nations**

Analysis of political institutions and the processes with the focus on Third World nations. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 3323 Introduction to Public Administration**

A survey of public administration in the United States highlighting a wide variety of topics in the discipline, but with emphasis upon the general machinery of the national bureaucracy and on the powers, problems, and control of its agencies. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 3331 Methods of Political Science Research**

Analysis of the study of politics, models of inquiry, research methods, and introduction to the use of computers in political science research. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 3343 International Politics**

A study of the political principles, problems and factors involved in the foreign policies and relations of nation-state with particular emphasis on the sources and uses of national power and difficulties in limiting the use of such power. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 3363 American Hispanic Politics**

A study of the American Hispanic experience. Analyzes political socialization and culture, political participation and behavior, leadership, organizations, and power in the American political system. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 3373 Contemporary Texas**

This course is a survey of contemporary political, and administrative issues confronting Texas. Prerequisite: GOVT 2301 and GOVT 2302.

**GOVT 3385 Internship**

This course is designed for the students seeking credit through an internship placement. The internship must be directly related to government; the student must be under direct academic supervision and the student must complete written assignments to be evaluated by the supervising teacher. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4312 Urban and Metropolitan Planning**

An analysis of the various political factors shaping the direction and tasks of the planner. Attention is given to zoning, capital improvement budgeting, subdivision control and related aspects of the interrelationship of such planning with that done by other local units of government. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4320 American Constitutional Law: Federalism**

A study of the allocation of government powers by use of court cases, with special emphasis on the national government and an introduction to the judicial functions of the American legal system. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4321 American Constitutional Law: Civil Liberties**

A study of the limitations of governmental powers in the United States by use of the courts cases, with primary emphasis on civil and political rights. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4360 American Executive Process**

Advanced study of the development of the power and influence of the president and other American executives; procedures and politics of the executive process; the relation of the executive to the other elements of the political system. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4363 American Legislative Process**

Advanced study of the legislative process; structure, powers, organization, political control and procedures of congress, state legislatures and local legislative bodies in the rest of the political system. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4365 American Administrative Process**

Advanced study of the law and procedures of national, state and local administrative agencies and their behavior; problems in administrative management; theory of complex organizations; policy outcomes of the administrative process. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4366 American Political Parties and Politics**

A study of the history, function and leadership of political parties and the role they play in the operation of national, state, and local governments in the United States and a study of the role of group politics and voting behavior in the American political process. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4367 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. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4368 Special Topics in American Government**

Significant issues and problems in politics and the political system. Course may be repeated for credit provided different topics are the focus of each class. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4369 Latin American Politics**

A survey of governmental processing in Mexico, the Caribbean, Central and South America. Examines competing ideologies, group dynamics, relationships between political, economic and social structures and Latin America's role in the international political system. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4370 European Politics**

A study of the major democracies of Europe. A comparative study of peoples and their political, social and economic institutions. Generally includes, but is not limited to, Great Britain, France, and Germany. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4371 Contemporary International Issues**

A study of important issues in international politics. Involves issues of regional and international conflicts, solutions to conflicts and the changing international system. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4372 Classical Political Theory**

A study of classical political philosophy from Socrates to Machiavelli. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4373 Modern Political Theory**

A study of political philosophy from Machiavelli through the 20th Century. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4374 American Public Policy**

An analysis of the formation, implementation, and assessment of selected public policies in America. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

**GOVT 4390 Political Science Senior Seminar**

This course will help senior students organize, consolidate and systematically demonstrate their knowledge of American Government, Political

Theory, International Relations/Comparative Politics and Public Administration. Lec 3, Cr 3. Prerequisite: GOVT 2301, GOVT 2302.

## **Health Profession Related Sciences (HPRS)**

### **HPRS 1101 Introduction to Health Professions**

An overview of the roles of the various members of the health care system, educational requirements, and issues affecting the delivery of health care. Lec 1, Lab 0

### **HPRS 1106 Medical Terminology**

A study of work origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures. Lec 1, Lab 0

### **HPRS 1204 Basic Health Profession Skills**

A study of the concepts that serve as the foundation for health profession courses. Topics include client handling and safety issues, basic client monitoring, and health documentation. Lec 1, Lab 4

### **HPRS 1205 Medical Law/Ethics for Health Professions**

Introduction to the relationship between legal aspects and the ethics associated with the health care field. Emphasis on the ethical and legal responsibilities of health care professionals. Lec 2, Lab 0

### **HPRS 2300 Pharmacology for Health Professions**

A study of drug classifications, actions, therapeutic uses, adverse effects, methods of administration client education, and calculation of dosages. Lec 3, Lab 0

### **HPRS 3301 Introduction to the Evolving Healthcare System**

Introduces the student to the organizational structure of the U.S. Health Care system. Provides historical perspective to the system evolution from institutional-based to population based and cost-unaware to cost-aware values. Describes the financing mechanisms, primary providers and secondary providers, and consumers of health care. Discusses how technology affects the politics of the system. Discusses the health care system along the Texas-Mexico borders and how cultural influences impacts health care delivery.

### **HPRS 3302 Medical Law/ Ethics for the Health Professional**

Describes the laws and ethical standards that apply to allied health practitioners. Uses case presentations and develops methods for solving legal and or ethical and cultural dilemmas. Discuss pertinent legal cases involving allied health practitioners.

### **HPRS 3309 Leading and Managing the Healthcare Team**

Discusses the concepts of leadership within the context of allied health. Prepares the learner to use problem-solving methods to effectively supervise and lead subordinates in a health care setting. Focuses on the economics of managed care; how continuous quality improvement relates to cost-effective care. Develops skills and values necessary for effective teamwork.

### **HPRS 3313 Physical & Mental Health Throughout the Lifespan**

This course is designed to provide information of the aging process, the physical, psychosocial, and nutritional needs of the elderly. The student will develop skills to provide quality assessment and care for the geriatric client. Also discussed is an introduction to mental health services, careers, history, agencies and current issues, and the difference between functional and dysfunctional behaviors. Students develop an awareness of the factors that affect mental health by exploring traditional and emerging treatment modalities.

### **HPRS 3316 Clinical Nutrition**

This course is designed to emphasize the importance of nutrition in maintaining health and wellness. The effectiveness of the therapeutic diet

as related to specific diseases will be explored. In addition to school-based training, this course provides clinical-based learning experiences.

### **HPRS 3320 Patient Education in Health Sciences**

This course will cover adult learning theories and concepts to develop appropriate teaching materials and materials and programs for patients and their families that enhance client knowledge and skills for health promotion and recovery. Prerequisite: Permission from instructor.

### **HPRS 3324 Teaching in the Health Sciences**

This course will provide an introduction to the principles of teaching to include planning, implementation, assessment and evaluation in health career education. The student will develop an appreciation of the value of vocational/technical education.

### **HPRS 4300 Pharmacology for Health Professional**

This course will provide an overview of the pharmacokinetics and pharmacodynamics of prescription and nonprescription medications. Course content will emphasize drug classifications, drug action, drug administration, ethical and legal issues, and safety. Students will develop an understanding of pharmaceuticals and its impact on the health care industry.

### **HPRS 4301 Introduction to Health Data Utilization**

Surveys the use of computers in the health care industry. The learner will understand the principles of data base management with examples from medical records. Use of computer spreadsheets, graphics programs in managing and presenting data will be taught.

### **HPRS 4302 Continuous Quality Improvement**

Presents the principles of continuous quality improvement and application to the workplace. The learner will develop policy and procedures and performance improvement plans and apply the techniques learned in the other courses in implementing CQI.

### **HPRS 4312 Pathophysiology**

This course allows students to conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. Students in Pathophysiology study disease processes, and how human systems are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology.

### **HPRS 4316 Medical Microbiology**

Students in Medical Microbiology study the morphology and physiology of microbes and the relationship between microbes and health maintenance. Emphasis is placed on the role of microbes in infectious diseases. Prerequisite: BIOL 1306 or BIOL 2301 or departmental approval.

### **HPRS 4330 Independent Study**

This course will offer the student the opportunity for an in-depth exploration of a topic or a clinical skill in the health sciences. This course maybe repeated twice for credit. Prerequisite: Three hours upper level coursework.

### **HPRS 4334 Issues and Trends in Health Care**

This course will address current events, issues and attitudes pertinent to health care. This course maybe repeated twice for credit with permission of instructor. Prerequisite: Three hours of upper level coursework.

### **HPRS 4360 Practicum in Health Services**

Students will spend time in a clinical area appropriate to their field practice the skills learned in the theory coursework.

### **HPRS 4309 Research Methods in Evidenced-Based Healthcare**

In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. The student actively formulates



a problem related to health science, designs the research and procedures to be used, and plans a final product that will involve a formal presentation to representatives of the scientific community. The course may be conducted in the classroom settings or as independent seminar.

## **Health Services (CTMT, DSEC, DSVT, ECCS)**

### **CTMT 3332 Principles of Computed Tomography**

In depth coverage of computed tomography imaging techniques. Image quality assurance and radiation protection are emphasized.

### **CTMT 3636 Computed Tomography Equipment and Methodology**

Skills development in the operation of computed topographic equipment, focusing on routine protocols, image quality, quality assurance and radiation protection.

### **CTMT 4636 Practicum in Computed Tomography**

Practice in the clinical setting performing CT Imaging. Close supervision by preceptor in the clinical setting. This experience can be paid or non-paid.

### **DSEC 3140 Practicum I Echocardiography**

A basic type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional, generally in a clinical setting.

### **DSEC 3200 Introduction to Echocardiography Techniques**

An introduction to scanning techniques and procedures with hands-on experience in a lab setting. Emphasis is placed on the sonographic explanation of the normal adult heart.

### **DSEC 3300 Principles of Adult Echocardiography**

An introduction to cardiovascular anatomy and physiology, including hemodynamics and spatial relationships of the normal adult heart. Topics include anatomical correlation of 2D, M-mode and Doppler sonographic imaging. Scanning techniques are correlated and taught in the laboratory sessions.

### **DSEC 3340 Adult Echocardiography**

Fundamental theories of echocardiography including cardiac anatomy and physiology, physics, M-mode 2D correlation and scanning protocol, mitral valve normal and abnormal echo patterns, hemodynamic and conduction changes, and basic Doppler and color flow. Designed for sonographers and individuals practicing echo who need more of an academic echo background.

### **DSEC 4140 Practicum II Echocardiography**

An advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional, generally in a clinical setting.

### **DSEC 4200 Echocardiography Evaluation of Pathology I**

An emphasis on adult acquired cardiac pathologies. Topics include cardiovascular pathophysiology, quantitative measurements and the application of 2D, M-mode, and Doppler. Recognition of the sonographic appearances of cardiovascular disease is stressed.

### **DSEC 4300 Echocardiography Evaluation of Pathology II**

A continuation of Echocardiography Evaluation of Pathology I with emphasis on cardiac disease. Topics include adult and pediatric congenital heart disease. A discussion of quantitative measurements and application

of 2D, M-mode, and Doppler. Recognition of the sonographic appearances of cardiac disease is stressed.

### **DSVT 3140 Practicum I Vascular Technology**

A BASIC type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional, generally in a clinical setting.

### **DSVT 3210 Vascular Technology Applications**

Study of noninvasive vascular exams with emphasis on anatomy and physiology, and pathophysiology.

### **DSVT 3300 Introduction to Vascular Technology**

An introduction to basic noninvasive vascular theories, with emphasis on basic skills and knowledge, such a image orientation, transducer handling and identification of anatomic structures.

### **DSVT 3330 Principles of Vascular Technology**

An introduction to noninvasive vascular technology modalities, including 2D imaging, Doppler, plethysmography and segmental pressures. Emphasis on performing basic venous and arterial imaging and non-imaging exams.

### **DSVT 3340 Cerebral Vascular Evaluation**

Integration of basic concepts and the application of non-invasive technology for the evaluation of carotid disease.

### **DSVT 3350 Peripheral Vascular Evaluation**

Integration of basic concept and the application of noninvasive technology for the evaluation of peripheral vascular disease.

### **DSVT 4140 Practicum II Vascular Technology**

An advanced type of health professions work-based instruction that helps students synthesize new knowledge, apply previous knowledge, or gain experience managing the workflow. Practical experience is simultaneously related to theory. Close and/or direct supervision is provided by the clinical professional, generally in a clinical setting.

### **ECCS 3310 Introduction to Emergency and Critical Care**

The purpose of this course is to provide the learner with advanced knowledge in critical care medicine. Topics will include monitoring technology, advanced procedures, diagnostic testing, and treatment of acutely critical patients.

### **ECCS 3325 Advanced Airway Management**

Prepares the student to perform endotracheal intubations, emergency tracheotomy, and other advanced airway techniques as well as insertion of chest tubes, emergency thoracentesis and other life saving maneuvers. Practice on manikins and possibly live animal labs are planned.

### **ECCS 3340 Critical Care Pharmacology**

This course is designed to provide the learner with a fundamental knowledge of the actions and therapeutic uses of drugs. The topics covered will include basic principles of drug action, pharmacokinetics, autonomic and cardiovascular pharmacology, neuropharmacology, toxicology, endocrine pharmacology, and respiratory tract pharmacology.

### **ECCS 3355 Electrocardiography**

A study of the fundamentals of electrocardiology with emphasis on the role of the 12-lead ECG in and out of hospital medical care. The purpose of this course is to teach in systematic-analytical approach to rapid 12-lead interpretation. Topics begin with cardiac anatomy and physiology and progress to the level of recognizing the classic 12-lead and multi-lead ECG patterns.

**ECCS 4310 Invasive Hemodynamic Procedures**

The learner will be prepared to monitor hemodynamic data in the intensive care unit. Topics will cover arterial line insertion, aortic counter pulsation, insertion of balloon tip pulmonary artery catheter. The physiology and interpretation of pathology will also be reviewed.

**History (HIST)****HIST 1301 United States to 1877**

Discovery; the colonial period; the American Revolution; establishing the nation, political, territorial and socioeconomic growth; the sectional controversy; civil war; reconstruction in the South to 1877. Lec 3, Cr 3.

**HIST 1302 United States since 1877**

The growth of transportation and industry, the agrarian protest and the movement toward economic and political reform. The creation of an overseas empire, the United States in two world wars; the Cold War, and the role of the United States as a dominant world power. Lec 3, Cr 3.

**HIST 2321 World History I**

A study of world history to 1650 tracing the rise, decline and renewal of major civilizations, emphasizing those societies which have been in forefront of human change at any one time. Lec 3, Cr 3. Prerequisite: HIST 1301, HIST 1302.

**HIST 2322 World History II**

A study of world history since 1650 tracing the rise, decline and renewal of major civilizations, emphasizing those societies which have been in forefront of human change at one time. Lec 3, Cr 3. Prerequisite: HIST 1301, HIST 1302.

**HIST 2380 Mexican-American Studies**

This survey course presents the chronological, social-cultural and political-historical foundations that forged the Mexican/American/Hispanic/Chicano heritage. Included in this course are elements of pre-Columbian roots, Spanish/Caribbean cultural, social and political systems, Mexican history and heritage and their collective impact on the contemporary Hispanic population in United States. Lec 3, Cr 3. Prerequisite: HIST 1301, HIST 1302.

**HIST 3313 American Colonial Era to 1783.**

A study of American Colonial history from the founding of the first colony through the American Revolution with emphasis given to the development of American civilization; causes, and results of the American Revolution. Lec 3, Cr 3. Prerequisite: 6 hours of lower division history.

**HIST 3324 Formative Period of the American Nation, 1783-1840.**

A study of the early years of the American nation from the critical period to the adoption of the constitution and launching of the government through the transformation of American Society by the Jacksonian Era of the Common Man. Lec 3, Cr 3. Prerequisite: 6 hours of lower division history.

**HIST 3333. Colonial Mexico, Central and South America**

A study of the establishment of the Spanish dominion; geography and natural resources; institutional and social development; cultural aspects and contribution. Lec 3, Cr 3. Prerequisite: 6 hours of lower division history.

**HIST 3334 Mexico and the Borderlands Through Independence**

This course surveys Mexican history with emphasis on the pre-Columbian Indians, the Conquest, Spanish colonial institution, and independence. Lec 3, Cr 3. Prerequisite: 6 hours of lower division history.

**HIST 3335 Mexico Since Independence**

This course surveys major developments in the nineteenth and twentieth century in Mexico with emphasis on the early national period, the Reform,

the Porfiriato, and the Revolution. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 3336 Mexican-American Heritage**

A consideration of Mexican American history as it relates to the cultural, political, and socioeconomic experience of this ethnic group in the United States. Prerequisite: 6 hours of lower division history.

**HIST 3340 Texas History**

A history from Texas from the Spanish period to the present day. Emphasis will be placed upon the Indians, the role of the Spanish and Mexicans, the period of Anglo American settlement, the revolution, the Republic and the development of the modern state. Lec 3, Cr 3. Prerequisite: HIST 1301, HIST 1302.

**HIST 4303 The Emergence of Modern America, 1877-1917**

A study of the growth of American business and industry, the emergence of the U.S. as a world power, the populist protest and progressive reform movements. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 4313 Twentieth Century America 1917 to Present**

A study of the history of the United States from World War I to the present emphasis on domestic and foreign affairs in their relationship to and effect on each other. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 4338 American Intellectual Social History**

The intellectual perspective includes major historical and cultural ideas, which were conceived and used by elites to promote given political and social agendas. The Social History component includes group behavior and participation in such basic areas as: Religion, Political Democracy, Labor Organizations and Reform movements. Prerequisite: HIST 1301 and HIST 1302.

**HIST 4343 Era of the Sectional Conflict**

United States history from 1840 to 1877 with emphasis upon the development of sectionalism, the breakdown of American political parties, Civil War and Reconstruction. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 4344 United States Diplomatic History**

A survey of American foreign policy, its implementations and ratifications, and the interaction between the United States and other nations from 1776 to the present, with special emphasis on the relations with Mexico. Lec 3, Cr 3. Prerequisite: 6 hours of lower division history.

**HIST 4345 North American Economic History**

A survey of North American Economic growth and development from the pre-colonial era to the present. May be counted as ECON 4345 or HIST 4345. Lec 3, Cr 3.

**HIST 4357 History of Modern Latin America**

A study of the cultural and political trends of the Latin American nation since independence. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 4365 History of the Middle Ages**

A study of European Medieval roots to 1500. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 4367 History of Early Modern Europe**

A study of the transition of European society into modernity in the 16th, 17th, and 18th centuries. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

**HIST 4369 Nineteenth Century Europe: 1789-1914**

A study of the political, social and cultural developments in Europe from

the French Revolution to the outbreak of World War I. Prerequisite: HIST 1301 and HIST 1302

### **HIST 4371 History of the Islamic World**

A survey of the vast crescent of the Islamic World from North Africa through the Middle East to Indonesia. The study will commence with Mohammed in 622 but concentrate on the challenges posed by the Islamic World in modern times. Prerequisites: HIST 1301, HIST 1302.

### **HIST 4372 History of Russia**

A study of Russian history from the founding of the Kievan state through to today. Special emphasis will be given to the Soviet Era and the current state of the former Soviet republics. Prerequisite: HIST 1301 and HIST 1302.

### **HIST 4373 History of Spain**

An introduction to the rich drama of Spanish history from the early cave painters through Reconquista, Empire, and Generation of 98 European Union. Lec 3, Cr 3. Prerequisite: 6 hours of lower division history.

### **HIST 4374 History of Asia**

A survey of Asian history from earliest times through to today. Special emphasis will be given to the Asian core civilizations of China and India. Prerequisite: HIST 1301 and HIST 1302.

### **HIST 4377 French-Led Revolutionary Europe**

A study of Europe from the late 18th to late 19th century, in which France provided the principal model for culture and political change. Lec 3, Cr3. Prerequisite: 6 hours of lower division History.

### **HIST 4379 Modern Europe: 1914-Present**

A study of Europe from the commencement of the First World War through to the progressive, increasingly-unified Europe of today. Prerequisite: HIST 1301 and HIST 1302.

### **HIST 4380 History of World War I and II**

A history of the causes, course, and outcomes of the two World Wars. Lec 3, Cr3. Prerequisite: 6 hours of lower division history.

### **HIST 4385 Ancient History**

Formerly HIST 4396. A study of the historical foundations of the Middle East, Greece, and Rome. Lec 3, Cr 3. Prerequisite: 6 hours of lower division History.

### **HIST 4390 American History Senior Seminar**

This course will help senior students to consolidate their knowledge of American History. The student is challenged to appreciate the flow of American history as major historical themes evolve from Pre-Columbian peoples and civilizations through to the present in the United States and Mexico. Lec 3, Cr 3. Prerequisite: All lower division requirements and 15 hours of upper division History.

### **HIST 4392 World History Senior Seminar**

This course will help students to consolidate their knowledge of World History. The student is challenged to appreciate the flow of world history as major historical themes evolve from earliest civilization through to the modern day. Lec 3, Cr 3. Prerequisite: All lower division requirements and 15 hours of upper division History.

## **Interdisciplinary Science (ISCIU)**

### **ISCIU 1410 Scientific Inquiry I**

The first in two-semester course sequence that will serve as an introduction to the methods of scientific inquiry. Topics are selected from various fields of the natural sciences to illustrate the history, philosophy, and methods of science. Students will examine problems through directed inquiry in a laboratory setting.

### **ISCIU 1411 Scientific Inquiry II**

This is a continuation of ISCIU 1410, Scientific Inquiry I. Prerequisite: ISCIU 1411.

## **Interdisciplinary Studies (INDS)**

### **INDS 3301 Theories of Knowledge**

Analysis of humankind's ways of knowing, including empirical and non-empirical methods. Perspectives and issues are drawn from the various sciences and humanities as well as nonacademic sources of knowledge. Lec 3, Cr 3. Prerequisite: Approval of Department Chair or Co-op Coordinator.

### **INDS 3303 Culture and Humanity: Human Diversity Cross Cultural Perspective**

Analysis of the diversity of the human experience from a cross-cultural perspective. Particular attention is paid to differing world-views and institutional patterns (e.g., the economy, religion, politics, family, medicine) as well as the role of technology and science within different cultural contexts. Lec 3, Cr 3.

### **INDS 3304 Frontier Studies: The U.S.-Mexico Border**

Orientation in the theory and proactive of field work (in either English or Spanish) for the analysis of the historical, social, economic, cultural, political, folkloric, and linguistic aspects for the U.S.-Mexico border region. Prospects for the future of the borderlands area are addressed. Lec 3, Cr 3.

## **International Business (INTL)**

### **INTL 3331 International Law**

This course covers a wide range of topics including differences in national legal systems, the formation of international law through treaties and practice, and the relationship between international law and domestic law. It may include such topics as immigration law, human rights, intellectual property protection, the settlement of international disputes, and customs law. Prerequisite: BLAW 3337 and admission for upper division. Lec 3, Cr 3.

### **INTL 3391 Multimodal Transportation**

An overview of the role of transportation in the conduct of commerce. This course examines the various modes of moving goods from the producer to the consumer, including motor, rail, air, water, pipeline, and special carriers. Prerequisite: Admission to upper division. Lec 3, Cr 3.

### **INTL 3392 Supply Chain Management**

The study of the systematic approach to managing the flows of materials and information linking the organization itself and its suppliers, transporters, warehouses, retailers, and customers in a way to maximize the overall value generated. Appropriate concepts and quantitative skills required for effective and efficient management of a supply chain will be studied. Themes encompassed include globalization and the role of e-commerce. Prerequisite: MANA 3361; admission to upper division. Lec 3, Cr 3.

### **INTL 4361 International Management**

The study of current recommended global management practices including managing across cultures and intercultural communication, organizing international operations and decision making, controlling across political and social environments, motivation and leadership across culture and human resource/labor issues. Prerequisite: MANA 3361; admission to upper division. Lec 3, Cr 3.

### **INTL 4371 International Marketing**

This course will provide students with an understanding of how to evaluate marketing opportunities in the foreign markets. Emphasis is placed on

adapting marketing concepts and strategies to accommodate individual environmental differences in the development of an international marketing plan. Topics may include cross-cultural issues, market-entry strategies, currency markets, international brand development, and consumer motivations. Prerequisite: MARK 3371 and admission to upper division. Lec 3, Cr 3.

**INTL 4381 International Finance & Economics**

An analysis of international trade, foreign investment, financing, and the factors affecting them in the process of allocating scarce resources to better meet human needs. Prerequisite: FINA 3380 and admission to upper division. Lec 3, Cr 3.

**INTL 4393 Topics in International Business**

The study of significant topics related to International Business. Course may be repeated for credit when topic varies. Prerequisite: Admission to upper division. Lec 3, Cr 3.

## **Interpreting (INTG)**

**INTG 4366 Interpreting I**

A basic orientation in the theory and practice of interpreting English to Spanish and Spanish to English. Emphasis on sight translation and short consecutive interpreting, and also preparation for simultaneous interpreting. Lec 3, Cr 3. Prerequisite: SPAN 3332, SPAN 3333, or approval of instructor.

**INTG 4367 Interpreting II**

Advanced practice in English and Spanish and Spanish to English consecutive and simultaneous interpreting with close attention to terminology and documentation. Lec 3, Cr 3. Prerequisite: SPAN 3332, SPAN 3333, or approval of instructor.

## **Italian (ITAL)**

**ITAL 1311 Elementary Italian I**

A course designed to develop fundamental skills in listening comprehension, speaking, reading, and writing, emphasizing conversations, vocabulary acquisition, reading, composition and culture. Lec 3, Cr 3.

**ITAL 1312 Elementary Italian II**

A continuation of Italian 1311. Lec 3, Cr 3. Prerequisite: ITAL 1311 or consent of instructor.

## **Kinesiology (KINE, DANC, HLTH, HLTHU)**

**KINE 1100 Advanced Life Saving**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1101 Aerobic Dance and Exercise**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1102 Angling & Baitcasting**

Instruction in individual dual and fitness activities are designed to develop

in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1103 Archery**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1105 Ballet I**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1106 Ballet II**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1108 Body Mechanics (Women Only)**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1109 Bowling**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1110 Flag Football**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1113 Golf**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive

lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1114 Gymnastics**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1115 Jazz & Modern Dance**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1116 Jogging**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1117 Paddle Tennis**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1119 Racquetball**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1120 Sailing**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1122 Soccer**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except

those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1124 Swimming**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1125 Table Tennis**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1126 Tap Dance**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1131 Wrestling**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1132 Surfing**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1304 Personal and Community Health**

This is a survey course designed to acquaint the student with the major health issues of today. Includes the study of mental and social health issues, the body systems, nutrition, fitness, disease, drug use and abuse, health care systems and environmental health concerns. Lec 3, Cr 3.

**KINE 1309 Sports Officiating – Basketball/Softball**

Instruction in the rules and techniques of officiating basketball and softball will be given. Opportunities for practice in both the classroom and intramural setting will be provided. Lec 3, Cr 3.

**KINE 1321 Coaching Athletics**

Designed to provide the student with an overview of the many areas of concern involved in coaching major sports. Includes the nature of the

coaching profession; organizing practices and games; psychological and sociological aspects of coaching; communications with school personnel, parents and the media ; and the ethics of coaching. Lec 3, Cr 3.

**KINE 1331 P.E. Activities in the Elementary Schools**

A study of physical activities suitable for preadolescents from ages 4-12. Activities studied include individual and group games, movement exploration, rhythms, tumbling and fitness. Lec 3, Cr 3.

**KINE 2370 Kinesiology (biomechanics)**

The study of the science of human motion, including the use of implements and objects involved in the performance of movement. The course is based specifically on biomechanics, musculoskeletal anatomy and neuromuscular physiology. Lec 3, Cr 3. Prerequisite: BIOL 1407 or BIOL 2401.

**KINE 3301 Psychology of Sport and Exercise**

A study of the effects of psychological factors on performance in sport, as well as the effects of sport-exercise participation on psychological development and wellness. Prerequisite: KINE 1301 and KINE 1306

**KINE 3320 History and Principles of Sport and Movement Sciences**

Study of the sporting events of early civilizations and their evolution into modern society. Includes the Olympic Games, the European influence on sports in the U.S. and the modern sports movement in the U.S. including intercollegiate and interscholastic sports. Lec 3, Cr 3.

**KINE 4313 Seminar in Sports, Dance and Exercise Science**

Selected topics on sports, dance or exercise science. Current trends and theories are included. Course covers skills, legal implications and specific topics in the areas of perceptual motor skills, sports, dance and exercise science that are not available as part of the regular course offerings. Courses may be repeated for credit when topics vary, but not more than nine hours will apply to a bachelor's degree. Lec 3, Cr 3.

**KINEU 2304 Outdoor Education**

This course involves and introduction to outdoor adventure activities (such as rock climbing, orienteering, canoeing, backpacking, and camping) as well as an introduction to experiential activity as teaching methodology. Topics covered require academic preparation and active student participation.

**DANC 1241 Ballet I**

Introduction to technique, theory and vocabulary of classical ballet. Previous ballet experience necessary.

**HLTH 3300 Elementary and Secondary School Health**

This course focuses in the etiology of the physical, mental, social, and emotional health of young people. Emphasis will be placed on the theory and practice in health education and an overview of the coordinated school health program. Prerequisite: HLTHU 2320.

**HLTH 3305 Selected Topics in Health Education**

Selected topics in the field are examined with the intent of promoting the study and research of areas not offered in the curriculum. May be repeated one time as long as the topic is different. Prerequisite: HLTHU 2320.

**HLTH 4300 Human Disease**

This course covers the relationship between the human body and communicable and non-communicable diseases/ The historical aspects of diseases, etiology, prevention and control, prevalence and symptoms are examined. Prerequisite: HLTHU 2320.

**HLTH 4305 Community and Consumer Health**

Aspect of community health such as political, social, economic, and cultural values are examined. In addition, the study of factors that influence the consumer marketplace for health products and services are investigated.

**HLTHU 2320 Personal Health**

The course will cover factors and the health issues that influence lifestyle and wellness throughout the lifespan. Emphasis will be placed on the application of knowledge and skills for personal and skills for personal and professional practice.

**HLTHU 2325 Nutrition**

The course covers the science of nutrition and food dietary choice, weight management, disease prevention and food safety. Identification of nutritional problems and the resources in the community will be examined.

**KINE 1104 Badminton**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1107 Basketball**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1111 Folk and Square Dance**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1112 Folklorico**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1118 Pington**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1121 Self-Defense**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1123 Softball**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1127 Tennis I**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1128 Tennis II**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1129 Volleyball**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1130 Weight Training**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1133 Basic Sports Skills**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1. Kinesiology Majors/Minors Only

**KINE 1134 Physical Conditioning**

Instruction in individual dual and fitness activities are designed to develop in the student the necessary skills and knowledge to engage in productive lifetime leisure activities. All courses emphasize beginning skills except those designated II, which are at the intermediate level. To enroll in a II level course, students may either have take the I level or already posses the fundamental skills in the activity. A course cannot be repeated for credit. Lec 2, Cr 1.

**KINE 1164 Lifetime Fitness**

This is a lecture course that explores the role of physical activity and proper nutrition in the prevention of cardiovascular and other chronic diseases. The principles of health-related physical fitness development and maintenance are emphasized, including cardiovascular endurance, muscular strength and endurance, flexibility and body composition. Lec 1, Cr 1.

**KINE 1238 Concepts of Fitness for Life**

This course is designed to improve the students' knowledge of total well-being with emphasis upon cardiovascular endurance, proper nutrition, weight control, strength and flexibility. Students will assess their own fitness needs, establish realistic goals and evaluate their progress toward reaching these goals. Lec 2, Lab 1, Cr 2.

**KINE 1301 Introduction to Sports and Exercise Science**

A survey course designed to introduce the prospective kinesiology education major to the history, philosophy, scientific foundations, objectives and current status of sports and exercise in educational and recreational settings. Lec 3, Cr 3.

**KINE 1306 First Aid/First Responder**

Topics of study include cardiopulmonary resuscitation, bleeding and shock, fractures, dislocations and medical emergencies. Upon successful completion of skills and knowledge tests, the student may be certified through the American Red Cross. Lec 3, Cr 3.

**KINE 1308**

Sports Officiating - Football, Volleyball. Instruction in the rules and techniques of officiating football and volleyball will be given. Opportunities for practice in both the classroom and college intramural setting will be provided. Lec 3, Cr 3.

**KINE 3302 Foundations of Sports and Exercises for Pre-Adolescent**

Theory application of modified individual, dual, and team sports for the preadolescent. Course includes knowledge and basic fundamentals for sport-related skill development. Included in the course are games of lower organization, relays, motor skills, lead-up games and related team sports. Lec 3, Cr 3.

**KINE 3309 Modified Team and Individual Sports**

A study of team and individual sports appropriate for adolescents and adults. Emphasis is given to the study of rules, terminologies, history and sociological aspects within the contexts of physical development and motor performances. Lec 3, Cr 3.

**KINE 3314 Dance for Children and Adolescents**

A study of historical foundations and philosophical roots relating to the development of dance in the United States. Includes the forces, controversies, and leaders affecting dance as an integral part of current society. Lec 3, Cr 3.

**KINE 3330 Coaching of Sports**

Study of the coaching profession as a multidimensional role in education. Course includes study of the psychological and sociological aspects of coaching; use of coaching strategies; organizing practices and games; communication with school, parents, and the media; and the ethics of coaching. The use of technology in coaching will also be examined. Lec 3, Cr 3.

**KINE 3340 Principles of Wellness and Fitness**

Study of the scientific principles of total well-being with emphasis upon physical fitness, proper nutrition, weight control, and stress management. Students will learn to design comprehensive wellness programs for the K-12 public school sector. Lec 3, Cr 3.

**KINE 3353 Physiology of Exercise and Human Performance**

Basic systematic adaptations to exercise with specific emphasis on the interrelationship of physiological functions of the human body, and the changes resulting from physical activity. Lec 3, Cr 3.

**KINE 3356 Aesthetics (Harmony) of Movement**

A study of motor skills and physical development from birth to adulthood with emphasis on childhood. Course includes study of neurological, physiological, intellectual, social and emotional factors that influence gross and fine movement activities. Lec 3, Cr 3.

**KINE 3370 Biomechanics**

The study of the advanced principles of human movement; scientific principles learned in the course will allow the student to understand how and why the human body moves in the manner that it does. The student will also learn to analyze biomechanical technique in numerous motor skills, as required in teaching and coaching complex movement. Lec 3, Cr 3. Prerequisite: BIOL 1407 or BIOL 2401.

**KINE 4310 Measurement Techniques in Physical Exercise and Sports**

Course includes knowledge and theory fundamentals of statistical measurement basics. It includes construction, selection, administration and interpretation of performance and knowledge tests for physical activities. Lec 3, Cr 3.

**KINE 4351 The Adapted Kinesiology Program**

Study of adaptations for the exceptional child. Theory and implications of specific disabilities with application to exercise and sports. Characteristics of special population children as related to the physiological basis of movement. Lec 3, Cr 3.

**KINEU 2255 Health and Motor Development for EC-4**

This course focuses on motor activities and health for young children. It includes the study of physiological, intellectual, social and emotional factors that influence gross and fine motor skills. The course is also designed to acquaint students with health issues for young children. Prerequisite: Admission to Teacher Education

**DANC 1242 Ballet II**

A continuation of DANC 1314. Prerequisite: DANC 1241 or equivalent skills Lab 3, Cr 2. Prerequisite: DANC 1241 or equivalent skills.

**DANC 2251 Theater Dance III**

A continuation of DANC 1352. Prerequisite: DANC 1252 or equivalent skills. Lab 3, Cr 2. Prerequisite: DANC 1252 or equivalent skills.

**DANC 1252 Theater Dance II**

A continuation of DANC 1351. Prerequisite: DANC 1241 or equivalent skills. Lab 3, Cr 2. Prerequisite: DANC 1241 or equivalent skills.

**DANC 2241 Ballet III**

A continuation of DANC 1342. Prerequisite: DANC 1242 or equivalent skills. Lab 3, Cr 2. Prerequisite: DANC 1242 or equivalent skills.

**DANC 2242 Ballet IV**

A continuation of DANC 2241. Prerequisite: DANC 2241 or equivalent skills. Lab3, Cr 2. Prerequisite: DANC 2241 or equivalent skills.

**DANC 2252 Theater Dance IV**

A continuation of DANC 2251. Prerequisite: DANC 2251 or equivalent skills. Lab 3, Cr 2. Prerequisite: DANC 2251 or equivalent skills.

**DANC 1251 Theatre Dance I**

An introduction to all aspects of theater dance. Emphasis on technique and vocabulary leading to skills in performing jazz, tap, modern, character, and folkloric dance. Previous dance experience necessary.

**Machine Shop Operations (MCHN)****MCHN 1354 Intermediate Machining II**

Development of job process plan to include operation of lathes, milling machines, drill press machines, and power saws. Set-up, layout, and tool maintenance is included. Emphasis on shop safety and preventative maintenance. Lec 3, Cr 3.

**MCHN 1302 Machinist II**

A study of different blueprints, with emphasis on mechanical parts and the application of machine shop tools to the production of the components and parts. Includes the determination of operations required based on part geometry, features and tolerance. Application of CAD to production of blueprints. Lec 3, Cr 3.

**MCHN 1305 Metals and Heat Treatment**

Designed for students going into the workforce as CNC Operators, manual machinists, tool designers, or heat treat operators. Topics include properties of metal and heat treatment of metals. Lec 2, Lab 3, Cr 3.

**MCHN 1317 Machine Shop Blueprint Reading**

A study of different types of Manufacturing blueprints and the application of each. Emphasis on mechanical components, with an introduction to Computer Aided Drafting. Lec 3, Cr 3.

**MCHN 1320 Precision Tools & Measurement**

An introduction to the modern science of dimensional metrology. Emphasis on the identification, selection, and application of various types of precision instruments associated with the machining trade. Practice of basic layout and piece part measurements while using standard measuring tools. Lec 2, Lab 4, Cr 3.

**MCHN 1332 Bench Work & Layout**

An introduction to bench work and layout. Application of the use theory of tools including, hand tools, micrometers, height gages, pedestal grinders, and layout tools. Includes principles of dimensional measurements and accuracy. Lec 1, Lab 8, Cr 3.

**MCHN 1338 Machining I**

An introduction to machine shop theory, math and terminology, basic bench work, and part layout using a variety of common measuring tools. Application and basic operation of machine tools, such as, band saws, grinders, drill presses, lathes and mills with common hand tools. Lec 1, Lab 8, Cr 3.

**MCHN 1341 Basic Machine Shop II**

A continuation of Basic Machine Shop I. Lec 1, Lab 8, Cr 3.

**MCHN 1343 Machine Shop Mathematics**

Designed to prepare the student with technical, applied mathematics that will be necessary in future machine shop-related courses. Lec 3, Cr 3.

**MCHN 2303 Fundamentals of C.N.C Machine Controls**

An introduction to G and M codes (RS274-D) necessary to program Computer Numerical Controlled (CNC) machines.

**MCHN 2337 Advanced Milling Operations**

An advanced study of milling machine operations. Identification and/or use of milling cutters and support tooling including end mills, slab mills, involute cutters, rotary tables, and indexing heads. A review of related math and machine theory. Lec 3, Lab 4, Cr 4.



## **Magnetic Resonance Imaging Technology (MRIT)**

### **MRIT 3330 Special Topics in Magnetic Resonance Imaging Technology**

Topics address recently identified current events, skills, knowledge, or occupation and relevant to the professional development of the student.

### **MRIT 3334 Magnetic Resonance Equipment and Methodology**

A study of the actual operational control of magnetic resonance imaging. Theory and application of magnetic resonance imaging equipment and the principles of the patient.

### **MRIT 3664 Clinical Practicum**

Practical workplace clinical experience in MR scanning, patient screening and related activities. This course is competency based rather than time based. If the student needs more time to complete the required competences.

### **MRIT 4331 Cross-Sectional Anatomy**

This course provides the student with a basic knowledge of cross-sectional anatomy. This course provides the foundation needed to recognize anatomic structures in MR images.

## **Management (MANA)**

### **MANA 3361 Principles of Management**

This course is a study of the management functions of planning, organizing, leading and controlling. Emphasis is placed on organizational theory and behavior. Lec 3, Cr 3.

### **MANA 3362 Human Resource Management**

Current development within the field of personnel administration are reviewed. AS study is made of the concepts, principles, policies and organizational procedures utilized by business institutions in the management of personnel. Covered areas are selection, placement, compensation, morale, labor turnover, collective bargaining, and supervisory activities. Lec 3, Cr 3. Prerequisite: MANA 3361 and Admission to Upper Division.

### **MANA 3363 Production Management**

The concept of the production function and its applicability to all types of business firms, problems which provide background for the integration of scientific decision processes relative to an analysis of production activities and computer applications in the productions/operation environment. Lec 3, Cr 3. Prerequisite: BUSIU 2341 or BUSIU 2441; admission to upper division.

### **MANA 4350 Business Ethics**

This course examines various theories of ethical reasoning used in business to resolve ethical dilemmas. The concepts of integrity, objectivity, independence and other core values in business will be studied. Lec 3, Cr 3.

### **MANA 4360 Organizational Theory and Behavior**

A study of the theory of organizational structures and individual and group behavior within organizations. Prerequisite: MANA 3361, Admission to Upper Division.

### **MANA 4366 Small Business Management**

A study of the special characteristics of small business. Emphasis will be placed on the selecting and starting of a small business and the essential function of management in the first years of operation. Lec 3, Cr 3. Prerequisite: MANA 3361, MARK 3371 and Admission to Upper Division.

### **MANA 4367 Topics in Management**

The study of significant topics related to Management. Course may be repeated for credit when topic varies. Lec 3, Cr 3. Prerequisite: MANA

3361, MARK 3371. Admission to Upper Division.

### **MANA 4368 Industrial Relations**

An examination of current issues and problem areas facing management and unions in their relationship with employees, government and the community. Emphasis is placed on the role of union and management in the process to contemporary labor legislation, contract negotiations, and daily administration of company and union relations. Lec 3, Cr 3. Prerequisite: MANA 3361 and Admission to Upper Division.

## **Manufacturing Engineering Technology (MFET, MFETU)**

### **MFET 2420 Manufacturing Process Technologies**

Introduction to Manufacturing processes including metal cutting, measurements and metrology, deformation processes, casting, welding, joining, and composites. Lec 3, Lab 3, Cr 4. Prerequisite: ENGT 2401 and ENGR 1205.

### **MFET 3311 International Quality Assurance Systems**

Study of the statistical methods used in international markets for the assurance of product quality. International standards and practices including ISO 9000 will be examined, along with practical fundamentals of control charts, correlation, regression and design of experiments. Lec 3, Lab 0, Cr 3. Prerequisite: MFET 2420 and ENGT 2303 or MATH 2342.

### **MFET 3320 Product and Process Design**

Application of the engineering design and problem solving process for products and Manufacturing processes. Concepts of product life cycle, reliability, reparability, engineering specifications, productivity and product cost will be introduced. Lec 2, Lab 3, Cr 3. Prerequisite: MFET 2420.

### **MFET 3325 Manufacturing Process Planning**

Introduction to basic Industrial Engineering functions including process engineering, work analysis, workplace design, time and motion studies, line balancing, inventory control and material handling systems. Lec 3, Cr 3. Prerequisite: MFET 2420. Lec 3, Lab 0, Cr 3.

### **MFET 3331 Computer Aided Manufacturing**

Introduction to the integration of design and manufacturing in computer-based systems. Applications of engineering design theory and methodology, 2D and 3D graphics, dimensions, tolerances and fits. Extensive use of commercial Computer Aided Design/CAM systems. Lec 2, Lab 3, Cr 3. Prerequisite: MFET 2420.

### **MFET 3332 Robots in Manufacturing**

This course deals with the technology and application of robots in a Computer Integrated Manufacturing (CIM) environment by providing understanding of robotics hardware and software. Digital interfacing of robots with other CIM components will be introduced. Robotics cell design and the socio-economic impact of robotics will also be discussed. Prerequisite: MFET 2420 or MFET 4320. Lec 2, Lab 3, Cr 3.

### **MFET 3341 Electronic Assembly Technology**

Basics of assembly equipment and processes for printed circuit board assembly including surface mount, insertion machines, screen printing, soldering, cleaning and testing. Lec 2, Lab 3, Cr 3. Prerequisite: MFET 2420.

### **MFET 3350 Special Topics: Manufacturing Engineering Technology Junior Level**

A special topic is offered as an elective in manufacturing engineering technology at the junior level. Different sections may cover different topics in a semester. Under special topics courses related to new developments in the area of manufacturing engineering technology will be offered. Lec 3, Cr 3.

### **MFET 3351 Plastic Manufacturing Technology**

Focuses on the important relationships between material properties, molding processes, product design and performance of finished products. Lec 2, Lab 3, Cr 3. Prerequisite: MFET 2420.

### **MFET 4320 Materials and Processes**

Introduce concepts needed to understand, develop, and use any material for engineering applications. Learn structures, properties and applications of common materials in electrical engineering. Understand the processes used to create products from various materials. Study current manufacturing process technologies and their integration into today's industry. Lab experiments will determine material properties. Prerequisite: CHEM 1311, INMT 1291, and MATH 1412. Lec 2, Lab 3, Cr 3.

### **MFET 4321 Designed Experimentation**

Application of computer systems to the design and execution of engineering experimentation for product and process design, analysis and problem solving. Covers classical and modern factorial experimentation techniques, response surface analysis, experimental design, execution and data analysis. Lec 3, Cr 3. Prerequisite: MFET 3311. Lec 2, Lab 0, Cr 3.

### **MFET 4350 Special Topics: Manufacturing Engineering Technology Senior Level**

A special topic is offered as an elective in manufacturing engineering technology at the senior level. Different sections may cover different topics in a semester. Under special topics, courses related to view developments in the area of manufacturing engineering technology will be offered. Lec 3, Cr 3.

### **MFET 4360 International Environmental Issues In Manufacturing**

Concepts of pollution prevention, international regulations including ISO 14000 and environmental impact on a global basis as it relates to manufacturing activities. Lec 3, Lab 0, Cr 3. Prerequisite: Senior standing.

### **MFETU 2350 Special Topics: Manufacturing Engineering Technology Sophomore Level**

A special topic is offered as an elective in manufacturing engineering technology at the sophomore level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of manufacturing engineering technology will be offered. Lec 3, Cr 3.

## **Marketing (MARK)**

### **MARK 3371 Principles of Marketing**

The marketing structure as it operates in our economic system. With emphasis on improving the flow of goods and services from producer to consumer. Practical application of principles and techniques. Designed as a beginning course in marketing. Lec 3, Cr 3. Prerequisite: Admission to upper division.

### **MARK 3372 Consumer Behavior**

An overall view of the basic perspectives of consumer behavior. An interdisciplinary approach is utilized by studying the fields of economics, psychology, sociology and anthropology as they relate to marketing. Emphasis is placed on the fundamental process of motivation, perception and learning, as well as analysis of individual predispositions and group influences in marketing. Lec 3, Cr 3. Prerequisite: MARK 3371; admission to upper division.

### **MARK 4371 Sales Management and Personal Selling**

The selection, training, compensation, organization, and control of a field sales organization is studied. Primary emphasis is devoted to the selection and training of the sales force for the selling process and making a sales presentation. Lec 3, Cr 3. Prerequisite: MARK 3371, MANA 3361; ad-

mission to upper division.

### **MARK 4372 Promotion Management**

This survey course covers the development and management of an organization's advertising and sales promotional effort. The course includes a review of advertising, production, scheduling, and media buying. Emphasis is on the coordination of media strategy with field sales force activities. Lec 3, Cr 3. Prerequisite: MARK 3371; admission to upper division.

### **MARK 4376 Marketing Strategy**

Applications of marketing principles to strategy formulation. Topics include: target market selection, market mix development and new product planning. Both consumer and industrial marketing is stressed through the use of cases, readings, and special projects. Recommended as the capstone course in the marketing major. Lec 3, Cr 3. Prerequisite: MARK 3371 or MANA 3361; admission to upper division.

### **MARK 4377 Topics in Marketing**

The study of significant topics related to Marketing. Course may be repeated for credit when topic varies. Lec 3, Cr 3. Prerequisite: Admission to upper division.

### **MARK 4378 Marketing Research**

Quantitative research procedures and techniques utilized in business today. Problems definition, sources of research data, survey methods, questionnaire design and sampling techniques. Practical application of procedures and techniques is emphasized through class research projects. Lec 3, Cr 3. Prerequisite: MARK 3371 and BUSIU 2341 or BUSIU 2441; admission to upper division.

## **Mathematics (MATH)**

### **MATH 0100 Mathematics Lab**

This is a developmental mathematics course Enrollment in this course is restricted to those students who have failed the mathematics portion of the THEA test but have satisfied the developmental mathematics requirements. Students will pursue an individualized plan of study under the supervision of a mathematics instructor. In addition to the one hour of lab per week, students are recommended to devote additional time in the Learning Assistance Center of the CDI Math Lab working with computer tutorials as recommended by the instructor. Lec 1, Cr 1.

### **MATH 0120 Basic Mathematics Lab**

This course is intended for students needing a review of arithmetic. This course is designed to prepare students for introductory Algebra (Math 0421)

Topics include addition, subtraction, multiplication and division of whole numbers, fractions, and decimals; percents; data analysis, graphs, and statistics; geometry; introduction to real numbers and algebraic expressions; and applications of these topics. Students will pursue an individualized plan of study under the supervision of a mathematics instructor. Lec 0, Lab 3, Cr 1.

### **MATH 0320 Basic Mathematics**

A course designed for students needing a review of the fundamental operations of arithmetic with a gradual introduction to some basic concepts of algebra in preparation for Introductory Algebra. Topics include addition, subtraction, multiplication and division of whole numbers, fractions, decimals and signed numbers, algebraic expressions involving integers, geometry, ratio, proportion, percents, metric measurement, algebraic equations, statistics, pictography, tables, bar, circle and line graph interpretations, and word problems. Lec 3, Cr 3.

### **MATH 0321 Introductory Algebra**

A first course in algebra designed to prepare students for Intermediate Alge-

bra. Topics include arithmetic and algebra of the real numbers, sets, linear equations, linear inequalities, absolute value equations and inequalities, integer exponents, adding, subtracting, multiplying, dividing and factoring polynomials, adding, subtracting, multiplying and simplifying rational expressions, complex fractions, synthetic division, and applications of these topics. Lec 3, Cr 3.

#### **MATH 0322 Intermediate Algebra**

A second course in algebra designed to prepare students for College Algebra. Topics include rational exponents and radicals, radical expressions, complex numbers, quadratic equations and inequalities, linear equations and inequalities, functions, variation, algebra of functions, symmetry, graphing quadratic functions, circles, ellipses, hyperbolas, square roots, and other useful functions, and applications of these topics. Lec 3, Cr 3.

#### **MATH 0421 Introductory Algebra**

This is a first course in algebra designed to prepare students for Intermediate Algebra (Math 0422)

Topics include review of arithmetic and algebra of real numbers, sets, linear equations, linear inequalities, absolute value equations and inequalities, linear equations in two variables, graphing linear equations in two variables, integer exponents, adding, subtracting, multiplying, dividing, and factoring polynomials, and applications of these topics. Lec 3, Lab 3, Cr 4. Prerequisite: MATH 0120 or MATH 0320 with minimum grade of C, or appropriate score on the placement exam.

#### **MATH 0422 Intermediate Algebra**

This is a second course in algebra designed to prepare students for General Educational Mathematics Core Courses, which include Math 1314, Math 1324, and Math 1332. Topics include review of exponents, polynomials, and factoring, rational expressions, synthetic division, equations of lines, inequalities, and functions, joint and combined variations, linear systems, roots and radicals, quadratic equations, inequalities, and graphs, and applications of these topics. Lec 3, Lab 3, Cr 4. Prerequisite: MATH 0421 or MATH 0321 with minimum grade of C.

#### **MATH 1314 College Algebra**

A college level course in Algebra. Topics include zeros and graphs of polynomials functions, rational functions, inverse functions, exponential functions, logarithmic functions, linear systems of equations in two and three variables, nonlinear systems of equations, second-degree inequalities and systems, linear programming, matrices, determinants, solution of linear systems by matrices and determinants, sequences, series, binomials theorem, mathematical induction, permutations, combinations, probability, and applications of these topics. Lec 3 Cr 3. Prerequisite: MATH 0322 or MATH 0422 with minimum grade of C equivalent as determined by the Mathematics assessment test.

#### **MATH 1316 Trigonometry**

Topics include trigonometric functions, right triangles, radian measure and circular functions, graphs of trigonometric functions, identities, inverse trigonometric functions, trigonometric equations, oblique triangles, complex numbers, and the practical problems. Lec 3, Cr 3. Prerequisite: MATH 1314 with minimum grade of C, or equivalent as determined by the Mathematics assessment test.

#### **MATH 1324 Business Algebra**

This course is designed to meet the needs of students majoring within the School of Business. Topics include those from College Algebra, which apply to business and economics, simple and compound interest, annuities, probability and statistics and linear programming. Lec 3, Cr 3. Prerequisite: MATH 0322 or MATH 0422 with minimum grade of C.

#### **MATH 1325 Business Calculus**

This course is designed to meet the needs of students majoring within the School of Business. Topics include: applications of differential and integral calculus to business and economics, probability and statistics. Lec 3, Cr 3. Prerequisite: MATH 1314 or MATH 1324 with minimum grade of C.

#### **MATH 1332 Math for Liberal Arts**

This course is designed to meet the needs of non-science and non-business majors. The topics covered in this course include sets, logic, elementary number theory, functions, geometric concepts, mathematics of finance, and the introduction to probability and statistics. Lec 3 Cr 3. Prerequisite: MATH 0322 or MATH 0422 with minimum grade of C, or equivalent as determined by the Mathematics assessment test.

#### **MATH 1335 Mathematical Concepts I**

This course is designed for students considering a major in elementary education, in which the basic concepts of mathematics are introduced and applied. Topics include: mathematical reasoning and problem solving, theory of sets, numeration systems, systems of whole numbers and integers, and number theory. This course cannot be counted toward a major or minor in mathematics. Lec 3, Cr 3. Prerequisite: MATH 0322 with minimum grade of C.

#### **MATH 1336 Mathematical Concepts II**

A continuation of MATH 1335 that includes topics in rational and real numbers, decimals, informal geometry and measurement, metric geometry, variations, applications of mathematics, simple statistical methods and probability. This course cannot be counted toward a major or minor in mathematics. Lec 3, Cr 3. Prerequisite: MATH 1335 with minimum grade of C.

#### **MATH 1342 Elementary Statistics**

This course is designed to provide the student with an elementary overview of the nature and uses of descriptive and inferential statistics. Topics include descriptive statistics, measures of central tendency and dispersion, probability, distributions, tests of hypothesis and estimation for large and small samples, linear regression and correlation, comparisons, and analysis of variance. Prerequisite: MATH 1314 with minimum grade of C, or equivalent as determined by the Mathematics assessment test.

#### **MATH 1348 Analytic Geometry**

This course is designed for students with a reasonably sound background in algebra and trigonometry. Topics include basic geometric concepts, vectors, the straight line, the circle, conic sections, transformation of coordinates, curve sketching, transcendental curves, polar coordinates, parametric equations, and solid analytical geometry. Lec 3, Cr 3. Prerequisite: MATH 1316 with minimum grade of C, or high school Trigonometry, Analysis, and/or Calculus and successfully assessed.

#### **MATH 1412 Pre-Calculus Mathematics**

This course is an alternative to MATH 1316 and MATH 1348. Topics include functions and their graphs, trigonometric, exponential and logarithmic functions, vectors, conics, systems of equations, sequences and series, and polar coordinates. Lec 4, Cr 4. Prerequisite: MATH 1314 with minimum grade of C, or equivalent as determined by the Mathematics assessment test.

#### **MATH 2313 Calculus I**

This course covers functions, limits, and continuity, the derivative, differentiation of algebraic functions, the derivative as a rate of change, maximum and minimum problems with applications, Rolle's Theorem, the Mean-Value Thermo, higher derivatives, concavity, techniques of graphing, antiderivative, the definite integrate and integration with applications. Lec3, Lab 1, Cr 3. Prerequisite: MATH 1412 with minimum grade of C,

or MATH 1348 with minimum grade of C, or high school Trigonometry, Analysis, and/or Calculus and successfully assessed.

### **MATH 2314 Calculus II**

A continuation of MATH 2313 that includes topics such as applications of the definite integrate, differentiation and integration of inverse, logarithmic, exponential, inverse trigonometric, and hyperbolic functions with application, solving differential equations, various techniques of integration with applications, improper integrals, approximate integration, limits of sequence, infinite series, various tests for convergence of a series, power series, Taylor and Maclaurin Series, and application for power series. Lec 3, lab 1, Cr 3. Prerequisite: MATH 2313 or MATH 2413 with a minimum grade of a C.

### **MATH 2318 Linear Algebra I**

This is an introductory course in linear algebra. Topics include systems of linear equations, vectors in n-space, matrix operations, determinants, and vector spaces. Lec 3, Cr 3. Prerequisite: MATHU 2311 or MATHU 2332 with a minimum grade of C.

### **MATH 2321 Differential Equations and Linear Algebra**

This course emphasizes solution techniques. Topics include differential equations, vector spaces, linear transformation, matrix/vector algebra, eigenvectors, Laplace Transform and systems of equations. Prerequisite: MATH 2414 with minimum grade of C.

### **MATH 2413 Calculus I**

This course covers functions, limits, and continuity, the derivative, differentiation of algebraic functions, the derivative as a rate of change, maximum and minimum problems with applications, Rolle's Theorem, the Mean-Value Theorem, higher derivatives, concavity, techniques of graphing, antiderivative, the definite integral and integration with applications. Lec 3, Lab 2, Cr 4. Prerequisite: MATH 1412 with minimum grade of C, or MATH 1348 with minimum grade of C, or high school Trigonometry, Analysis, and/or Calculus and successfully assessed.

### **MATH 2414 Calculus II**

This course is a continuation of MATH 2413. This course covers the following topics: applications of the definite integral, differentiation, integration, and applications of logarithmic, exponential, trigonometric, hyperbolic functions and their inverses, solving differential equations, various techniques of integration with applications, improper integrals, approximation methods for definite integrals, limits of sequence infinite series, various tests for convergence of a series, power series, Taylor and Maclaurin Series, and application of power series. Lec 3, Lab 2, Cr 4. Prerequisite: MATH 2413 with minimum grade of C, or MATH 2313 with minimum grade of C.

### **MATH 3301 History of Mathematics**

This course is a study of the historical development of ideas that shape modern mathematical thinking. Although mathematicians are studied, emphasis is placed on mathematical development. Prerequisite: MATH 2313 or MATH 2413 with a minimum grade of C.

### **MATH 3310 Survey of Mathematical Concepts and Principles I**

The course is a study of mathematical concepts taught in high school from an advanced point of view. The course is designed to deepen the understanding of the majority of mathematical ideas needed for teaching courses included in the secondary mathematics curriculum and the main goal is to enhance the in-service and pre-service teachers' ability to communicate mathematically. Topics include those from mathematical foundations, algebra, discrete mathematics, probability and statistics, which are included in domains 1,2 and 5 of ExCET for Secondary Mathematics. Prerequisite: MATH 2318 with a minimum grade of C.

### **MATH 3317 Survey of Mathematical Concepts and Principles II**

The course is a study of mathematical concepts taught in high school from an advanced point of view. The course is designed to deepen the understanding of the majority of mathematical ideas needed for teaching courses included in the secondary mathematics curriculum and the main goal is to enhance the in-service and pre-service teachers' ability to think and communicate mathematically. Topics include those from mathematical foundations, algebra, discrete mathematics, probability and statistics, which are included in domains 3,4, and 5 of ExCET for Secondary Mathematics. Prerequisite: MATH 3310 with a minimum grade of C.

### **MATH 3321 Algebra I**

This course covers linear transformations, matrix representations of linear transformations, similarity of matrices, orthogonality, least squares problems, the Gram-Schmidt orthogonalization, eigenvalues and eigenvectors, systems of linear differential equations, diagonalization, Hermitian matrices quadratic forms, positive definite matrices. Prerequisite: MATH 2318 with a minimum grade C.

### **MATH 3328 Linear Algebra II**

This course covers linear transformations, matrix representations of linear transformations, similarity of matrices, orthogonality, least squares problems, the Gram-Schmidt orthogonalization, eigenvalues and eigenvectors, systems of linear differential equations, diagonalization, Hermitian matrices quadratic forms, positive definite matrices. Prerequisite: MATH 2318 with a minimum grade of C.

### **MATH 3332 Geometry II**

Complete overview of Hilbert's axioms (connection, order, parallels, congruence, continuity); convex geometry (convex hull, extreme points, linear programming); projective geometry (collineation, coordination, the Main Theorem, affine spaces). Prerequisite: MATHU 2332 with a minimum grade of C

### **MATH 3335 Contemporary Math I**

This course is designed for students seeking teacher certification for grade levels Early Childhood through eight grade. Selected topics will be studied from an advanced point of view and will include Set Theory, Logic, and Truth Tables, Mathematical Reasoning and Problem Solving, Number Systems and Numeration, and Number Theory and Nature of Numbers. Lec 3, Cr 3. Prerequisite: MATH 1314, MATH 1332 or MATH 1324.

### **MATH 3336 Contemporary Math II**

This course is designed for students seeking teacher certification for grade levels Early Childhood to eight grade. Selected topics will be studied from an advanced point of view and will include Integers, Fractions and Decimals, Statistics and Probability, Geometry and Measurements. Lec 3, Cr 3. Prerequisite: MATH 3335.

### **MATH 3339 Topology**

This is an introductory course in topology, one of the major branches of modern mathematics. Topics will include; sets, mappings, metric spaces, sequences in metric spaces, connectedness, and compactness. Prerequisite: MATHU 2311 with a minimum grade of C.

### **MATH 3341 Real Analysis**

This course presents a rigorous introduction to the elements of real analysis. Topics include sequences, series, functions, limits, continuity, and derivatives. Prerequisite: MATH 2318 with a minimum grade of C

### **MATH 3348 Vector Analysis**

This course is a study of the application of vector methods to the problems of mathematics and physics. Topics discussed include vector and scalar products, differentiation of vector-valued functions, the divergence theo-

rem, and Stokes theorem. Lec 3, Cr 3. Prerequisite: MATH 3447 with a minimum grade of C.

### **MATH 3349 Differential Equations**

This course concentrates on solving ordinary differential equations by a variety of methods and techniques including Laplace Transforms. Also included in this course are elementary applications problems and solving systems of linear differential equations. Lec 3, Cr 3. Prerequisite: MATH 2314 or MATH 2414 with a minimum grade of C.

### **MATH 3362 Discrete Structures**

This course is an introduction to discrete mathematics with minimal mathematics requirements. This course extends the students' mathematical maturity and ability to deal with abstraction. Topics include logic and proofs, set theory, relations, functions, algorithms, combinatorics, graph theory, directed graphs and binary trees, ordered sets and lattices, and propositional calculus. Particular emphasis is given to structures applicable to mathematics, which are essential for the mathematics major or minor. Prerequisite: MATH 2414 with minimum grade of C.

### **MATH 3366 Computer Algebra Systems**

This is a course in high level programming language. Different programming styles are covered such as functional, rule-based, procedural and object oriented programming. A computer algebra system such as Mathematical, Maple or MatLab is used. Prerequisite: MATH 3447 with a minimum grade of C.

### **MATH 3379 Fund Math for Science& Engineering**

This course covers applications of Mathematics in Chemistry, Physics, Biology, Computer Science, Engineering Technology, and Space Science as described in the NASA mission. The course provides the necessary mathematics skills for pre-service and in-service teachers. This course may be taken by students considering a career in technical or engineering technology programs. The course covers the following major areas: fundamental concepts of operations, the metric system, and measurements; fundamental algebraic concepts; relations and variations; right-triangle trigonometry; analytic geometry and peculiar graphs; vector and spatial analytic geometry; and calculus and differential equations. Lec 3, Cr 3. Prerequisite: MATH 2314 or MATH 2414 and MATH 3349 and CHEM 1312 with a minimum grade of C.

### **MATH 3447 Calculus III**

Topics include Vectors in space, limits of functions of several variables, directional derivatives of functions of several variables, and multiple integration. Prerequisite: MATH 2314 or MATH 2414 with a minimum grade of C.

### **MATH 4321 Algebra II**

This course is for students with little experience in algebra that wish to improve their algebraic skills. It is also a contribution to disburden Algebra I. We pick two connected areas in modern algebra on which we look more abstractly, e.g., finite group theory and Galois theory. Prerequisite: MATH 3321 with minimum grade of C.

### **MATH 4329 Number Theory**

This course includes a study of divisibility of integers, prime factorizations, congruence, and Diophantine equations. Prerequisite: MATH 3321 with a minimum grade of C.

### **MATH 4332 Groups and Geometries**

This course is for students with little experience in algebra as well as in geometry. We present incidence geometries, incidence graphs, coset geometries, automorphism of geometries, simplicial complexes, adjacency algebras. The concrete objects of interest will be the projective spaces and

design which play a role in applied mathematics. Prerequisite: MATH 3321 with minimum grade of C.

### **MATH 4342 Complex Analysis**

This course gives rigorous introduction to the theory of functions of a single complex variable. Topics include complex number system, analytic functions, Cauchy-Riemann equation, complex integration Cauchy's theorem, infinite series, and the residue theorem. Prerequisite: MATH 3341 with minimum grade of C.

### **MATH 4343 Advanced Calculus**

In this course, basic analytical concepts like limits, continuity, differentiability and integrability of real functions in several variables (which students have seen before in the calculus courses) will be considered under a more theoretical point of view. Algebraic as well as topological methods will be used in order to provide the axiomatic setting. In addition, the course discusses the convergence of number and function series. Prerequisite: MATH 3341 with minimum grade of C.

### **MATH 4361 Problem Solving and Math Modeling**

The course is based on problem solving techniques and modeling projects, which require active building models for real-world problems. A basic understanding of Mathematics up to single variable differentiation and integration Calculus is required. Topics such as difference equations, differential equations, probability, statistics, numerical methods, and linear algebra will be introduced as part of the modeling process. Prerequisite: MATH 2318 with a minimum grade of C.

### **MATH 4374 Probability and Statistics**

This course introduces the student to the mathematical theory of probability and statistics. Topics include probability, random variables, discrete and continuous probability distributions, expectation and variance. Moments and moment generating functions and the central limit theorem.

### **MATH 4379 Special Problems in Applied Mathematics**

This course covers special undergraduate topics in applied mathematics, which are not taught elsewhere in the department. May be repeated for credit when topic is different. Lec 3, Cr 3. Prerequisite: MATH 2314 or MATH 2414 with a minimum grade of C and Junior Standing.

### **MATH 4391 Special Topic in Mathematics**

This course covers special undergraduate topics in mathematics not offered elsewhere in the department. May be repeated for credit. Prerequisite: MATH 2318 with a minimum grade of C.

### **MATHU 2311 Foundations of Mathematics**

The major objective of this course is to develop some skills that are necessary for the upper-level mathematics courses. It includes reading mathematical texts independently, understanding both mathematical English and logical symbolisms, constructing counterexamples, thinking independently, and also understanding and discovering mathematical proofs. The course covers topics in logic and foundations of mathematics such as propositional logic, quantifiers, set theory, proof theory, and recursion theory. Prerequisite: MATH 2414 with a minimum grade of C.

### **MATHU 2332 Geometry I**

Euclidean geometry (congruence axioms and theorems with proofs, polygons), analytic geometry (coordination over the real numbers), transformational geometry (basic results in  $GL(2, \mathbb{R})$  and  $GL(3, \mathbb{R})$ ), axiomatic introduction into Projective Geometry. Prerequisite: MATH 2414 with a minimum grade of C.

## **Mechanical Engineering Technology (MEET)**

### **MEET 3333 Mechanical Subsystem Design**

Selection and computer-aided graphical representation of mechanical subsystems for the transmission of mechanical power and/or generation of mechanical motion are studied. Component selection of gears, cams, belt and chain drives, clutches and transmissions will use data sources of contemporary manufacturers ranging from vendor catalogs to computerized databases. Lec 2, Lab 3, Cr 3. Prerequisite: ENGR 2302.

### **MEET 3350 Special Topic: Manufacturing Engineering Technology Junior Level**

A special topic is offered as an elective in mechanical engineering technology at the junior level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of mechanical engineering technology will be offered. Lec 3, Cr 3.

### **MEET 3430 Transport Technologies I**

This course covers the zero, first, and second laws of thermodynamics, fluid properties, conduction, convection and radiant heat transfer. Prerequisite: MATH 2314. Lec 3, Lab 3, Cr 4.

### **MEET 3431 Transport Technologies II**

Analysis and applications of fluid mechanics and fluid power to mechanical systems, components and control of hydraulic and pneumatic systems. Prerequisite: MEET 3430. Lec 3, Lab 3, Cr 4.

### **MEET 4325 Mechanical Power Systems**

Technology of prime movers and their operating characteristics; plants for generating electric power, internal and external combustion engines, motors and turbines. Lec 2, Lab 3, Cr 3. Prerequisite: MEET 3431.

### **MEET 4350 Special Topic: Mechanical Engineering Technology Senior Level**

A special topic is offered as an elective in mechanical engineering technology at the senior level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of mechanical engineering technology will be offered. Lec 3, Cr 3.

### **MEETU 1301 Introduction to Computer for Technology**

Introductory course to computer programming and computer usage for technologists using Visual Basic. The course features the use of object and event driven programming. The course includes creating graphic user interface, writing and debugging software, and input/output device management. Programming techniques include decisions making, repetitive loops, arrays, and subprogram creations and usage. Problem solving techniques structured programming and programming conventions will be covered. Lec 2 Lab 2, Cr 3.

### **MEETU 2350 Special Topic: Mechanical Engineering Technology Sophomore Level**

A special topic is offered as an elective in mechanical engineering technology at the sophomore level. Different sections may cover different topics in a semester. Under special topics, courses related to new developments in the area of manufacturing engineering technology will be offered. Lec 3, Cr 3.

## **Medical Lab Technology (MLAB)**

### **MLAB 1166 Practicum**

Practical general training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates to the workplace training and experiences to the student's general and technical course of study. Lec 0, Lab 10, Cr 1.

### **MLAB 1167 Practicum**

Practical general training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates to the workplace training and experiences to the student's general and technical course of study. Lec 0, Lab 10, Cr 1.

### **MLAB 1201 Introductory to Clinical Laboratory**

An introduction to clinical laboratory science, including quality control, laboratory math, safety basic laboratory equipment, laboratory setting, accreditation and certification. Lec1, Lab 4

### **MLAB 1211 Urinalysis and Body Fluids**

An introduction to urinalysis and body fluid analysis, including anatomy and physiology of the kidney, and physical, chemical, and microscopic examination of urine, cerebrospinal fluid, and other body fluids. Lec 1, Lab4, Cr 2.

### **MLAB 1227 Coagulation**

A course in coagulation theory, procedures, and practical applications. Includes laboratory exercises, which rely on commonly performed manual and semiautomated techniques. Lec 1, Lab 2, Cr 2.

### **MLAB 1331 Parasitology/Mycology**

A study of the taxonomy, morphology, and pathogenesis of human parasites and fungi, including the practical application of laboratory procedures. Lec 2, Lab 4, Cr 3.

### **MLAB 1335 Immunology/ Serology**

An introduction to the theory and application of basic immunology, including the immune response, principles of antigen-antibody reactions, and the principles of serological procedures. Lec 2, Lab 4, Cr 3.

### **MLAB 1415 Hematology**

Introduction to the theory and practical application of routine and special hematology procedures, both manual and automated; red blood and white blood cells maturation sequences, normal and abnormal morphology and associated diseases. Lec 3, Lab 4, Cr 4.

### **MLAB 2132 Seminar in Medical Laboratory Technology**

Designed to reinforce didactic information with laboratory methodologies and allow exploration of advanced techniques in medical laboratory technology. Prerequisite: MLAB 1201.

### **MLAB 2166 Practicum**

Practical general training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates to the workplace training and experiences to the student's general and technical course of study. Lec 0, Lab 10, Cr 1.

### **MLAB 2167 Practicum**

Practical general training and experiences in the workplace. The college and the employer develop and document an individualized plan for the student. The plan relates to the workplace training and experiences to the student's general and technical course of study. Lec 0, Lab 10, Cr 1.

### **MLAB 2431 Immuno-hematology**

A study of blood antigens and antibodies. Performance of routine blood banking procedures, including blood group and Rh typing, and antibody screens, antibody identification, cross matching, elution and absorption techniques.

### **MLAB 2501 Clinical Chemistry**

An introduction of the principles and procedures of various tests performed in Clinical Chemistry. Presents the physiological basis for the test, the principle and procedure for the test, and the clinical significance of the test results including quality control and normal values. Also includes basic laboratory techniques, chemical laboratory safety, electrolytes, acid-base

balance, proteins, carbohydrates, lipids, enzymes, metabolites, endocrine function, and toxicology. Lec 4, Lab 4, Cr 5to

**MLAB 2534 Clinical Microbiology**

Instruction in the theory, practical application, and pathogenesis of clinical microbiology, including collection, setup, identification, susceptibility testing and reporting procedures. Lec 4, Lab 4, Cr 5

**MLAB 4112 Advanced Hematology**

Specialized procedures in hematology with an emphasis on body fluid analysis.

**MLAB 4115 Advanced Immunology**

Advanced concepts in clinical immunology with an emphasis on specialized tests including HLA system. Abnormalities of the immune system will be emphasized.

**MLAB 4303 Medical Laboratory Leadership**

An introduction to the leadership roles and responsibilities of the clinical laboratorian in management, supervision and education as well as regulatory and legal aspects of laboratory science.

**MLAB 4314 Advanced Immunoematology**

Lecture and laboratory stress the detection, identification and characterization of rarer and atypical antigens, antibodies, compatibility testing, blood component therapy and problem solving techniques.

**MLAB 4322 Advanced Clinical Chemistry**

Discussion of special procedures and instrumentation in the clinical chemistry laboratory including toxicology therapeutic drug monitoring and clinical correction of biochemical results as well as problem solving strategies.

**MLAB 4631 Advanced Clinical Microbiology**

Lecture and laboratory emphasize fastidious bacteria, fungi, viruses and rickettsia. Disease processes, therapy and prevention as they relate to microbiology will also be emphasized.

**PLAB 1223 Phlebotomy**

Skill development in the performance of a variety of blood collection methods using proper techniques and universal precautions. Includes vacuum collection devices, syringes, capillary skin puncture, butterfly needles and blood culture, and specimen collection on adults, children and infants. Emphasis on infection prevention, proper patient identification, labeling of specimens and quality assurance, specimen handling, processing, and accessioning. Topics include professionalism, ethics, and medical terminology.

## **Music (MUSI, MUSIU)**

**MUSI 1111 Elementary Sight Singing and Ear Training I**

Singing tonal music in treble, bass, alto, and tenor clefs. Aural study, including dictation, of rhythm, melody, and diatonic harmony. Corequisite: MUSI 1211 or consent of instructor.

**MUSI 1112 Elementary Sight Singing and Ear Training II**

Continuation of MUSI 1116 Elementary Sight Singing & Ear Training I Prerequisite: MUSI 1111. Corequisite: MUSI 1212 or consent of instructor.

**MUSI 1114 Keyboard Skills I**

This course is designed to teach students keyboardists the requisite skills to interpret and perform works in the jazz idiom. Lab 3, Cr 1. Prerequisite: Advanced keyboard skills.

**MUSI 1115 Keyboard Skills II**

A continuation of Keyboard Skills I Prerequisite: MUSI 1114.

**MUSI 1127 Concert Band**

**MUSI 1131 Estudiantina**

A traditional folkloric instrumental and vocal group. Students will study and perform folk music of Mexico and Spain. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 1132 Accompanying and Chamber Music**

This course is designed to afford the keyboardist the opportunity of learning the requisite skills needed to become a competent accompanist. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1. Prerequisite: Advanced keyboard skills.

**MUSI 1136 Jazz Band**

**MUSI 1137 Guitar Ensemble**

This course is designed to afford the guitar major experience in ensemble playing. A study of performance practice and literature of the guitar ensemble will be emphasized. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1. Prerequisite: Advanced guitar skills.

**MUSI 1141 Campus Choir**

**MUSI 1154 Vocal Ensemble**

The Vocal Ensemble is a chamber ensemble comprised of students with established choral experience. The student will gain experience and knowledge of ensemble literature, exposure to correct concepts of ensemble sonority, and historical interpretation of various periods of music. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1. Prerequisite: Concurrent enrollment in MUSI 1141.

**MUSI 1159 Opera Workshop**

A study and performance of music selected from the opera repertoire and works of the music theater. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lec 2, Lab 2, Cr 1.

**MUSI 1162 Diction I**

A study of phonetic sounds of the German and Italian languages to promote the ability to sing in those languages, utilizing the international Phonetic Alphabet (IPAM). Lab 2, Cr 1. Prerequisite: READ 0300 or appropriate assessment.

**MUSI 1165 Diction II**

A continuation of MUSI 1162 with an emphasis on the Spanish and French languages. Lab 2, Cr 1. Prerequisite: MUSI 1162.

**MUSI 1166 Woodwind Class I**

Introduction to the mechanics and care of the flute, clarinet, and saxophone; embouchure, breath control, tonguing and intonation problems, literature, maintenance, and minor repair are emphasized. Lec 3, Cr 1. Prerequisite: MUSI 1211 or consent of the instructor.

**MUSI 1168 Brass Class I**

A study of the techniques of playing the trumpet and French horn. Topics covered include the embouchure, articulation, breath control, tone production, equipment, brass instrument history, transportation, maintenance and repair. Lab 3, Cr 1. Prerequisite: MUSI 1211 or consent of instructor.

**MUSI 1181 Piano Class**

Development of piano techniques and musical style in a class situation. This course is intended and usually limited to music majors and minors. Others may be admitted to this course as room permits. This course may

be repeated up to four times for credit. In each subsequent taking of this course the level of difficulty increases. Music majors must be enrolled in this course until they pass the piano proficiency exam. Students must pass proficiency before student teaching. Lab 3, Cr 1.

**MUSI 1183 Voice Class I**

Introduction to instruction in the fundamentals of singing, with emphasis on breathing and tone production. Lab 3, Cr 1.

**MUSI 1184 Voice Class II**

Emphasis on voice projection, clarity of tone and song interpretation. Continuation of MUSI 1183. Lab 3, Cr 1. Prerequisite: MUSI 1183.

**MUSI 1188 Percussion Class I**

Special attention is given to hand position, sticking techniques and tuning of snare, bass and trap drums and timpani. Cymbals and other utility percussion instruments, their uses and effects, will also be studied. Lab 3, Cr 1. Prerequisite: MUSI 1211 or consent of instructor.

**MUSI 1189 Strings Class I**

Introduction to the fundamentals of the viola, cello and bass, with emphasis on basic technique and bowing. Lab 3, Cr 1. Prerequisite: MUSI 1211 or consent of instructor.

**MUSI 1192 Guitar Class I**

Development of guitar technique and musical style in a class situation. Lab 3, Cr 1.

**MUSI 1193 Guitar Class II**

Continuation of MUSI 1192. Lab 3, Cr 1. Prerequisite: MUSI 1192.

**MUSI 1211 Music Theory I**

Analysis and writing of tonal melody and diatonic harmony up to and including the chords. Analysis and writing of small compositional forms. Correlated study at the keyboard. Prerequisite: READ 0320 or appropriate assessment. Must be concurrently enrolled in MUSI 1111.

**MUSI 1212 Music Theory II**

Continuation of MUSI 1211 Music Theory I Prerequisite: MUSI 1211. Corequisite: Enrollment in the assigned sight singing and ear training course lab (MUSI 1111 or MUSI 1112)

**MUSI 1239 Stage Band / Jazz Ensembles**

Rehearsal and performance of popular, dance, and jazz music. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 4, Cr 2.

**MUSI 1241 Campus Choir**

The chorus performs a wide variety of music representing the literature of the great eras of music history. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 4, Cr 2.

**MUSI 1263 Improvisation**

Designed to provide background in the art of improvisation and knowledge of basic materials and practices as a foundation for improvising or extemporaneous playing. Lec 1, Lab 2, Cr 2.

**MUSI 1301 Music Fundamentals**

An introduction to the elements of music. Includes study of music reading in various clefs, notation, rhythm, time signature and meters, scales and modes, key signatures, intervals, and chords. Lec 3, Cr 3.

**MUSI 1306 Music Appreciation**

A non technical survey course designed for the intelligent appreciation of traditional musical styles represented throughout history. Recording, videos, and live performances help illustrate the influence of music within the various fine arts. Lec 3, Cr 3.

**MUSI 1308 Music Literature I**

An introduction to important musical trends, styles, and literature of Western Civilization from the Middle ages to the present. Lec 3, Lab 1, Cr 3. Prerequisite: MUSI 1312 or concurrent enrollment.

**MUSI 1312 Music Theory II**

Continuation of MUSI 1311. Lec 3, Lab 2, Cr 3. Prerequisite: MUSI 1311. Lecture and Lab must be taken together.

**MUSI 2111 Advanced Sight Singing and Ear Training I**

Singing more difficult tonal music including modal, ethnic, and 20th century materials. Aural study, including dictation, of more complex rhythm, melody, chromatic harmony, and extended tertian structures. Prerequisite: MUSI 1112. Corequisite: MUSI 2211 or consent of instructor.

**MUSI 2112 Advanced Sight Singing and Ear Training II**

Continuation of MUSI 2116 Advanced Sight Singing & Ear Training I. Prerequisite: MUSI 2111 Corequisite: MUSI 2212 or consent of instructor.

**MUSI 2135 Vocal Jazz Choir**

The choir is performance oriented, concentrating on compositions for small vocal ensembles. Literature performance may include compositions of contemporary and popular music. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 2139 Instrument Chamber Ensemble**

Smaller instrumental ensembles -wind, string, percussion, piano or laboratory (Jazz, Rock, Fusion, Contemporary). Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 2166 Woodwind Class II**

Introduction to the mechanics and care of double reed instruments (oboe and bassoon); embouchure, breath control, tonguing, literature, maintenance, and minor repair and intonation problems are emphasized. Continuation of MUSI 1166. Lab 3, Cr 1. Prerequisite: MUSI 1211 or consent of instructor.

**MUSI 2168 Brass Class II**

Introduction to the mechanics and care of the trombone, euphonium and tuba; embouchure, articulation, breath control, tone production of equipment, bass instrument history, transposition, maintenance and repair. Continuation of MUSI 1168. Lab 3, Cr 1. Prerequisite: MUSI 1211 or consent of instructor.

**MUSI 2188 Percussion Class II**

Continuation of MUSI 1188. Lab 3, Cr 1. Prerequisite: MUSI 1211 or consent of instructor.

**MUSI 2211 Music Theory III**

Prerequisite: MUSI 1212. Corequisite: Enrollment in the assigned sight singing and ear training course lab (MUSI 1111, MUSI 1112, or MUSI 2111)

**MUSI 2212 Music Theory IV**

Continuation of MUSI 2211, MUSI Theory III. Prerequisite: MUSI 2211. Corequisite: Enrollment in the assigned sight singing and ear training course lab (MUSI 1111, MUSI 1112, MUSI 2111, or MUSI 2112)

**MUSI 2310 Special Topics in Music**

A variety of special topics in music. Topics will be of a survey nature and may include: Jazz, Rock, Folk, Contemporary Music, Latin American Music and Texas Border Music. Course may be repeated for credit. Topics will vary. Open to all college students. Lec 3, Cr 3.



**MUSI 3127 Concert Band**

The concert band studies and performs a wide variety of music representing the literature and sonority of sounds of the great eras of music history up to the contemporary sounds of today's composers. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 3131 Estudiantina**

A traditional folkloric instrumental and vocal group. Students will study and perform folk music of Mexico and Spain. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 3132 Accompanying and Chamber Music**

This course is designed to afford the keyboardist the opportunity of learning the requisite skills needed to become a competent accompanist. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1. Prerequisite: Advanced keyboard skills.

**MUSI 3135 Vocal Jazz Choir**

The choir is performance oriented, concentrating on compositions for small vocal ensembles. Literature performed may include compositions of contemporary and popular music. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 3136 Jazz Band****MUSI 3137 Guitar Ensemble**

This course is designed to afford the guitar major experience in ensemble playing. A study of performance practice and literature of the guitar ensemble will be emphasized. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1. Prerequisite: Advanced guitar skills.

**MUSI 3139 Instrumental Chamber Ensemble**

Smaller instrumental ensembles - wind, string, percussion, piano or laboratory (Jazz, Rock, Fusion, Contemporary). Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1.

**MUSI 3141 Campus Choir****MUSI 3154 Vocal Ensemble**

The Vocal Ensemble is a chamber ensemble comprised of students with established choral experience. The student will gain experience and knowledge of ensemble literature, exposure to correct concepts of ensemble sonority, and historical interpretation of various periods of music. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 3, Cr 1. Prerequisite: Concurrent enrollment in MUSI 1241.

**MUSI 3159 Opera Workshop**

A study and performance of music selected from the opera repertoire and works of the music theater. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lec 2, Lab 2, Cr 1.

**MUSI 3170 Performance Recital**

Public performance of specific applied literature assigned by the students' major applied instructor. This course is intended for the music major NOT seeking teacher certification. Lab 1, Cr 1.

**MUSI 3211 Orchestration and Arranging**

A study of the basic techniques of instrumentation, including ranges, transpositions, and characteristics of band, jazz band and orchestral instruments.

This course will also study the basic techniques of vocal arranging. Lec 2, Cr 2. Prerequisite: MUSI 2212 and must have passed the Department Piano Proficiency Exam.

**MUSI 3289 Introduction to Conducting**

An introduction to the basic techniques of conducting. This course is intended both instrumental and choral music majors. Lec 2, Cr 2. Prerequisite: MUSI 1312.

**MUSI 3304 Elementary Music Techniques -General**

This general music course provides an introduction to the following elementary music methods and approaches: Kodaly, Orff, Dalcroze, Music Memory, and CM (Comprehensive Musicianship)

It also surveys the National Standards in Music Education and the National Assessment of Music Education in the schools. Lec 3, Cr 3. Prerequisite: MUSI 1308, MUSI 1312.

**MUSI 3306 Secondary Choral Techniques**

This course provides an introduction to: basic choral literature for intermediate and secondary choirs; small ensemble literature; solo vocal repertoire; jazz/show choir/choreography; concert programming; counting systems; sight-reading methods and texts. It also surveys the rule, regulations, and competition of the University Interscholastic League and the T.B.A. Texas Bandmasters Association. Lec 3, Cr 3. Prerequisite: MUSI 1308, MUSI 1312, MUSI 3289.

**MUSI 3307 Secondary Instrumental Techniques**

This course provides an introduction to the following: solo instrumental repertoire; concert programming; counting systems; sight-reading methods and texts; jazz band literature and improvisation materials. It also survey the rules, regulations, and competition of the University Interscholastic League and the T.B.A. Texas Bandmasters Association. Lec 3, Cr 3. Prerequisite: MUSI 1308, MUSI 1312, MUSI 3289.

**MUSI 3308 Music History II**

Music History is a comprehensive study of musical styles, genres, composers and literature of the Western art music tradition from the seventeenth and eighteenth centuries. Prerequisite: MUSI 2312 with minimum grade of C.

**MUSI 3309 Music History III**

Music History III is comprehensive study of musical styles, genres, composers and literature of the Western art music tradition from the nineteenth and twentieth centuries. Prerequisite: MUSI 2312 with minimum grade of C.

**MUSI 3310 Jazz Arranging**

This course investigates the various techniques used in composing and arranging for the small and large jazz ensembles. Course topics include: instrumental ranges, transpositions, basic chord voicing and reharmonization. Several written arrangements for the various ensembles common to the genre will be part of the course requirements.

**MUSI 3312 Counterpoint and Analysis**

A survey of polyphony of the eighteenth through the twentieth centuries with emphasis on creative projects. Lec 3, Cr 3. Prerequisite: MUSI 2212 and must have passed the Departmental Piano Proficiency Exam.

**MUSI 3313 Advanced Jazz Harmony**

This course is a study of advanced concepts in jazz harmony and counterpoint. Topics will include the following: reharmonization, superimposition, Coltrane analytical techniques, and advanced improvisation techniques. Prerequisite: MUSI 2312 and MUSI 1263.

**MUSI 3363 Intermediate Jazz Improvisation**

This course is a continuation of MUSI 1263 Improvisation. Application

of the Locrian, Lydian and Phrygian modes, to jazz improvisation will be studied. Additionally the whole-tone, diminished and altered dominant scale application will be studied. Lec 3, Cr 3.

### **MUSI 3380 Music Pedagogy**

Music Pedagogy is a program that prepares individuals to provide instruction and tutoring to clients in private and institutional settings specially associated with the individual's area of instrumental/vocal concentration. Prerequisite: Successful completion of Sophomore recital (MUAP 2288)

### **MUSI 4211 Computer Applications in Music**

An introduction to computer programs important to the musician and music educator. Topics covered include MIDI applications, sequencing, music notation, word processors, spreadsheet, classroom management programs, marching drill programs and the Internet. Lec 3, Cr 2. Prerequisite: MUSI 2312.

### **MUSI 4289 Advanced Conducting**

The study and application of advanced conducting techniques with emphasis on the development of analytical and interpretive skills in both instrumental and choral conducting. Lec 2, Cr 2. Prerequisite: MUSI 3289.

### **MUSI 4301 Senior Experience in Music**

This course provides a capstone experience for the music major. It is designed to make connections of the various elements of the music degree. This course also serves as a review for the ExCet exam. Lec 3, Cr 3. Prerequisite: Advanced standing in Music.

### **MUSIU 2308 Music History I**

Music History I is a study of musical styles, genres, composers and literature from American folk and jazz traditions, selected world music cultures, and the Western art music tradition from antiquity through the Renaissance. Prerequisite: MUSI 2311 with minimum grade of C.

### **MUSIU 2313 Fine Arts in Elementary School**

Students will have the opportunity to learn the basic principles, elements, history, techniques and teaching methodologies of the fine arts and apply the knowledge to appropriate strategies for classroom instruction. Prerequisite: The student must be accepted into School of Education.

## **Music – Applied Music (MUAP)**

### **MUAP 1287 Applied Other I**

The following courses are lower division applied music courses for music majors seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Students normally progress to the next higher level each semester. Occasionally it may require more than one semester of study to accomplish this process. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 1, Pract 10, Cr 2.

### **MUAP 1288 Applied Other II**

The following courses are lower division applied music courses for music majors seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Students normally progress to the next higher level each semester. Occasionally it may require more than one semester of study to accomplish this process. The process of each student from one semester to another

is dependent on the faculty jury held at the conclusion of each semester. Lab 1, Pract 10, Cr 2.

### **MUAP 1387 Applied Other I**

The following courses are lower division applied music courses for music majors NOT seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 3.

### **MUAP 1388 Applied Other II**

The following courses are lower division applied music courses for music majors NOT seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 3.

### **MUAP 2287 Applied Other III**

The following courses are lower division applied music courses for music majors seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Students normally progress to the next higher level each semester. Occasionally it may require more than one semester of study to accomplish this process. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 1, Pract 10, Cr 2.

### **MUAP 2288 Applied Other IV**

The following courses are lower division applied music courses for music majors seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Students normally progress to the next higher level each semester. Occasionally it may require more than one semester of study to accomplish this process. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 1, Pract 10, Cr 2.

### **MUAP 2387 Applied Other III**

The following courses are lower division applied music courses for music majors NOT seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester

to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 3.

#### **MUAP 2388 Applied Other IV**

The following courses are lower division applied music courses for music majors NOT seeking teacher certification. The student must pass an entrance audition to gain admission into the first semester of applied music, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 3.

#### **MUAP 3201 Applied Music V**

The following courses are upper division applied music courses for music majors seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Students must complete their junior or senior recital before student teaching. Lab 1, Pract 10, Cr 2.

#### **MUAP 3202 Applied Music VI**

The following courses are upper division applied music courses for music majors seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Students must complete their junior or senior recital before student teaching. Lab 1, Pract 10, Cr 2.

#### **MUAP 3281 Applied Voice V**

#### **MUAP 3401 Applied Music V**

The following courses are upper division applied music courses for music majors NOT seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 4.

#### **MUAP 3402 Applied Music Vi**

The following courses are upper division applied music courses for music majors NOT seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require

more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 4.

#### **MUAP 4201 Applied Music VII**

The following courses are upper division applied music courses for music majors seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Students must complete their junior or senior recital before student teaching. Lab 1, Pract 10, Cr 2.

#### **MUAP 4202 Applied Music VIII**

The following courses are upper division applied music courses for music majors seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The process of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Students must complete their junior or senior recital before student teaching. Lab 1, Pract 10, Cr 2.

#### **MUAP 4401 Applied Music VII**

The following courses are upper division applied music courses for music majors NOT seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, present a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 4.

#### **MUAP 4402 Applied Music VIII**

The following courses are upper division applied music courses for music majors NOT seeking teacher certification. The student must have completed four semesters of lower division applied music on the same instrument, presented a sophomore recital, perform on a student recital, appear before the faculty jury, be concurrently enrolled in an ensemble and attend a set number of live performances approved by the Music Faculty. See the Chair of the Fine Arts Department for details. Occasionally it may require more than one semester of study to accomplish this progress. The progress of each student from one semester to another is dependent on the faculty jury held at the conclusion of each semester. Lab 2, Pract 20, Cr 4.

### **Nursing – Associate Degree Nursing (RNSG)**

#### **RNSG 1108 Dosage Calculation for Nursing**

Dosage Calculations include reading, interpreting and solving calculation problems encountered in the preparation of medications; and conversion of measurements within the apothecary, avoirdupois, and metric system. Lab 3, Cr 1.

**RNSG 1205 Nursing Skills**

Study of concepts and principles essential for demonstrating competence in the performance of nursing procedures. Topics include knowledge, judgment, skills and professional values within a legal/ethical framework. Lec 1, Lab 4, Cr 2. Prerequisite: Admission to the Associate Degree Nursing Program, BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH 1313, PSYC 2301.

**RNSG 1210 Introduction to Community-Based Nursing**

Overview of the delivery of nursing care in a variety of community-based setting; application of systematic problem-solving processes and critical thinking skills, focusing on the examination of concepts and theories relevant to community-based nursing; and development of judgment, skills, and professional values within a legal/ethical framework. Lec 2, Lab 0, Cr 2.

**RNSG 1215 Health Assessment**

Development of skills and techniques required for a comprehensive health assessment within a legal/ethical framework. Lec 1, Lab 3, Cr 2. Prerequisite: Admission to the Associate Degree Nursing Program, BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH 1314 or MATH 1332, PSYC 2301, or departmental approval.

**RNSG 1231 Principles of Clinical Decision Making**

Examination of selected principles related to the continued development of the professional nurse as a provider of care, coordinator of care, and member of a profession. Emphasis on clinical decision-making for clients in medical-surgical setting experiencing health problems involving fluid and electrolytes.

**RNSG 1247 Concepts of Clinical Decision Making**

Integration of previous knowledge and skills into the continued development of the professional nurse as a provider of care, coordinator, and member of a profession. Emphasis on clinical decision-making for clients in medical-surgical settings experiencing health problems involving gastrointestinal disorders; endocrine and metabolic disorders; reproduction and sexual disorders; musculoskeletal disorders; eye-ear-nose-throat disorders; and integumentary disorders. Discussion of knowledge, judgment, skills, and professional values within a legal/ethical framework. Cr 2, Lec 2, Lab 0.

**RNSG 1251 Care of the Childbearing Family**

Study of concepts related to the provision of nursing care of childbearing families. Topics may include selected complications. Topics include knowledge, judgment, skills, unprofessional values within a legal/ethical framework. Lec 2, Cr 2.

**RNSG 1260 Clinical: Nursing RN: Foundations for Nursing Practice**

A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On-site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics are learning outcomes vary. Cl 12, Cr 2. Prerequisite: Admission to the Associate Degree Nursing Program, BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH 1313, PSYC 2301. Corequisite: Concurrent enrollment in RNSG 1423.

**RNSG 1301 Pharmacology**

Introduction to the science of pharmacology. Emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification as it applies to body systems through the lifespan. Topics

include the roles and responsibilities of the nurse in safe calculation and administration of medications. Prerequisite: RNSG 1108, RNSG 1205, RNSG 1215, RNSG 1413, and RNSG 1260.

**RNSG 1413 Foundations for Nursing Practice**

Introduction to the role of the professional nurse as a provider of care, coordinator of care, and member of a profession. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Lec 3, Lab 3, Cr 4.

**RNSG 2121 Management of Client Care**

Exploration of leadership and management principles applicable to the role of the nurse as provider of care, coordinator of care, and member of the profession. Includes application of knowledge, judgment, skills, and professional values within a legal/ethical framework. Lec 1, Cr 1.

**RNSG 2161 Clinical: RN: Care of Childbearing Family**

A method of instruction providing detailed education, training and work-based experiences and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics are learning outcomes vary. Cl 6, Cr 1. Prerequisite: RNSG 1201, RNSG 1205, RNSG 1215, RNSG 1423, RNSG 1260, PYSC 2314. Corequisite: Concurrent enrollment in RNSG 1251, RNSG 2162, AND RNSG 2201.

**RNSG 2162 Clinical: RN: Care of Children and Families**

A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning, experiences. Course may be repeated if topics are learning outcomes vary. Cl 6, Cr 1. Prerequisite: RNSG 2301, RNSG 2414, RNSG 2260, RNSG 2261, BIOL 2320, BIOL 2121 Corequisite: Concurrent enrollment in RNSG 2201, RNSG 1251, AND RNSG 2161.

**RNSG 2163 Clinical: RN: Mental Health Nursing**

A method of instruction providing detailed education, training and work-based experiences and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics are learning outcomes vary. Cl 6, Cr 1. Prerequisite: RNSG 1301, RNSG 1210, RNSG 1231, RNSG 1247, RNSG 2260, BIOL 2321, BIOL 2121 Corequisite: Must be taken with RNSG 2213.

**RNSG 2166 Practicum**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. The guided external experiences may be paid or unpaid. This course may be repeated if topics are learning outcomes vary. Cl 8, Cr 1. Prerequisite: PRNR 2201, RNSG 2262, PRNR 2213, RNSG 2263, SPCH 1318. Corequisite: Concurrent enrollment in RNSG 2404, RNSG 2131.

**RNSG 2201 Care of Children and Families**

Study of concepts related to the provision of nursing care of children and families emphasizing judgment, and professional values in a legal/ethical framework. Lec 2, Cr 2.

### **RNSG 2213 Mental Health Nursing**

Principles and concepts of mental health, psychopathology, and treatment modalities related to the nursing care of clients and their families. Lec 2, Cr 2.

### **RNSG 2260 Clinical: RN: Clinical Decision-Making**

A method of instruction of providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Courses may be repeated if topics are learning outcomes vary. Cl 12, Cr 2. Prerequisite: RNSG 1201, RNSG 1205, RNSG 1215, RNSG 1423, RNSG 1260, PSYC 2314. Corequisite: Concurrent enrollment in RNSG 2414.

### **RNSG 2307 Transition to Nursing Practice**

Introduction to selected concepts related to the role of the professional nurse as provider of care, coordinator of care, and member of the profession. Reviews trends and issued impact in the future. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Lec 2, Lab 4, Cr 3.

### **RNSG 2360 Clinical: Nursing RN: Care of the Clients with Complex Health Care Needs**

A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. On site clinical instruction, supervision, evaluation, and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics are learning outcomes vary. Cl 14, Cr 3. Prerequisite: SPCH 1315 or 1318, ENGL 1301, RNSG 1251, RNSG 2161, RNSG 2201, RNSG 2162, RNSG 2213, and RNSG 2163. Corequisite: RNSG 2441, and RNSG 2121.

### **RNSG 2441 Advanced Concepts of Clinical Decision Making**

Application of advanced concepts and skills for development of the professional nurse's roles in complex client/nursing situations. Emphasis on clinical decision-making for clients in medical-surgical settings experiencing health problems involving cardiovascular disorders; neurologic disorders; liver, biliary and pancreatic disorders; renal and urinary disorders; hematologic disorders; and cancer. Focus given to knowledge, judgment, skills, and professional values within a legal/ethical framework. Prerequisite: RNSG 1251, RNSG 2161, RNSG 2201, RNSG 2162, RNSG 2213, RNSG 2163, ENGL 1301, SPCH 1315 or SPCH 1318. Corequisite: RNSG 2360 and RNSG 2121.

### **RNSG 2461 Clinical: Nursing RN: Transition Nursing Practice**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional.

## **Nursing – Bachelor of Science in Nursing (NURS)**

### **NURS 3303 Nursing of the Family in Psychosocial Crisis**

This course is a broad spectrum of psychological phenomena. The content of this course includes psychosocial assessment and intervention strategies. Emphasis is placed on the integration of the teaching process, pharmacology, and nurse-and-client therapeutic relationship within the nursing process framework. Topics included in this course are affective disorder, stress, adaptation, personality disorder, psychoses and anxiety. Cr 3. Prerequisite: Acceptance into program.

### **NURS 3304 Perspectives Professional Nurse Practice**

This course examines the components of a bio-psychosocial spiritual model of professional nursing practice in a changing and diverse healthcare environment. It addresses the need for nursing practice to maintain nurturing, sensitive, relationship-centered care with the empathy, commitment and analytic skills associated with holistic nursing practice and the heritage of nursing. Students will be encouraged to embraced the values of altruism, autonomy, human dignity, integrity and social justice as a member of the nursing profession. Lec 3, Cr 3.

### **NURS 3405 Health Assessment in Professional Nursing**

Within a holistic approach, the theory and skills of health assessment, including health history, physical examination and cultural assessment of infants, adults and elderly clients are emphasized. Elements of the Holistic Nursing Assessment Tool for Outpatients will be incorporated into the health history document. Lec 2, Lab 6, Cr 4. Prerequisite: NURS 3701, NURS 3702, NURS 3303, NURS 3604.

### **NURS 3508 Foundations of Holistic Nursing Practice**

This course provides a foundation for holistic nursing practice with an emphasis on the nurturing the nurturer, holistic care of clients, and caring for our planetary home. Holistic nursing theory and interventions are introduced and applied to the concepts of health and illness. Clinical activities will emphasize the interventions in the practice of holistic nursing, complimentary/alternative therapies and other activities that support holistic care. Lec 3, Lab 6, Cr 5.

### **NURS 3604 Clinical Skills in Nursing**

The focus of this course is on the clinical skills associated with the delivery of competent nursing care to clients/patients with varied alterations of their health status. In this course the student will be required to demonstrate mastery of selected basic nursing skills in a simulated clinical setting. NURS 3604 has a written component and a skills practical examination. The written component contains 100 questions. Among the areas tested are nursing process and professional nursing skills. The practical examination requires that the student demonstrates competence in selected professional nursing skills, for example, medication administration (I.V., I.M., S.C.), catheterization (male, female), sterile dressing change, tracheotomy suctioning and nasogastric irrigation and suction. Cr 6. Prerequisite: NURS 3701, NURS 3702, NURS 3303.

### **NURS 3701 Nursing of the Adult Client with Alterations in Homeostasis**

This course focuses on the nursing care of the adult client in a variety of settings and at various stages of the health-illness continuum. Pharmacology, nutrition, comfort, rest, inflammatory and infection, immunity, surgical intervention, oxygenation, circulation, elimination, integument cellular growth and thermal regulation are included in this course. Cr 7. Prerequisite: Acceptance into program.

### **NURS 3702 Nursing of the Childbearing and Childrearing Families**

This course focuses on nursing care associated with Childbearing and Childrearing. Topics are centered in the antepartal, postartal, and neonatal periods. Both the normal and complicated phases of childbearing are covered. Pharmacology, nutrition, the teaching process, and communication are presented with the framework of the nursing process. Nursing care of children of all ages and at various stages of the health-illness continuum is examined. Cr 7. Prerequisite: Acceptance into program.

### **NURS 4307 Transcultural Nursing**

This course focuses on theoretical foundations for understanding cultural diversity in health and illness beliefs and behaviors and practical implica-

tions of this understanding. The student will gain experience in gaining knowledge and skills in gathering culturally relevant data to assist in the holistic assessment of patients from a variety of cultural backgrounds. Lec 3, Cr 3.

#### **NURS 4309 Research in Professional Nursing**

The student is introduced to the research process. Focus is on the utilization of research findings in nursing practice and the wellness model as a priority in nursing research. The course provides students with the opportunity to utilize the fundamentals of research as a basic for identifying researchable problems in nursing. This course develops skills in critical thinking through the critique of research projects. Lec 3, Cr 3.

#### **NURS 4311 Contemporary Issues in Professional Nursing**

This course examines contemporary issues and trends affecting the professional nurse and the profession, including the changes in the social and cultural attitudes of society. A major focus is an in-depth analysis of topics relevant to nursing today and in the future, that include domestic violence, genetics, ethical and legal issues. The Standards of Holistic Nursing Practice and the American Nurses Association Standards of Practice are accepted. Lec 3, Cr 3.

#### **NURS 4336 Special Topics**

This course focuses on a current health care issue. Topics vary from semester to semester and are offered on a rotating basis. Different topics may be repeated for credit. Lec 3, Cr 3. Prerequisite: Registered Nurse or consent of instructor.

#### **NURS 4408 Family Nursing**

The major focus of this course is the role professional nurse in promoting family health. This course provides a clinical practicum where in students have the opportunity to intervene with families in their usual environment. Emphasis will be placed on the cultural beliefs and practices of the family regarding health. Topics for this course include family development theory, adaptive patterns, assessment of the family, aging, sexuality, and teaching. Prerequisite: NURS 3701, NURS 3702, NURS 3303, NURS 3604, NURS 3405, NURS 3606, NURS 3407.

#### **NURS 4606 Health Promotion in Professional Nursing**

Students explore factors to promote the bio-psycho-social spiritual health of individuals and groups throughout the lifespan. They learn about health promotion of individuals from culturally diverse backgrounds along with the nurse's role of assessing and identifying strategies to promote health of individuals and populations. Among the concepts included are health, wellness, disease, illness, healing, population-based nursing, and lifestyles modifications. Lec 3, Lab 9, Cr 6. Prerequisite: NURS 3701, NURS 3702, NURS 3303, NURS 3604.

#### **NURS 4610 Professional Nursing in the Community**

This course is both community-based and community-focused with the emphasis on holistic care in the community. The community is viewed as a major determinant of the health status of its families and individual members. Areas of knowledge include community health nursing roles, political influences, epidemiology, environment and global health, holistic community care, common community health problems, vulnerable populations and care of families. The clinical practicum provides an opportunity for the students to explore community health nursing roles in a variety settings. Lec 3, Lab 9, Cr 6. Prerequisite: NURS 3701, NURS 3702, NURS 3303, NURS 3604, NURS 3405, NURS 3606, NURS 3407, NURS 4408.

#### **NURS 4612 Leadership**

This course emphasizes a theoretical and experiential approach to identifying the role of the professional nurse in the health-care system. Current

theories of leadership, management, and change are related to the practice of professional nursing. Other topics include economics of health care, staff development, and total quality management. Lec 3, Lab 9, Cr 6. Prerequisite: NURS 3701, NURS 3702, NURS 3303, NURS 3604, NURS 3405, NURS 3606, NURS 3407, NURS 4408, NURS 4309, NURS 4610.

## **Nursing - Vocational Nursing (VNSG)**

#### **VNSG 1226 Gerontology**

Overview of the normal physical, psychosocial, and cultural aspects of the aging process. Addresses common disease processes of aging. Exploration of attitudes toward care of the elderly. Lec 2, Cr 2. Concurrent with VNSG 1160.

#### **VNSG 1160 Clinical I-B**

A health-related work-based learning experience that enables that the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Concurrent: VNSG 1226. Cr 1.

#### **VNSG 1227 Essentials of Medication Administration**

General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. Lec 2, Cr 2.

#### **VNSG 1304 Foundation of Nursing I**

Introduction to the nursing profession including history, standards of practice, legal and ethical issues, and the role of the vocational nurse. Topics include mental health, therapeutic communication, cultural and spiritual diversity, nursing process, and holistic awareness. Lec 3, Cr 3.

#### **VNSG 1502 Applied Nursing Skills I**

Introduction to and application of primary nursing skills. Emphasis on utilization of nursing process and related scientific principles of safety, body mechanics, infection-control, asepsis and technique. Lec 2, Lab 3, Cr 5. Concurrent with VNSG 1360.

#### **VNSG 1360 Clinical I-A**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Admission into program and concurrent: VNSG 1502.

#### **VNSG 1231 Pharmacology**

Fundamentals of medication and their diagnostic, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process. Lec 2, Cr 2.

#### **VNSG 1330 Maternal-Neonatal Nursing**

Utilization of the nursing process in the assessment and management of the childbearing family. Emphasis on the bio-psycho-socio-cultural needs of the family during the phases of pregnancy, childbirth, and the neonatal period including abnormal conditions. Lec 3, Cr 3. Concurrent: VNSG 1261.

#### **VNSG 1261 Clinical II**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Successful completion of level I courses. Concurrent: VNSG 1330.

#### **VNSG 1334 Pediatrics**

Study of childhood diseases and childcare from infancy through adolescence incorporating basic aspects of normal growth and development. Focus on the care of the well and ill child utilizing the nursing process. Lec 3, Cr 3. Concurrent with VNSG 1262.

### **VNSG 1262 Clinical III**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Successful completion of level I courses. Concurrent: VNSG 1334.

### **VNSG 1429 Medical/Surgical Nursing I**

Application of the nursing process to the care of adult patients experiencing medical-surgical conditions in the health illness continuum. A variety of health care settings are utilized. Lec 4, Cr 4. Concurrent with VNSG 2461.

### **VNSG 2461 Clinical IV**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Successful completion of level I courses and concurrent: VNSG 1429. Cr 4.

### **VNSG 1432 Medical/Surgical Nursing II**

Continuation of Medical-Surgical Nursing I with application of the nursing process to the care of adult patients experiencing medical-surgical conditions in the health-illness continuum. A variety of health care settings are utilized. Lec 4, Cr 4. Concurrent with VNSG 2362.

### **VNSG 2362 Clinical V**

A method of instruction providing detailed education, training and work-based experience, and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for more complex nursing experience by the faculty. On-site instruction, supervision, evaluation and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topic and learning outcomes vary. Prerequisite: VNSG 1432.

### **VNSG 1238 Mental Illness**

Study of Human behavior with emphasis on emotional and mental abnormalities and mode of treatment incorporating the nursing process. Lec 2, Cr 2.

### **VNSG 1119 Professional Development**

Study of importance of professional growth. Topics include the role of the licensed vocational nurse in the multi-disciplinary health care team, professional organizations and continuing education. Lec 1, Cr 1.

### **VNSG 2462 Clinical V**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. Prerequisite: Successful completion of level I courses; concurrent: VNSG 1432. Cr 3.

## **Nursing (NURS)**

### **PRNR 1251 Care of the Childbearing Family**

Prerequisite: RNSG 1201, RNSG 1205, RNSG 1215, RNSG 1423, RNSG 1260, SPYC 2314. Corequisite: Concurrent enrollment in a clinical RNSG 2261, RNSG 2301, RNSG 2414.

### **PRNR 2201 Care of Children and Families**

Prerequisite: RNSG 2301, RNSG 2414, RNSG 2260, PRNR 1251, RNSG 2261, BIOL 2320, BIOL 2121, a Humanities Course. Corequisite: Concurrent enrollment in a clinical RNSG 2262, PRNR 2213.

### **PRNR 2213 Mental Health-Nursing**

Prerequisite: RNSG 2301, RNSG 2414, RNSG 2260, PRNR 1251, RNSG 2261, BIOL 2320, BIOL 2121, a Humanities Course. Corequisite: Concurrent enrollment in a clinical RNSG 2262, PRNR 2201.

## **Philosophy (PHIL)**

### **PHIL 1301 Introduction to Philosophy**

Introduction to Philosophy is designed to acquaint students with the range of topics within philosophy and to provide them with general notions of the history of ideas. More specifically, the course will stress critical thinking as the foundation for all philosophical analysis. Topics include epistemology, metaphysics, ethics, and logic. Lec 3, Cr 3.

### **PHIL 1316 History of Judaism**

A nonsectarian historical study of the Hebrew people, their literature and their religious concepts from the earliest known period of the time of Christ. Major personalities of the Old Testament and the continuity of Hebrew history are examined. Lec 3, Cr 3.

### **PHIL 1317 History of Christianity**

The Christian movement in the Mediterranean world during the first century. The life of Christ, the beginning of the Christian church, the life and letters of Paul, and the general development of the New Testament, from a nonsectarian historical viewpoint. Lec 3, Cr 3.

### **PHIL 2303 Introduction to Logic/Critical Thinking**

This course concentrates on syllogistic logic to help the students better understand and critically evaluate arguments. Prerequisite: Students may not be enrolled in any remedial classes. ENGL 1301 with minimum grade of C.

### **PHIL 2306 Introduction to Ethics**

Analysis of basic principles and methods of evaluating human behavior, including critical examination of both classical and contemporary ethical theories, with emphasis upon their application to personal decision making and contemporary moral issues. Lec 3, Cr 3.

## **Physical Science (PSCI)**

### **PSCI 4210 Physical Sciences for Educators I**

This is the first part of hands on physical science course designed for education majors in EC-8 programs. The course will provide the students with basic theoretical background in physical science (properties of matter, mechanics, waves), and will develop skills in physical experimentation. Prerequisite: 3 hours of an introductory science course at an undergraduate level in any discipline.

### **PSCI 4220 Physical Science for Educators II**

This is one of two parts of a hands-on physical science course designed for education majors in EC-8 programs. The course will provide the students with basic theoretical and experimental background in electricity, magnetism, and electronics. Prerequisite: 3 credit hours of an introductory science course at an undergraduate level in any discipline, or consent of instructor.

## **Physics (PHYS)**

### **PHYS 1101 General Physics I Lab**

Laboratory experiments in classical mechanics, heat, and wave motion. Lab 3, Cr 1. Prerequisite: PHYS 1301 or concurrent enrollment.

### **PHYS 1102 General Physics Laboratory II**

Laboratory experiments in electricity, magnetism, light, and modern physics. Lab 3, Cr 1. Prerequisite: PHYS 1302 or concurrent enrollment.

### **PHYS 1105 Fundamentals of Musical Acoustic Lab**

Lab topics covered: Nature of vibration, relation to music, sound waves and characteristics, vibratory sources of sounds used in music, stretched strings, air columns, percussive instruments and the voice, noise, musical scales, electronic recording, and synthesis of sound. Prerequisite: MUSI

1301 or MUSI 1211 or consent of the instructor.

**PHYS 1110 Conceptual Physics Laboratory**

Laboratory experiments in mechanics, heat, electricity and magnetism designed for non-science majors and students in the technology programs. Prerequisite: PHYS 1310 or concurrently enroll.

**PHYS 1111 Introduction to Astronomy Laboratory**

Laboratory experiments in introductory astronomy based on observations of stars, planets, and galaxies. Prerequisite: Concurrent enrollment in PHYS 1311.

**PHYS 1301 General Physics I**

Fundamentals of classical mechanics, heat and thermodynamics, vibratory motion, waves and sound. Lec 3, Cr 3. Prerequisite: High school trigonometry or credit for MATH 1314 and credit or registration in MATH 1316.

**PHYS 1302 General Physics II**

Fundamentals of electricity, magnetism, electromagnetic interaction, light, and modern physics. Lec 3, Cr 3. Prerequisite: PHYS 1301.

**PHYS 1305 Fundamentals of Musical Acoustics**

This is one semester course in the fundamentals of musical acoustics. The following topics will be covered: Nature of vibration, relation to music, sound waves and characteristics, vibratory sources of sounds used in music, stretched strings, air columns, percussive instruments and the voice, noise, musical scales, electronic recording, and synthesis of sound. Prerequisite: MUSI 1301 or MUSI 1211 or consent of the instructor.

**PHYS 1310 Conceptual Physics**

A course designed primarily for non-science majors and students in the technology programs to explain the basic concepts of matter, mechanics, heat, electricity and magnetism with emphasis on applications and problem solving, and to illustrate the philosophy and methods of science. Prerequisites: Concurrent enrollment in PHYS 1110.

**PHYS 1311 Introduction to Astronomy**

This course is designed as an introduction to the study of Astronomy. Topics included are the formation of the planetary system, birth, and death of stars, Black holes, Newton stars and supernovas, and the current status of research in this area are also presented. Prerequisite: Concurrent enrollment on PHYS 1111.

**PHYS 1401 College Physics I**

This course introduces the student to the fundamentals of Physics, Linear motion, rotational motion, gravity and friction, work and energy, as applications of Newton's Laws, are the major part of this introductory Physics course for Engineering Technology. Other major topics include properties of materials, thermodynamics and heat transfer with applications in air conditioning. Lec 3, Lab 3, Cr 4. Prerequisite: Concurrent enrollment in MATH 1412 or consent of instructor. Co-requisite: PHYS 1401.01 must be taken with PHYS 1401.91.

**PHYS 1402 College Physics II**

This second in the sequence of Physics courses for Engineering Technology. It explores waves, sound, electrostatics, electricity, magnetism, electric circuits and fields, light and optics, and solid-state electronics. Other major topics include lenses and optical instruments. Problems useful to the Engineering Technology fields will be emphasized. Lec 3, Lab 3, Cr 4. Lecture and Lab must be taken together.

**PHYS 2125 University Physics I Laboratory**

Laboratory experiments in classical mechanics, including kinematics, dynamics statics, fluids, oscillation, and waves. Prerequisite: MATH 2413 and concurrent enrollment in PHYS 2325.

**PHYS 2126 University Physics II Laboratory**

Laboratory experiments in thermodynamics, electricity and magnetism, light, and optics. Prerequisites: MATH 2414 and concurrent enrollment in PHYS 2326.

**PHYS 2325 University Physics I**

This course is the first of a two-semester sequence of courses for physics, engineering physics, and computer science majors. Introductory to classical mechanics, including statics, dynamics, fluids, oscillation, and waves. Lec 3, Cr 3 Prerequisite: MATH 2413 and concurrent enrollment in PHYS 2125.

**PHYS 2326 University Physics II**

This is the second course in the two-semester introductory sequence for physics, engineering physics, and computer science majors. The topics addressed will be an introduction to thermodynamics, electricity, and magnetism, light and optics. Lec 3, Cr. 3 Prerequisite: PHYS 2325 and MATH 2414 and concurrent enrollment in PHYS 2126.

**PHYS 3201 Advanced Physics Laboratory I**

A course in experimental physics designed to give the student experience with real world apparatus such as lasers, high field magnets, detectors, radioactive sources, vacuum equipment, and sophisticated electronic devices such as lock-in amplifiers and multichannel scalars. The course also stresses writing of reports in the formats of the ATP Style Manual. Lab 6, Cr 2. Prerequisite: Junior standing in the Physics Degree Program.

**PHYS 3310 Classical Mechanics**

A rigorous treatment of particle kinematics and dynamics. Systems of particles and the conservation laws. Rigid body motion. Lagrangian mechanics of small oscillations and coupled oscillators. Lec 3, Cr 3. Prerequisite: PHYS 2426, MATH 2414, and must be taken with PHYS 3490.

**PHYS 3315 Physics of Biological Systems**

This course will teach students how to apply the basic principles of physics to the problem of the Life Sciences. Prerequisite: BIOL 1306, BIOL 1106, BIOL 1307, BIOL 1107, PHYS 1301, PHYS 1101, PHYS 1302, PHYS 1102.

**PHYS 3320 Thermodynamics**

Equilibrium states of single component substances. Changes of state, specific heats, and heat transfer. Thermodynamics laws and functions in quasi equilibrium processes. Analysis of thermodynamic cycle. Lec 3, Cr 3. Prerequisite: PHYS 2326, PHYS 3490 and must be taken with PHYS 3400 or consent of instructor.

**PHYS 3400 Modern Physics**

Special relativity, Planck's radiation law, elements of quantum theory, atomic and molecular structures and spectra. The atomic nuclear reactions, and an introduction to elementary particles. Lec 3, Lab 3, Cr 4. Prerequisite: PHYS 2326 and PHYS 3490.

**PHYS 3490 Mathematics for Scientists and Engineers I**

This course studies the application of various mathematical techniques to advanced problems in physics. Topics may include functions of a complex variable, the calculus of residues, integral transformations, the special functions of mathematical physics and partial differential equations with special applications to the heat equation and Schrödinger's equation. Prerequisite: PHYS 2426.

**PHYS 3492 Mathematics for Scientists and Engineers II**

Prerequisite: PHYS 3490.

**PHYS 4300 Undergraduate Research Project**

A special laboratory research project, to be carried out under the direction of a faculty member, resulting in a written report. Lec 1, Lab 9, Cr 3.



Prerequisite: Senior standing in the Physics Degree Program and consent of a supervising faculty member.

### **PHYS 4315 Analysis of Biomolecules by Physical Methods**

This course is designed for students in Bachelors of Science in Engineering Physics/ Bioengineering Program and provides basic information on physical methods currently used in bioengineering and biomedical research study physical properties of vitally important macromolecules.

### **PHYS 4320 Quantum Mechanics**

The Schrödinger equation, operators, and perturbation methods. Applications to the harmonic oscillator and the hydrogen atom. Lec 3, Cr 3. Prerequisite: PHYS 3400 and PHYS 3492.

### **PHYS 4330 Electromagnetic Theory**

The theory of electrostatics, electromagnetic, electrical and magnetic properties of materials, electric and magnet fields, electric current, Ohm's law, the Biot-Savart law Maxwell's Equations. Lec 3, Cr 3. Prerequisite: PHYS 3400 and PHYS 3492.

### **PHYS 4340 Solid State Physics**

The structural, thermal, electric, and magnetic properties of crystalline solids. Free electron theory of metals. Concept of energy bands and elementary semiconductor physics.

### **PHYS 4380 Special Topics in Physics**

Special topics in physics, arranged for individuals or small groups. May be repeated for credit up to a maximum of six hours. Lec 3, Cr 3. Prerequisite: Permission of instructor.

### **PHYS 4390 Computational Methods for Engineers and Physicists**

This is an introduction to the techniques and use of computers to solve engineering and physical problems. The topics covered include the study of finite difference methods, the implementation of linear algebra problems to solve systems of equations, and the use of Monte Carlo methods, spectrum analysis and techniques of scientific visualization will be covered. Prerequisite: PHYS 3490, COSC 1437 or COSC 1317 or COSC 1318, or permission of instructor.

## **Physics Bioengineering (BENG)**

### **BENG 3310 Pathways of Cellular Signaling**

The course is designed for students in Bachelors of Science in Engineering Physics/Bioengineering Program. It describes major pathways of inter-and intracellular signaling, and emphasizes its biophysical aspects. Structural features of signaling components are discussed.

## **Physics Bioengineering (BENG)**

### **BENG 4120 Molecular Bioengineering Lab**

Laboratory experiments in macromolecular design. Prerequisite: Credit for or concurrent enrollment in BENG 4320.

### **BENG 4320 Molecular Bioengineering**

The course is designed for students in Bachelors of Science in Engineering Physics/Bioengineering Program. The topics include biomaterials, designing biomolecules for therapeutics and diagnostics, and advanced bimolecular assemblies. Prerequisite: PHYS 3315.

## **Psychology (PSYC)**

### **PSYC 2301 Introduction to Psychology**

A survey of the scope and methods of psychology; cultivation of a scientific attitude toward behavior. Lec 3, Cr 3.

### **PSYC 2308 Child Psychology**

This course investigates the physical, behavioral, mental, emotional and social changes that accompany growth and development during infancy

and childhood. Lec 3, Cr 3.

### **PSYC 2314 Lifespan Development**

The study of the biological, cognitive and psychosocial changes in the development of the individual from conception through maturity to death. Lec 3, Cr 3.

### **PSYC 2317 Statistics of Psychology Education**

This course covers measures of central tendency and variability, statistical inference and correlation. May be counted as SOCI 2317 or PSYC 2317. Lec 3, Cr 3. Prerequisite: PSYC 2301.

### **PSYC 3301 Research Methods in Psychology**

Quantitative research methods and techniques used in contemporary psychological research;; instruction in the steps involved in the scientific approach to solving problems and in applying the experimental method in the laboratory. Lec 3, Cr 3. Prerequisite: PSYC 2317.

### **PSYC 3302 Adolescent Psychology**

This course investigates the physical, behavioral, mental, emotional, and social changes that accompany growth and development in adolescence. Lec 3, Cr 3. Prerequisite: PSYC 2301.

### **PSYC 3303 Adulthood and Aging**

This course investigates the physical, behavioral, mental, emotional, and social changes that accompany growth and development during the adult years from maturity to old age. Lec 3, Cr 3. Prerequisite: PSYC 2301.

### **PSYC 3318 Theories Learning**

This course is the study of how behavior of an individual undergoes enduring changes as a result of exposure to events in the environment. The main focus is on classical, operant, and observational learning. Lec 3, Cr 3. Prerequisite: PSYC 2301.

### **PSYC 3322 Biopsychology**

In this course, psychology will be approached from the perspective of the human being as a living organism and as part of the biological world. Emphasis will be on how the nervous system, especially the brain, is related to various aspects of behaviors and experience. Lec 3, Cr 3. Prerequisite: BIOL 1306, BIOL 1106 and 6 hours in advanced PSYC.

### **PSYC 3324 Health Psychology**

This is a relatively new field of psychology that studies mental, emotional, and behavioral factors that affect the onset, duration, recovery and prevention of physical illnesses. Lec 3, Cr 3.

### **PSYC 3326 Contemporary Issues in Social Psychology**

This course examines how an individual's behaviors and thinking influences and is influenced by the presence of others. Topics include attribution, conformity, persuasion, attitude structure and change, leadership, and prejudice and discrimination. Lec 3, Cr 3. Prerequisite: 6 hours of PSYC or SOCI.

### **PSYC 3343 Tests and Measurements in Psychology**

This course looks at theoretical issues and practical problems involved in designing and administering tests and measures such as questionnaires, surveys, aptitude and achievement tests, personnel selection, and personality inventories. Lec 3, Cr 3. Prerequisite: 6 hours of PSYC or 3 hours of behavioral statistics.

### **PSYC 3363 Human Sexuality**

This course explores the multidimensional nature of human sexuality including the physiological, psychological, and sociological aspects of human sexuality. Lec 3, Cr 3. Prerequisite: PSYC 2301 or SOCI 1301.

### **PSYC 4101 Senior Seminar in Psychology**

This course is a capstone experience in which students reflect on their

undergraduate education in psychology, integrate their major coursework, assess and evaluate the major as it currently exist, and formulate a plan for their future professional development. Lec 1, Cr 1. Prerequisite: Psychology major with at least 24 hours including PSYC 2301, PSYC 2317, PSYC 3301.

**PSYC 4302 Advanced Statistics for Psychology**

This course reviews and expands on basic principles of statistical analysis with an emphasis on inferential techniques such as analysis of variance and integrated with the use of prepackaged statistical analysis programs such as SPSS and SAS. Lec 3, Cr 3. Prerequisite: PSYC 2317, PSYC 3301.

**PSYC 4305 Behavior Management and Modification**

This course explores the application of various techniques derived from learning theories for the treatment of a wide variety of behavioral and emotional problems in clinical settings; decreasing the frequency of undesirable behaviors and increasing the frequency of desirable behaviors in non-clinical settings. Lec, Cr 3. Prerequisite: PSYC 3318.

**PSYC 4306 Conflict Resolution**

An investigation of the nature of conflict and the methods to resolve conflict with an emphasis on collaborative problem solving and mediation. Lec 3, Cr 3. Prerequisite: PSYC 2301.

**PSYC 4312 Psychology of Gender**

This course asks how biological and cultural factors influence the development of gender roles and identities and stereotypes of masculinity and femininity and how these affect our lives at the personal, social, and institutional levels. Lec 3, Cr 3. Prerequisite: 9 hours of PSYC or SOCI.

**PSYC 4313 Abnormal Psychology**

This course explores the origins, categories and treatments of mental, emotional and behavioral disorders ranging from relatively mild stress and anxiety disorders to the more severe schizophrenias and organic mental disorders. Lec 3, Cr 3. Prerequisite: 6 hours of Psychology. (3000 and 4000 level)

**PSYC 4319 Cognitive Processes**

This course examines mental activities from an information processing perspective. Topics include perception, pattern recognition, attention, memory, decision making, and problem solving. Lec 3, Cr 3. Prerequisite: PSYC 3301.

**PSYC 4322 Sensation and Perception**

This course looks at how the sensory nervous system monitors the internal and external environments and how the central nervous system organizes, evaluates and acts on incoming sensory information. Lec 3, Cr 3. Prerequisite: PSYC 2301.

**PSYC 4330 Psychology and the Legal Systems**

This course provides an interdisciplinary introduction to the field of Forensic Psychology, including basic concepts of the American legal process in civil and criminal cases and application of the science of Psychology in the legal system for the development and implementation of law and policy. Prerequisite: PSYC 3301 or CRIJ 3302 or SOCI 4305.

**PSYC 4333 Theories of Personality**

This is an examination of some of the major theories of how we acquire the distinctive behavioral, mental, and emotional characteristics which make us unique individuals. Lec 3, Cr 3. Prerequisite: 6 hours of Psychology.

**PSYC 4356 Industrial and Organizational Psychology**

This course explores psychological and behavioral factors involved with organizational design and effectiveness; leadership, personnel selection, placement, training, promotion retention; morale, job satisfaction and productivity. Lec 3, Cr 3. Prerequisite: 6 hours of basic Psychology.

**PSYC 4360 Clinical and Counseling Psychology**

This course introduces the methods of applying psychological principles to the diagnosis and treatment of emotional and behavioral problems and providing help with problems of social adjustment and vocational and educational goals. Lec 3, Cr 3. Prerequisite: 6 hours of basic Psychology, Including: Abnormal Psychology.

**PSYC 4363 Systems and Theories in Psychology**

This course chronicles the development of psychological thought from the ancient Greeks into modern era in terms of the most influential people and the ideas and theories that they have proposed. Lec 3, Cr 3. Prerequisite: PSYC 2301.

**PSYC 4374 Topics in Psychology**

This course is designed to address contemporary developments in psychology. The topics may vary and the course may be repeated twice for credit. Lec 3, Cr 3. Prerequisite: PSYC 2301.

**PSYC 4380 Independent Study**

This course allows students to arrange a personalized study schedule on a topic of their interest. The topic may be one which is not covered in the above courses or one which goes into more depth than is usually the case. Lec 3, Cr 3. Prerequisite: PSYC 2301.

**Radiologic Technology (RADR)**

**RADR 1166 Practicum I - Medical Radiologic Technology**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 21, Cr 1.

**RADR 1167 Practicum II - Medical Radiologic Technology**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 21, Cr 1.

**RADR 1201 Introduction to Radiography**

This course includes the historical development of radiography, basic radiation protection, an introduction to medical terminology, ethical and legal issues for health care professionals, and an orientation to the program and the health care system. Lec 2, Lab 0, Cr 2.

**RADR 1213 Principles Radiography Imaging I**

This course will analyze radiographic image qualities and the effects of exposure variables upon these qualities. Lec 1, Lab 2, Cr 2.

**RADR 1267 Practicum-Medical Radiologic Technician**

Practical general training and experience in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 20, Cr 2.

**RADR 1411 Basic Radiographic Procedures**

This course includes an introduction to radiographic positioning terminology, the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of basic anatomy and related pathology. Lec 3, Lab 3, Cr 4.

**RADR 2166 Practicum V - Medical Radiologic Technologic**

Practical general training and experiences in the workplace. The college

with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 21, Cr 1.

**RADR 2167 Practicum IV - Medical Radiologic Technologic**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 21, Cr 1.

**RADR 2217 Radiographic Pathology**

An overview of the disease process and common diseases and their appearance on medical images. Lec 2, Lab 0, Cr 2.

**RADR 2233 Advanced Medical Imaging**

An introduction to the use of computers in medical imaging and survey of specialized imaging modalities. Lec 2, Lab 0, Cr 2.

**RADR 2266 Practicum IV – Medical Radiologic Tech**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 20, Cr 2.

**RADR 2267 Practicum VII – Medical Radiologic Tech**

Practical general training and experiences in the workplace. The college with the employer develops and documents an individualized plan for the student. The plan relates the workplace training and experiences to the student's general and technical course of study. This course may be repeated if topics and learning outcomes vary. Lec 0, Lab 20, Cr 2.

**RADR 2305 Principles Radiographic Imaging II**

A continuation of the study of radiographic imaging technique formulation, image quality assurance, and the synthesis of all variables in image production. Lec 2, Lab 3, Cr 3.

**RADR 2309 Radiographic Imaging Equipment**

A study of the equipment and physics of x-ray production, basic x-ray circuits, and relate equipment components to the imaging process. Lec 3, Lab 1, Cr 3.

**RADR 2313 Radiation Biology and Protection**

A study of the effects of radiation exposure on biological systems, typical medical exposure levels, methods for measuring and monitoring radiation, and methods for protecting personnel and patients from excessive exposure. Lec 3, Lab 0, Cr 3.

**RADR 2331 Advanced Radiographic Procedures**

An advanced course including the proper manipulation of equipment, positioning and alignment of the anatomical structure and equipment, and evaluation of images for proper demonstration of advanced anatomy and related pathology. Lec 3, Lab 0, Cr 3.

**RADR 2335 Radiologic Technology Seminar**

This is a capstone course focusing on the synthesis of professional knowledge, skills, and attitudes in preparation for professional employment and lifelong learning. Lec 3, Lab 0, Cr 3.

## Reading (READ)

**READ 0320 College Reading I**

A Computer Directed Instructional (CDI) Course designed for students who scored 33-35 on the ASSET exam or completed READ 0300 with minimum grade of C. The program is individualized and self-paced and

gives instruction and practice in vocabulary, comprehension, and study skills. Students are required to purchase an access card.

**READ 0321 College Reading II**

A computer Directed Instructional (CDI) Course designed for students who scored 36-37 on the ASSET exam or completed READ 0320 with minimum grade of C. The program is individualized and self-paced and gives instruction and practice in vocabulary, comprehension, and study skills. Students are required to purchase an access card.

**READ 0322 College Reading III**

A computer Directed Instructional (CDI) Course designed for students who scored 38-41 on the ASSET exam or completed READ 0321 with minimum grade of C. The program is individualized and self-paced and gives instruction and vocabulary, comprehension, and study skills. Students are required to purchase an access card.

## Respiratory Therapy (RSPT)

**RSPT 1137 Basic Dysrhythmia Interpretation**

A comprehensive study of the electrical conduction system of the heart, electrophysiology, and characteristics of the common atrial, junctional, and ventricular dysrhythmias including atrioventricular blocks. Lec 1, Lab 0, Cr 1.

**RSPT 1161 Clinical II**

A method of instruction providing detailed education, training and work based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Lec 0, Lab 6, Cr 1.

**RSPT 1221 Respiratory Home Care/Rehabilitation**

Designed to develop an understanding of respiratory home care/rehabilitation equipment, procedures, and patient care, with emphasis on the use of special technology and equipment in the treatment of patients in a subacute and/or long-term patient care setting. Lec 1, Lab 3, Cr 2.

**RSPT 1241 Respiratory Home Care/Rehabilitation**

Designed to develop an understanding of respiratory home care/rehabilitation equipment, procedures, and patient care, with emphasis on the use of special technology and equipment in the treatment of patients in a subacute and/or long-term patient care setting.

**RSPT 1260 Clinical Respiratory Therapy Technician I**

A method of instruction providing detailed education, training and work based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Lec 0, Lab 12, Cr 2.

**RSPT 1315 Basic Respiratory Care Procedures I**

This course presents the basic principles and procedures, including gas laws, medical gas therapy, oxygen analyzers, humidity and aerosol therapy. Lec 2, Lab 4, Cr 3.

**RSPT 1316 Basic Respiratory Care Procedures II**

This course presents the basic principles and procedures, including lung expansion therapy, postural drainage and percussion, artificial airways, manual resuscitation devices and suctioning. Lec 2, Lab 4, Cr 3.

**RSPT 2133 Respiratory Care Case Management**

Preparation and presentation of the case study. Instruction in the investigation, organization, and presentation of the material, including preparation

of questions for group discussion. Lec 1, Cr 1.

**RSPT 2135 Pediatric Advanced Life Support**

A study of acute care, monitoring and management as applied to the neonatal and pediatric patient. Lab 3, Cr 1.

**RSPT 2139 Advanced Cardiac Life Support**

A comprehensive course designed to develop the cognitive and psychomotor skills necessary for resuscitation of the adult. Strategies for managing and stabilizing the cardiopulmonary arrested patient will be included. Lec 0, Lab 3, Cr 1.

**RSPT 2201 Cardiopulmonary Assessment**

Instruction in the integration of patient examination techniques, clinical lab studies, x-ray, pulmonary function, arterial blood gases, and invasive and non-invasive hemodynamics results in patient assessment. Lec 1, Lab 2, Cr 2.

**RSPT 2230 Examination Preparation**

Comprehensive review for selected respiratory care credentialing examinations. Test matrices and exam content areas for selected exams will be presented.

**RSPT 2247 Specialties in Respiratory Care**

An introduction to areas of interest in which the Respiratory Therapist may find application and/or employment. The depth of instruction will provide the indications, expected outcomes, hazards and methods for hyperbaric oxygen (HBO), extracorporeal membrane oxygenation (ECMO), nitric oxide (NO), sleep studies, nutritional assessment, metabolic monitoring, exercise/stress testing, and electroencephalograms. Lec 2, Lab 0, Cr 2.

**RSPT 2255 Critical Care Monitoring**

Introduction to monitoring techniques used clinically to assess a patient in the critical care setting. Lec 2, Cr 2.

**RSPT 2262 Clinical-Respiratory Therapy Technician3.**

A method of instruction providing detailed education, training and work based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by faculty. On-site clinical instruction, supervision, evaluation and placement is the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Lec 0, Lab 12, Cr 2.

**RSPT 2305 Pulmonary Diagnostics**

The theory and techniques involved in pulmonary function testing, diagnostics with emphasis on blood gas theory and analysis, quality control, oximetry, and capnography, Lec 2, Lab 4, Cr 3.

**RSPT 2310 Cardiopulmonary Disease**

A discussion of the pathogenesis, pathology, diagnosis, history, prognosis, manifestations, treatment and detection of cardiopulmonary disease. Lec 3, Cr 3.

**RSPT 2314 Mechanical Ventilation**

Preparation to conduct the therapeutic procedures to achieve adequate, spontaneous and artificial ventilation with emphasis on ventilator classification, methods, principles and operational characteristics. Also included are the indicators, complications, and physiologic effects/principles of mechanical ventilation. Lec 2, Lab 4, Cr 3.

**RSPT 2353 Neonatal/Pediatric Cardiopulmonary Care**

A study of acute care, monitoring and management as applied to the neonatal and pediatric patient. Lec 2, Lab 4, Cr 3.

**RSPT 2363 Clinical-Respiratory Therapy Technician**

A health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervi-

sion is provided by the clinical professional.

**RSPT 3333 Respiratory Care Case Management**

Introduction to the role of case manager of the care of cardiopulmonary disorders. Specific practice will be provided in developing case manager skills in the management of asthma and COPD. Lec 1, Lab 6, Cr 3.

**RSPT 4314 Mechanical Ventilation for Non RCPs**

Understanding ventilator concepts and technology including indications, complications, and troubleshooting. The learner will be required to write a significant paper as part of this course.

**RSPT 4319 Mechanical Ventilation of the Neonatal/Pediatric Patient**

Preparation to conduct the therapeutic procedures to achieve adequate spontaneous and artificial ventilation of the neonatal and pediatric patient. Topics include volume, pressure, and fluid ventilation and the indications, complications, and physiological effects ventilator support.

**RSPT 4325 Clinical Simulations in Respiratory Care**

A review of the National Board for Respiratory Care Clinical Simulation Examination matrix and practices. The learner will learn techniques used to take this exam and have practice in multiple patient care scenarios.

**RSPT 4333 Issues & Trends in Respiratory Care**

Students will discuss current trends in the application of respiratory care with particular attention to procedures that have evidence of improved patient outcomes. Issues concerning the practice of respiratory care will be researched and discussed.

**RSPT 4358 Advanced Respiratory Care Patient Assessment**

Instruction in the integration of patient examination techniques, clinical lab studies, x-ray, pulmonary function, arterial blood gases, and invasive and no-invasive hemodynamics results in patient assessment. Lec 2, Lab 4, Cr 3.

## **Scientific Inquiry (ISCIU)**

**ISCIU 1410 Scientific Inquiry I**

The first in a two semester course sequence that will serve as an introduction to the methods of scientific inquiry. Topics are selected from various fields of the natural sciences to illustrate the history, philosophy, and methods of science. Students will examine problems through directed inquiry in a laboratory setting. Lec 3, Lab 3 Cr 4.

**ISCIU 1411 Scientific Inquiry I**

The first in a two semester course sequence that will serve as an introduction to the methods of scientific inquiry. Topics are selected from various fields of the natural sciences to illustrate the history, philosophy, and methods of science. Students will examine problems through directed inquiry in a laboratory setting. Lec 3, Lab 3 Cr 4. Prerequisite ISCIU 1410.

## **Social Work (SOCW)**

**SOCW 2361 Introduction to Social Welfare**

Traces the philosophy and historical development of social welfare as an institutional arrangement, reflecting its European roots and its evolution in America. A general overview of social welfare institutions, structures and functions helps students understand social work concepts, ethics and practice. Descriptions of social work approaches help identify facets of the profession and target populations. Requirements for licensing and graduate social work are introduced. Lec 3, Cr 3.

**SOCW 2362 Social Welfare Institution and Legislation**

The development of social welfare institutions in the United States. Pays particular attention to the structures and the functions of social welfare as an institution, social welfare organizations, historic and current social

welfare legislation, gaps in the social welfare systems, and problems of social reforms. Lec 3, Cr 3.

## **Sociology (SOCI)**

### **SOCI 1301 Introduction to Sociology**

The study of human society; relationship of culture, social interaction, and group life to personality and human behavior; analysis of group structure, social organization, and social process. Lec 3, Cr 3.

### **SOCI 1306 Social Problems**

A survey and analysis of contemporary social problems, their likely causes and how they affect us with consideration of possible solutions that work toward social improvement. Particular attention is given to local problems. Lec 3, Cr 3.

### **SOCI 2301 Marriage and Family**

A functional analysis of the contemporary American family; basic sociological insights, including a brief historical and cross-cultural perspective as well as intensive study of American courtship, marriage, and family institutions. Lec 3, Cr 3. Prerequisite: Sophomore standing recommended.

### **SOCI 2317 Statistical Methods in Sociology**

Measures of central tendency and variability; statistical inference; correlation and regression. May be counted as SOCI 2317 or PSYC 2317. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 2319 Mexican-American Experience**

An introduction to the study of social, political and cultural processes which have shaped the Mexican American community in the United States with emphasis on the experience of Mexican American people in the Rio Grande Valley of Texas. Lec 3, Cr 3.

### **SOCI 3311 El Contexto de la Novela Mexicana**

An analysis of 20th century Mexican society and the events that sought to transform it. Within that context, the writer will be viewed as an interpreter of history and the novel as an attempt to define and reconstruct reality. This course will be taught in Spanish. Prerequisite: SOCI 1301, SPAN 2311 and SPAN 2312, or consent of instructor.

### **SOCI 3313 Criminology**

A study of crime, its causes, and its social treatment. Lec 3, Cr 3. Prerequisite: 3 hours of Sociology.

### **SOCI 3323 Hispanics in Global Society**

An examination of social, political and cultural processes which have shaped the Mexican American community in the United States; an analysis of its relations with other groups in society, its status, aspirations and power. An assessment of present opportunities and prospects for the future. Emphases will be placed on the development and status the development and status of Mexican American in Texas. Prerequisite: SOCI 1301.

### **SOCI 3324 Sociology of Health**

Analysis of basic problems in the maintenance and preservation of health and delivery of health care services by social class. Focus is on environmental course of disease, social-psychological response to illness and family cohesion; strain and resources as affected by illness. Lec 3, Cr 3. Prerequisite: 3 hours of Sociology.

### **SOCI 3333 American Communities**

This course analyzes the patterns of growth and development of American cities, suburbs, towns, edge cities, and planned communities. Consideration will be given to the demographic, ecological, political, cultural, and technological factors affecting urban communities. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 3335 Social Theory**

This course surveys the major theorists of Sociology's classical era, as well as modern theoretical approaches such as functionalism, neo-Marxism, symbolic interactionism, ethnomethodology, as an exchange network, and feminist theories. Students are encouraged to take this course as soon as possible after choosing Sociology as a major. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 3363 Gender**

This course will survey and analyze the social construction of gender in American society today. The historical and contemporary cultural linking of human traits to a particular sex, the resulting inequality of power between the sexes, and the effects of this on the occupational structure of the family are areas considered in this course. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 3364 Minorities**

This course examines inter-group relations that produce status and power differences for groups defined as minorities. The main focus of the course will be the social and cultural processes that place and maintain American minorities in disadvantaged statuses. Various historical experiences involving African Americans, Mexican Americans, and others, will be surveyed. Notable situations of inter-group conflict in various parts of the world will be reviewed. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 3373 Mass Communications and Culture**

The course provides an overview of media theory and research, and analyzes the ways in which media organization and environmental influences shape mass cultural products. Specific areas of attention include television, movies, books publishing, newspapers, and the internet. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 3374 Religion in Society**

This course will survey and analyze religion in contemporary society. Religion will be examined as an institution that provides a variety of functions for social solidarity and differentiation as well as personal and ethnic identity. Varieties of organizational structure linked to historical factors and social structure will also be analyzed. The adaptation of religious belief to modernity will be assessed within the context of various cultural traditions. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 3393 Aging**

The course considers the social meaning of age and analysis of the basic problems faced by the aged. Issues of health, income, work, religion, leisure, and interpersonal relationships of the aged are addressed. Lec 3, Cr 3. Prerequisite: SOCI 1301.

### **SOCI 4184 Senior Seminar**

This is a capstone course integrating students' experience in sociology, and providing them with end products and information useful beyond graduation; in particular, an academic portfolio. Lec 1, Cr 1. Prerequisite: This course should be taken in the last semester before graduation.

### **SOCI 4305 Methods of Social Research**

An integration of preliminary course work, comprehensive overview, and application of distinct research methods currently utilized in the discipline of sociology. Emphasis on hypothesis formulations, study design, data collection, and interpretation. Prerequisite: SOCI 1301 and SOCI 2317.

### **SOCI 4314 Sociology of Deviance**

This course provides a review of theory and research on the nature and extent of deviant behavior. Particular types of individual and subcultural deviance will be addressed. Lec 3, Cr 3. Prerequisite: SOCI 1301 and either SOCI 3335 or CRIJ 3303.

### **SOCI 4325 Population and Migration**

An introduction to the study of human population and migration and their impact on economic resources, the environment, education, health, and social services. An analysis of factors that affect reproduction, life chances, and migration, present trends and prospects for the future. Lec 3, Cr 3. Prerequisite: SOCI 1301, SOCI 2317.

### **SOCI 4352 Social Inequality**

This course addresses research, concepts and theory related to the causes and consequences of inequality in social life. It examines how inequality is built into the structure and culture of major social institutions; government, economy, religion, family, education. Lec 3, Cr 3. Prerequisite: SOCI 1301 and one of the following: SOCI 3323, SOCI 3363, SOCI 3364, or SOCI 3335.

### **SOCI 4375 Organizations and Work**

This course examines our organizationally-dominated world through the lens of organization theory. The transformation of world and the major schools of management theory during this century are considered. Lec 3, Cr 3. Prerequisite: SOCI 1301, SOCI 3335.

### **SOCI 4383 Independent Studies**

Designed to offer students the opportunity to gain experience in research or or-depth theoretical/empirical readings in a substantive area not normally covered within standard courses. Research projects or advanced readings will vary according to student interest and faculty availability. Sequential registration for up to nine hours is permitted as topics vary. Lec 3, Cr 3. Prerequisite: 9 hours of SOCI and consent of instructor.

## **Spanish (SPAN)**

### **SPAN 1313 Elementary Spanish I**

An introduction to the basic principles of grammar, emphasizing pronunciation, oral practice, conversation, and dictation. Also includes simple exercises in composition and easy reading within a cultural framework. Lec 3, Cr 3. Prerequisite: Basic skills in reading, writing, and departmental approval.

### **SPAN 1314 Elementary Spanish II**

Continuation of SPAN 1313. Lec 3, Cr 3. Prerequisite: SPAN 1313 or departmental approval.

### **SPAN 1373 Basic Spanish for Bilinguals I**

An introductory course for students who possess a spoken knowledge of Southwestern U.S. Spanish and who wish to develop competency in reading and writing standard Spanish. Through readings and written assignments the student will be introduced to the conventions of Spanish grammar and spelling. Through discussion and reading students will come to appreciate the place of the Mexican American dialect of Spanish within the context of the Hispanic community. Lec 3, Cr 3. Not for Spanish and Education majors or minors.

### **SPAN 1374 Basic Spanish for Bilinguals II**

Continuation of SPAN 1373. Lec 3, Cr 3. Prerequisite: SPAN 1373. Not for Spanish and Education majors or minors.

### **SPAN 2311 Intermediate Spanish I**

A comprehensive review of Spanish grammar. Lec 3, Cr 3. Prerequisite: SPAN 1314 or departmental approval.

### **SPAN 2312 Intermediate Spanish II**

Continuation of SPAN 2311. Lec 3, Cr 3. Prerequisite: SPAN 2311 or departmental approval.

### **SPAN 2316 Spanish for Specific Purposes**

Additional study designed to meet the specific interest and needs of students

pursuing careers other than business, such as education, medical specialties, and technology. Given in Spanish. Lec 3, Cr 3.

### **SPAN 2317 Business Spanish**

An introduction to Spanish business correspondence and the translation of commercial documents from English to Spanish. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 1373 or departmental approval.

### **SPAN 2321 Hispanic Language and Culture I**

An introduction to the language, culture, and literature, of the Hispanic world. Given in Spanish. Lec 3, Cr 3.

### **SPAN 2322 Hispanic Language and Culture II**

A continuation of SPAN 2321. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321.

### **SPAN 3301 Spanish Literature (1100 - 1750)**

A survey of the literature of Spain from the beginning to 1750. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3302 Spanish Literature (1750-Present)**

A survey of the literature of Spain from the mid-18th century to present. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3303 Advanced Spanish Composition**

Intensive training in Spanish composition, including class publications of material in Spanish. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3304 Advanced Spanish Composition**

Additional work in composition similar to Spanish 3303. Given in Spanish. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3310 Masterpieces of Spanish American Literature I**

An investigation of the literary works of the principal narrators, poets and dramatists of Spanish America from the beginning of Spanish Colonialism to Modernism. Analysis of form and content and study of the historical background and literary currents in each work. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3311 Masterpieces of Spanish American Literature II**

An investigation of the literary works of the principal narrators, poets and dramatists of Spanish America from Modernism to the present. Analysis of form and content and study of the historical background and literary currents in each work. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3330 Advanced Spanish Grammar**

A study of grammatical concepts with concentration on basic sentence structure, the paragraph, principles of punctuation, and functional grammar. Course designed for Spanish majors and minors as well as Education Minors in bilingual education. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3332 Introduction to Spanish/English Translation**

A basic orientation in the theory and practice of translating a text from Spanish to English, including consideration of both cultural and morpho-syntactical problems. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3333 Introduction to English/Spanish Translation**

An orientation in the theory and practice of translating a text from English to Spanish, including consideration of cultural and morpho-syntactical problems. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

### **SPAN 3334 Commercial Spanish for Translator**

A basic orientation in Microeconomics, Macroeconomics, Money and Banking, Foreign Trade, Accounting Mcs, Money and Banking, Foreign

Trade, Accounting Marketing, and Management with close attention to terminology in both Spanish and English, as well as commercial practice in Mexico and other Hispanic countries. Given in Spanish. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 3335 Topics in Translation**

Topics in the theory and practice of professional translation between Spanish and English in areas other than business and legal texts, including but not limited to the following: education, medical specialties, and technology. May be repeated two items for a total of 9 hours. Prerequisite: TRSP 3332 or SPAN 3332 and ENGL 1302 or ENGL 2311.

**SPAN 4303 Spanish Civilization**

A panoramic view of the political, literary, and cultural history of Spain and the Spanish-speaking countries of America. Recommended as a review for the ExCet examination in Spanish. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4304 Spanish Lyric Poetry**

A survey of lyric poetry from its beginning to the present. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4305 Cervantes**

A study of the principal works of Miguel de Cervantes with emphasis on Don Quixote. Given in Spanish. All readings, examinations, and papers in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4307 Spanish American Novel**

An investigation of the Spanish American novel of the 19th and 20th centuries. Students will become knowledgeable of the literary currents associated with the genre within their historical and social contexts; become aware of the key elements of the novel; develop the ability to analyze the key elements and identify literary techniques and devices; and develop the ability to articulate the findings of his/her own analysis and criticism. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4309 Contemporary Spanish Literature**

A study of the principal literary works of Spanish from the generation of 1898 to the present. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4310 Spanish Phonology and Phonetics**

An analysis of the phonetic and phonological systems of the Spanish language. Presentation of the articulatory description of the sounds of the language introduction to the phonological processes that exist in the language including stress assignment, syllabification and intonation. Description and analysis of some phonological processes that occur in the major varieties of the language. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4311 The Mexican Novel**

The study of the major novels of Mexico from beginning to the present. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4312 Structure of the Spanish Language**

An analysis of sentence structure in Modern Spanish from a generative perspective. Introduction to the goals and methods of generative grammar and a presentation of their relevance to the syntax of Spanish. Topics covered include pronominal deletion, sentence embedding, and sentence topicalization. Given in Spanish. Lec 3, Cr 3.

**SPAN 4316 Acquisition of the Spanish Language**

An analysis of the process of language acquisition among Spanish speaking children. Simultaneous acquisition of English and Spanish among Latino children in the United States. Discussion of the role of dialect and register in the acquisition process. Given in Spanish. Lec 3, Cr 3. Prerequisite:

SPAN 2321, SPAN 2322.

**SPAN 4317 Spanish Language in Social Context**

An analysis of language variation in the Spanish-speaking world. Correlation of social variables and specific linguistic variables. Language attitudes in some Spanish-speaking communities and their ramifications in the processes of language maintenance and shift. Linguistic and social manifestations of language contact, such as, direct transfer and code-switching. Given in Spanish. Lec 3, Cr 3.

**SPAN 4332 English/Spanish Commercial Translation**

Intensive practice in translation from English to Spanish and Spanish to English of commercial, financial, and marketing texts, as well as shipping, insurance, and customs house documents. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322, and SPAN 3332 or SPAN 3333.

**SPAN 4334 English/Spanish Legal Translation**

An analysis of legal language in English and Spanish. Intensive practice in the translation from English to Spanish and Spanish to English of contracts and government regulations, as well as texts relating to international organizations, civil law, and criminal law. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322, and SPAN 3332 or SPAN 3333.

**SPAN 4368 Children's Literature in Spanish**

A broad survey of literary works in Spanish appropriate for the young reader by the principal narrators, poets, and dramatists of the Hispanic World. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4369 Latin American Theater**

A study of selected dramatic works of representative Hispanic authors from a variety of geographical locates and cultures within the Spanish-speaking world. Interpretation and analysis of the aesthetic and ethical dimensions of the works, as well as creativity process that brought them to life on the stage. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4371 Chicano Narrative**

A general introduction to short stories and novels written in Spanish by U.S. citizens of Mexican descent. This survey begins with a picaresque novel .post WWII male writes and ends with a more recent novel by a woman writer exploring feminist issues. Given in Spanish. Lec 3, Cr 3. Prerequisite: SPAN 2321, SPAN 2322.

**SPAN 4373 Studies in Hispanic Culture**

Advanced study of topics in Hispanic culture, civilization, language or literature in areas not generally available as part of regular course offerings. Not repeatable. Given in Spanish. Lec 3, Cr 3.

**SPAN 4392 Senior Seminar**

Integration, synthesis, and evaluation of the graduating senior's cumulative studies of Hispanic Letters and the Spanish language. Portfolio preparation and evaluation; the planning, preparation and writing of a Senior Mini-thesis; and a Capstone Examination. Lec 3, Lab 3. Prerequisite: 18 hours in advanced spanish including SPAN 3301, SPAN 3303, SPAN 3311, SPAN 3330.

## Speech (SPCH)

**SPCH 1315 Applied Communication**

The focus of this course is the promotion of the student success- in college and life after college- through the adoption of effective communication skills. Special emphasis will be placed on developing skills in listening, interviewing, small group interaction, and public speaking and how those skills enhance student success. Lec 3, Cr 3.

### **SPCH 1318 Interpersonal Communication**

Designed to study communication barriers between individuals based on cultural, physical, and psychological differences. Emphasis will be placed on improving one-to-one communication and small group interaction. Lec 3, Cr 3.

### **SPCH 1342 Speech for the Bilingual Student**

Designed for bilingual students who want to improve their English. A study of the sound system, stress patterns, timing, melody, and phraseology of American English. Practice in presenting ideas to an audience. Lec 3, Cr 3.

### **SPCH 2333 Group Communications and Discussion**

This course is design to provide students with the necessary skills to participate in decision-making, problem solving, and group discussion effectively. Prerequisite: ENGL 1301, ENGL 1302, and SPCH 1315 or SPCH 1318.

## **Sting Success Series (NCB)**

### **NCB 1000 Sting Success Series**

First-time freshmen who have been advised into developmental classes and/or have not passed all sections of THEA. Must be taken during first semester. Required for first time freshmen that are registered in developmental classes and/or deficient in THEA.

## **Translation Studies in Spanish (TRSP)**

### **TRSP 3332 Introduction to Spanish/English Translation**

A basic orientation in the theory and practice of translating a text from Spanish to English, including consideration of both cultural and morpho-syntactical problems. Introduction to software programs used by professional translators and interpreters. Lec 3, Cr 3.

### **TRSP 3333 Introduction to English / Spanish Translation**

An orientation in the theory and practice of translating a text from English to Spanish, including consideration of cultural and morpho-syntactical problems. Lec 3, Cr 3. Prerequisite: SPAN 2321 and SPAN 2322.

### **TRSP 3335 Topics in Translation**

Topics in the theory and practice of professional translation between Spanish and English in areas other than business and legal texts, including but not limited to the following: education, medical, specialties, and technology. Lec 3, Cr 3. Prerequisite: Six hours of Freshmen English and TRSP 3332 or SPAN 3332.

### **TRSP 4332 Commercial Translation**

Intensive practice in translation from English to Spanish and Spanish to English of commercial, financial, and marketing texts, as well as shipping, insurance, and customs house documents. Lec 3, Cr 3.

### **TRSP 4334 Legal Translation**

An analysis of legal language in English and Spanish. Intensive practice in the translation from English to Spanish and Spanish to English of contracts and government regulations, as well as texts relating to international organizations, civil law and criminal law. Lec 3, Cr 3.

### **TRSP 4366 Interpreting I**

A basic orientation in the theory and practice of interpreting English to Spanish and Spanish to English on sight translation and short consecutive interpreting, and also preparation for simultaneous interpreting. Lec 3, Cr 3. Crosslisted with INTG 4366.

### **TRSP 4367 Interpreting II**

Advanced practice in English to Spanish and Spanish to English consecutive and simultaneous interpreting with close attention to terminology and documentation. Conference interpretation. Lec 3, Cr 3.

## **University Experience (UNIV)**

### **UNIV 1101 The University Experience**

The purpose of the course is to assimilate students to academic, personal, career, social, and recreational opportunities at the university and in the community; to develop lifelong learning skills in students; and to help students cope successfully with the demands of the university through the use of challenges and opportunities in and out of the classroom. This one hour course covers the essential topics. Lec 1, Cr 1.

### **UNIV 1301 The University Experience**

The purpose of the course is to assimilate students to academic, personal, career, social, and recreational opportunities at the university and in the community; to develop lifelong learning skills in students; and to help students cope successfully with the demands of the university through the use of challenges and opportunities in and out of the classroom. This three-hour course will cover the above topics comprehensively. Lec, 3 Cr 3.



# GOVERNANCE, ADMINISTRATION & FACULTY

# GOVERNANCE

## The University of Texas System Board of Regents

Regent, Title, Hometown	Term Expires
James R. Huffines, Chairman, Austin	2009
Rita C. Clements, Vice-Chairman, Dallas	2007
Woody L. Hunt, Vice-Chairman, El Paso	2005
Cyndi Taylor Krier, Vice-Chairman, San Antonio	2007
Robert A. Estrada, Dallas	2005
Robert B. Rowling, Dallas	2005
Judith L. Craven, M.D., Houston	2007
John W. Barnhill, Brenham	2009
H. Scott Caven Jr., Houston	2009
Mark G. Yudof, Chancellor	
Francie A. Frederick, Counsel and Secretary	

## Texas Southmost College Board of Trustees

Trustee, Title	Term Expires
Chester R. Gonzalez, Chair	2010
Rosemary Breedlove, Vice-Chair	2010
Eduardo Campirano, Secretary	2010
David G. Oliveira	2006
Dolly Zimmerman	2008
Roberto Robles, M.D.	2006
Roman D. "Dino" Esparza	2006

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Ph.D., University of Texas at Austin

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M.S., Ph.D., University of Wisconsin

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*Vice President for Business Affairs*  
B.B.A., Pan American University at Brownsville  
C.P.A., State of Texas

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B.A., University of Arkansas  
M.A., University of New Mexico  
Ph.D., University of North Texas

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*Vice President for Administration and Partnership Affairs*  
B.S., Kansas State University  
M.Ed. Antioch-New England  
M.S.W., Ph.D., University of Kansas

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*Vice President for Student Affairs*  
B.S., M.Ed., Pan American University  
Ed.D., University of Houston

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A.A., Texas Southmost College  
B.A., M.A., Ph.D., University of Texas at Austin

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B.A., Duke University  
M.A., Ph.D., University of Texas at Austin

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B.S.C.E., Virginia Tech (VPI&SU)  
M.S.C.E., Ph.D., University of Colorado at Boulder

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M.A., B.S., B.A., East Carolina University  
Ph.D., College of Medicine, University of Florida

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A.A., Texas Southmost College  
B.B.A., University of Texas-Pan American  
M.B.A., University of Texas at San Antonio  
Ph.D., University of Texas-Pan American

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B.A., M.A., Stephen F. Austin University

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M.A., University of Texas at Arlington  
M.L.S., University of North Texas

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B.A., M.S., Notre Dame University  
Ed.D., Texas A&M University-Corpus Christi

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MSSCT, University of Texas at Austin

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B.S., Kansas State University  
M.Ed. Antioch-New England  
M.S.W., Ph.D., University of Kansas

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B.S., M.S., Sam Houston State University

# ADMINISTRATIVE OFFICIALS

---

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B.A., Montclair State College

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B.S., University of Texas at Brownsville

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*Assistant Director, Media Services*

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M.Ed., University of Texas at Brownsville

### Peter Gawenda

*Director, BAT Program*

1960 Certificate Interpreter (II) FRG

1974 B.S., University of Maryland

1977 M.S., Troy State University

1978 Diploma, Fuehrungsakademie, Hamburg

1986 Ed.D., University of Houston

### Julio Ledezma

*Assistant Director, Scheduling and Course Inventory*

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### Larry Löf

*Director of Biological Station Rancho del Cielo/STEMS*

A.A., Texas Southmost College

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M.S., Pan American University

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### Linda Fossen

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M.B.A., Pan American University

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B.A., Texas A&I University

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M.A., Roosevelt University

Ed.D., University of Houston

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*Coordinator of New Student Relations*

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*Director, Academic Advising*

B.A., M.P.A., Pepperdine University

M.P.S., University of Illinois

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A.A., B.A.A.S., University of Texas at Brownsville

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State Certified Master Electrician (CME)

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M.B.A., Indiana Wesleyan University

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J.D., University of Wyoming College of Law

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Certified Data Processor (CDP)

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R.N., Massachusetts General Hospital School of Nursing

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B.I.M., American Graduate School of International Management

**John Sossi***Manager, International Innovation Center*

A.A. Cleveland Institute of Electronics

B.S., Oakland University

**Institutional Advancement Division***Vacancy, Vice President***Barry Horn***Assistant Vice President for Development***Leticia Fernandez***Director, News & Information*

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C.G.A.P., C.I.A., State of Texas

## Student Affairs Division

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*Program Director of University Talent Search*  
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Ed.D., University of Houston

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M.S., St. Mary's University  
Psy.D., Our Lady of the Lake University

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M.A., University of St. Thomas (St. Paul, MN)

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M.S., Webster University

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## COLLEGE & SCHOOL FACULTY

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*Charles Dameron Ph.D., Dean*

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#### Criminal Justice Department

*Susan Ritter, Chair*

#### English and Communication Department

*William Harris, Chair*

#### Fine Arts Department

*Sue Zanne Urbis, Chair*

#### Government Department

*Charles Chapman, Chair*

#### History Department

*William Adams, Chair*

#### Modern Languages Department

*Cipriano Cárdenas, Chair*

#### University Studies

*Julie Larson, Program Director*

### Faculty

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##### Ethel K. Cantu

*Master Technical Instructor*

1969 B.A., University of California, Davis

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1979

*Psychology*

##### William C. Davis

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1970 B.A., University of Texas at Austin

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1979

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##### Mathew Johnson

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1998 Ph.D., Texas Technical College

1999

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##### Sherry McCullough

*Associate Professor*

1965 B.A., 1987 M.S.W., 1991 Ph.D., University of Oklahoma

1991

*Sociology*

##### Jared Montoya

*Assistant Professor*

1998 B.S., 2004 M.S., 2005 Ph.D., Brigham Young University

2005

*Psychology*

##### David Pearson

*Professor*

1979 B.A., University of Massachusetts

1981 M.A., 1988 Ph.D., Yale University

1997

*Sociology*

<b>Scott Reid</b> <i>Assistant Professor</i> 1989 B.A., 1991 M.A., 1999 Ph.D., Kent State University	<b>1999</b> <i>Sociology</i>	<b>Patti Salinas</b> <i>Assistant Professor</i> 1977 B.S., Southwest Missouri State University 1980 J.D., University of Missouri-Columbia School of Law	<b>2004</b> <i>Criminal Justice</i>
<b>Luis Rodriguez-Abad</b> <i>Associate Professor</i> 1960 B.A., Wheaton College 1969 Ph.D., Syracuse University	<b>1995</b> <i>Sociology</i>	<b>William Wilkinson</b> <i>Professor</i> 1964 B.A., North Texas State University 1979 M.A., University of Texas at San Antonio 1985 Ph.D., Sam Houston State University	<b>1983</b> <i>Criminal Justice</i>
<b>Martha Warburton</b> <i>Lecturer</i> 1977 B.S., Kalamazoo College, Michigan 1982 M.S.W., University of Michigan	<b>2005</b> <i>Sociology</i>	<b>English and Communication Department</b>	
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- Fitratullah Khan** 1992  
*Professor* *Computer Sciences*  
1980 B.S., 1983 M.S., 1987 Ph.D., University of Texas at Arlington  
1991 M.S., University of Kansas
- Juan R. Iglesias-Leon** 2001  
*Assistant Professor* *Computer Sciences*  
1994 B.S., 1997 M.S., Universidad Nacional Autónoma de México  
2001 Ph.D., New Mexico State University
- Blanca E. Lozano** 1984  
*Assistant Professor* *Computer Information Systems*  
1978 B.S., Instituto Tecnológico de México  
1984 M.B.A., Pan American University
- Domingo Molina III** 1984  
*Assistant Professor* *Computer Sciences*  
1973 B.S., 1975 M.Ed., Pan American University  
1987 M.S., Corpus Christi State University
- Mahmoud K. Quweider** 2000  
*Associate Professor* *Computer Sciences*  
1985 B.S., 1989, 1991, 1997 M.S., 1995 Ph.D., University of Toledo

- Bari Siddique** 1985  
*Assistant Professor* *Computer Sciences*  
1975 B.S., 1977 M.S., University of Rajshahi at Bangladesh  
1984 M.S., 1985 M.S., Marquette University
- Lappoon R. Tang** 2004  
*Assistant Professor* *Computer Sciences*  
1995 B.S., 1997 M.S., 2003 Ph.D., University of Texas at Austin
- Amjad Zaim** 2005  
*Visiting Assistant Professor* *Computer Sciences*  
1991 B.S., Wright State University  
1994 M.S., Biomedical Engineering, Wright State University  
1995 M.S., Electrical & Computer Engineering, Wright State University  
1999 Ph.D. University of Toledo
- Engineering Department**
- José Amieva** 1995  
*Master Technical Instructor* *Electronics Engineering*  
1993 B.S.E.E., M.S.I.E.E., Texas A&I University
- William B. Berg** 1997  
*Associate Professor* *Electrical Engineering*  
1965 B.E., Stevens Institute of Technology  
1989 Ph.D., University of Massachusetts-Lowell
- Manuel J. Blanco** 2002  
*Associate Professor* *Mechanical Engineering*  
1985, B.S., 1996 Ph.D., Escuela Superior de Ingenieros Industriales de Sevilla  
1988, M.S., 1993 Ph.D., University of Massachusetts-Lowell
- Jaime Cardenas-García** 2005  
*Professor* *Mechanical Engineering*  
1971 B.S.M.E., University of Maryland  
1975 M.S., University of Maryland  
1983 Ph.D., University of Maryland
- Immanuel Edinbarough** 2000  
*Associate Professor* *Manufacturing Engineering*  
1996 Ph.D., 1988 M.S., 1981 B.S., Bharathiar University, India  
1984 B.E., Institution of Engineers, India
- Sanjay Kumar** 2005  
*Assistant Professor* *Mechanical Engineering*  
1996 M.Tech., Indian Institute of Technology-Kampur  
2003 Ph.D., California Institute of Technology
- Emir José Macari** 2004  
*Professor* *Civil Engineering*  
B.S.C.E., Virginia Tech (VPI&SU)  
1982 M.S.C.E., University of Colorado at Boulder  
1989 Ph.D., University of Colorado at Boulder
- José G. Martín** 1996  
*Professor* *Nuclear Engineering*  
1964 B.S., Mississippi State University  
1970 M.S., 1970 Ph.D., University of Wisconsin
- Fabio Urbani** 2002  
*Assistant Professor* *Electronics Engineering*  
1997 Ph.D., La Sapienza, Rome  
1994 BSE, La Sapienza, Rome
- Guillermo G. Weber** 2003  
*Professor* *Mechanical Engineering*  
1988, Ph.D, MS, Massachusetts Institute of Technology
- Wayne E. Wells** 1996  
*Professor* *Manufacturing Engineering*  
1962 B.S., University of Cincinnati  
1972 M.B.A., Eastern Michigan University  
1986 M.S., 1993 Ph.D., Wayne State University
- Yong Zhou** 2005  
*Assistant Professor* *Electrical Engineering*  
1995 M.S., Beijing University of Aeronautics & Astronautics  
2005 Ph.D., University of Texas at Austin
- Industrial Technology Department**
- Thomas E. Bell** 1998  
*Lecturer* *Machine Shop*  
1978 B.S., Texas A&M University
- Michael H. Boster** 1982  
*Master Technical Instructor* *Drafting*  
1972 B.S., 1975 M.S., University of Texas at Austin
- Merced Cantu, III** 2001  
*Lecturer* *Auto Mechanics*  
1987, Teaching Certificate State of Texas
- Jesus Galvan** 1984  
*Lecturer* *Air Conditioning & Refrigeration*  
1984 Certificate, Texas Southmost College  
1984 Licensed Texas A.C. Contractor
- Daniel Garcia** 2003  
*Lecturer* *Air Conditioning & Refrigeration*  
1979 A.A.S., Texas Southmost College  
1990 B.B.A., Texas Pan American
- Jaime R. Garza** 1981  
*Associate Master Technical Instructor* *Drafting*  
1974 B.A., University of Puget Sound  
1983 M.S., Corpus Christi State University
- Felipe Paredes** 2003  
*Lecturer* *Building Trades*  
1986 Certificate, Texas Southmost College
- Daniel Tamez** 1980  
*Assistant Master Technical Instructor* *Automotive Technology*  
1983 Specialized Vocational Training
- John Patrick Wade** 1982  
*Master Technical Instructor* *Air Conditioning and Refrigeration*  
1973 Bryant School of Air Conditioning, Refrigeration  
1977 B.A., Sam Houston State University  
1984 M.S., Corpus Christi State University
- David Zamora** 2000  
*Lecturer* *Auto Body*  
1977 A/C Repair Certificate, Texas Southmost College
- Mathematics Department**
- Naomi Acuña** 2004  
*Lecturer* *Mathematics*  
1996 B.S., University of Texas at Brownsville

<b>Steven C. Benton</b> <i>Assistant Professor</i> 1970 B.S., Central Missouri State University 1990 M.C.S., Corpus Christi State University	<b>1980</b> <i>Mathematics</i>	<b>Laura Villarreal</b> <i>Associate Master Technical Instructor</i> 1978 B.S., 1984 M.Ed., Pan American University	<b>1989</b> <i>Mathematics</i>
<b>Jeffrey A. Coleman</b> <i>Lecturer</i> 1977 B.S., 1984 M.S., Prairie View A&M University	<b>2000</b> <i>Mathematics</i>	<b>Mary Wagner</b> <i>Assistant Professor</i> 1970 B.S., 1973 M.S., Texas A&I University	<b>1985</b> <i>Mathematics</i>
<b>Rogelio Contreras</b> <i>Associate Professor</i> 1969 B.S., 1973 M.A., Texas A&M University-Kingsville 2002 Ph.D., Texas A&M University	<b>1974</b> <i>Mathematics</i>	<b>Fred W. Warnke</b> <i>Associate Master Technical Instructor</i> 1969 B.S., 1971 M.S., Texas A&I University	<b>1972</b> <i>Mathematics</i>
<b>Olivia R. Garcia</b> <i>Associate Professor</i> 1976 B.A., Pan American University 1983 M.S., University of New Hampshire 2002 Ph.D., Texas A&M University	<b>1981</b> <i>Mathematics</i>	<b>Sessia Wyche III</b> <i>Associate Professor</i> 1970 B.S., 1972 M.S., Texas A&I University	<b>1987</b> <i>Mathematics</i>
<b>James Alan Hilsenbeck</b> <i>Lecturer</i> 1988 B.A., University of Iowa 1995 M.S., Texas A&M University-Kingsville	<b>1995</b> <i>Mathematics</i>	<b>Taail Yi</b> <i>Assistant Professor</i> 1988 B.S., M.S., Dankook University Seoul 1994 M.S., University of Illinois, Urbana-Champaign 1997 M.Ed., University of Florida	<b>2001</b> <i>Mathematics</i>
<b>Anthony Lerma</b> <i>Associate Professor</i> 1972 B.S., 1974 M.Ed., Southwest Texas State University 1990 Ph.D., University of Texas at Austin	<b>1976</b> <i>Mathematics</i>	<b>Apolinar Zapata</b> <i>Lecturer</i> 1984 B.S., Autonomous University of Nuevo Leon 1987 M.S., 1990 Ph.D., University of Massachusetts	<b>1999</b> <i>Mathematics</i>
<b>Jerzy Mogilski</b> <i>Associate Professor</i> 1972 Magister-Warsaw University, Poland 1979 Ph.D., Polish Academy of Science	<b>1996</b> <i>Mathematics</i>	<b>Paul-Hermann Zieschang</b> <i>Associate Professor</i> 1983 Ph.D., Kiel University 1991 Habilitation, Kiel University	<b>2001</b> <i>Mathematics</i>
<b>Deloria Nanze-Davis</b> <i>Associate Professor</i> 1976 B.A., Texas Lutheran College 1983 B.B.A., 1977 M.Ed., East Texas State University 1995 Ed.D., University of Houston	<b>1988</b> <i>Mathematics</i>	<b><i>Physics &amp; Astronomy Department</i></b>	
<b>Jorge E. Navarro</b> <i>Associate Professor</i> 1969 B.S., Loyola University, Chicago 1972 M.S., 1995 Ph.D., Northeastern University	<b>1995</b> <i>Mathematics</i>	<b>Manuela Campanelli</b> <i>Associate Professor</i> 1996 Ph.D., University of Bern, Switzerland	<b>2001</b> <i>Physics</i>
<b>Imelda Peña</b> <i>Assistant Professor</i> 1969 B.S., 1972 M.S., Texas A&I University	<b>1972</b> <i>Mathematics</i>	<b>Mario C. Diaz</b> <i>Professor</i> 1984 Licenciado, 1987 Ph.D., University of Córdoba, Argentina	<b>1996</b> <i>Physics</i>
<b>Juan Jose Perez</b> <i>Assistant Professor</i> 1967 B.S., 1972 M.S., Texas A&I University	<b>1975</b> <i>Mathematics</i>	<b>Phillip Dukes</b> <i>Assistant Professor</i> 1996 Ph.D., Brigham Young University	<b>2001</b> <i>Physics, Physical Science</i>
<b>Janice C. Phillipp</b> <i>Assistant Professor</i> 1978 B.S., 1981 M.S., Texas A&M University	<b>1981</b> <i>Mathematics</i>	<b>Roberto Grosso</b> <i>Visiting Assistant Professor</i> 1990 Ph.D., University of Nuremberg-Erlangen in Germany	<b>2005</b> <i>Physics</i>
<b>Rozina Siddique</b> <i>Lecturer</i> 1993 B.S., 2000 M.S., University of Texas at Brownsville	<b>2000</b> <i>Mathematics</i>	<b>Natalia Guevara</b> <i>Associate Professor/Chair</i> 1989 Ph.D., Moscow State University, Russia	<b>1998</b> <i>Physics, Physical Science, Biophysics</i>
<b>Raymond Simonsen</b> <i>Associate Master Technical Instructor</i> 1963 B.A., Western Michigan University 1967 M.S., U.S. Naval Postgraduate School	<b>1988</b> <i>Mathematics</i>	<b>Andreas Hanke</b> <i>Assistant Professor</i> 1998 Ph.D., University of Wuppertal, Germany	<b>2004</b> <i>Biophysics, Nanoscience</i>
		<b>Fredrick A. Jenet</b> <i>Assistant Professor</i> 2001 Ph.D., California Institute of Technology	<b>2004</b> <i>Theoretical Astrophysics</i>
		<b>Carlos O. Lousto</b> <i>Associate Professor</i> 1987 Ph.D., Universidad Nacional de la Plata, Argentina 1991 Ph.D., Universidad de Buenos Aires, Argentina	<b>2001</b> <i>Physics, Astronomy</i>

**Soumya Mohanty** 2003  
*Assistant Professor* *Physics*  
 1997 Ph.D., Inter University Center for Astronomy &  
 Astrophysics, India

**Soma Mukherjee** 2003  
*Research Assistant Professor* *Physics*  
 1991 Ph.D., University of Calcutta, India

**Terry Jay Phillips** 1982  
*Master Technical Instructor* *Physics, Physical Science*  
 1975 B.S., 1977 M.S., Sam Houston State University

**Richard Price** 2004  
*Professor* *Physics*  
 1971 Ph.D., California Institute of Technology

**Adrienne L. Rodriguez-Zermeno** 2005  
*Lecturer* *Physics & Astronomy*  
 1999 B.A., 2003 M.Ed., University of Texas at Brownsville

**Bernard Whiting** 2005  
*Visiting Professor* *Astrophysics*  
 1979 Ph.D., Melbourne University

## School of Business

*Rafael Otero and Mary M. Sullivan, Co-Interim Deans*

### Department Chairs and Program Directors

#### Accounting Department

*Carol Collinsworth, Chair*

#### Business Administration Department

*Rafael Otero, Chair*

#### Business Technology Department

*Mary M. Sullivan, Chair*

Accounting Technology Program

International Business Program

*Mary M. Sullivan, Program Director*

Legal Assisting/Paralegal Studies

*Pierre Kleff, Program Director*

Medical Office Technology

*Susan Ebersole, Program Director*

## Faculty

### Accounting Department

**Carol Collinsworth** 1982  
*Assistant Professor* *Accounting*  
 1979 B.B.A., 1983 M.B.A., Pan American University  
 1986 C.P.A., State of Texas

**Essam Elshafie** 2005  
*Assistant Professor* *Accounting*  
 1986 B.S., Cairo University, Egypt  
 1999 M.Acc., Cleveland State University  
 2005 Ph.D., Kent State University

**Abel D. Hinojosa** 1975  
*Professor Emeritus* *Accounting*  
 1964 B.B.A., University of Texas at Austin  
 1970 M.S., University of Houston  
 1971 C.P.A., State of Texas

**Dennis S. Ortiz** 1998  
*Associate Master Technical Instructor* *Accounting*  
 1978 B.S., 1989 M.A., University of Arizona  
 2000 Ph.D., University of North Texas

**Diana Kay Pence** 2005  
*Associate Professor* *Accounting*  
 1982 B.B.A., 1984 M.B.A., University of Nebraska at Omaha  
 1996 Ph.D., University of North Texas

**Mary Jane Saucedo** 1992  
*Associate Professor* *Accounting*  
 1981 B.B.A., 1989 M.B.A., Pan American University  
 1987 C.P.A., State of Texas  
 1994 M.A.C.C., Texas A&M University-Corpus Christi  
 2001 Ph.D., Texas A&M University

**Lauran Schmid** 2005  
*Lecturer* *Accounting*  
 1981 B.B.A. University of Texas at Austin  
 1985 C.P.A., State of Texas  
 1988 M.B.A. University of Texas-Pan American

### Business Administration Department

**Russell Adams** 2001  
*Lecturer* *International Business Management*  
 1993 B.S., University of Texas at San Antonio  
 1997 M.I.M., Thunderbird-American Graduate School of  
 International Management

**Manuel Alcocer** 2005  
*Lecturer*

**Gaurango Banerjee** 1997  
*Assistant Professor* *Economics*  
 1991 B.S., BITS, Pilani India  
 1997 Ph.D., University of Alabama

**E. Thomas Coyle** 2002  
*Instructor* *International Business/Management*  
 1969 B.S., University of Tennessee  
 1976 M.B.A., Georgia State University

**Anthony J. Daboub** 1997  
*Lecturer* *Management*  
 1962 B.A., 1963 M.A., 1963 Ph.L., St. Louis University  
 1976 M.B.A., University of Dallas  
 1991 Ph.D., University of Texas at Arlington

**Khaled Elkhail** 2003  
*Assistant Professor* *Finance*  
 1997 B.S., Bilkent University  
 1999 M.B.A., 2002 D.B.A., Louisiana Tech University

**Edith Galy** 1997  
*Assistant Professor* *International Business/MIS*  
 1984 B.S., St. Mary's University  
 1998 M.B.A., University of Texas at Brownsville  
 2003 Ph.D., University of Texas-Pan American

**Gautam Hazarika** 2002  
*Assistant Professor* *Economics*  
 1989 B.A., St. Stephen's College, University of Delhi  
 1998 Ph.D., University of Rochester

**Gerald Hollier** 1988  
*Associate Professor Business Administration*  
 1965 B.B.A., Lamar State College  
 1986 M.B.A., Pan American University  
 1992 M.Ed., University of Texas at Brownsville  
 1996 Ed.D., University of Houston

**Kenneth Kury** 2005  
*Visiting Assistant Professor*

**Marco Lara-Gracia** 2004  
*Visiting Professor Supply Chain Management*  
 1987 B.S., ITESM, Tampico, Mexico  
 1989 M.A., ITESM, Monterrey, Mexico  
 1999 Ph.D., Purdue University

**Qinyu Liao** 2005  
*Assistant Professor Business Information Systems*  
 B.A., Chengdu, China  
 M.B.A., Emporia State University  
 Ph.D., Mississippi State University

**Marvin G. Lovett** 1988  
*Associate Professor Business Administration*  
 1978 A.A., Southwest Community College  
 1981 B.S., Northwest Missouri State University  
 1982 M.B.A., Northwest Missouri State University  
 1997 Ed.D., University of Houston

**Steven R. Lovett** 2000  
*Assistant Professor International Business/Management*  
 1985 B.S., Southwest Missouri State University  
 1986 M.B.A., Arizona State University  
 1997 Ph.D., University of Texas at Arlington

**Rafael Otero** 1997  
*Associate Professor International Business/Economics*  
 1985 A.A., Texas Southmost College  
 1987 B.B.A., University of Texas-Pan American  
 1991 M.B.A., University of Texas at San Antonio  
 1999 Ph.D., University of Texas-Pan American

**Vivian K. Permenter** 1974  
*Associate Professor Business Administration*  
 1969 B.S., East Central State University  
 1970 M.S., Oklahoma State University

**Pablo Rhi-Perez** 1995  
*Associate Professor Marketing*  
 1968 J.D., Universidad de Nuevo Leon, Mexico  
 1969 Diploma, Economic Planning, United Nations (CEPAL)  
 1970 M.B.A., Instituto Tecnológico de Estudios Superiores de Monterrey  
 1989 Ph.D., University of Texas at Austin

**James E. Storbeck** 2003  
*Professor Management*  
 1973 B.A., 1976 M.A., Temple University  
 1980 Ph.D., University of Texas at Austin

**Business Technology Department**

**Janna B. Arney** 2002  
*Associate Professor Business Technology*  
 1987 A.A.S., Texas Southmost College  
 1991 A.S., Columbus State Community College  
 1992 B.B.A., Ohio State University

1993 M.S., Marshall University  
 1997 Ph.D., Ohio State University

**Beatriz Castillo** 1984  
*Associate Master Technical Instructor Business Technology*  
 1976 A.A., Texas Southmost College  
 1980 B.B.A., 1984 M.Ed., Pan American University

**Pat Celaya** 2002  
*Assistant Master Technical Instructor Accounting Technology*  
 1986 B.B.A., University of Texas-Pan American at Brownsville  
 1988 C.P.A., State of Texas

**Susan Ebersole** 2004  
*Lecturer Medical Office*  
 1976 B.S., Temple University

**Paula Garcia** 2005  
*Lecturer/Co-Op Coordinator International Business*  
 1998 B.B.A., University of Texas at Brownsville

**Irma Saenz Jones** 1977  
*Professor Business Technology*  
 1974 A.A., Texas Southmost College  
 1977 B.S., 1980 M.B.A., Texas Woman's University  
 1986 M.S., Corpus Christi State University  
 1996 Ed.D., University of Houston

**Pierre Kleff** 2004  
*Assistant Master Technical Instructor Legal Assisting/Paralegal Studies*  
 1968 B.A., University of Dayton  
 1973 J.D., Chase College of Law

**Angela Kaye Monroe** 1998  
*Assistant Master Technical Instructor Business Technology*  
 1994 B.S., Fairmont State College  
 2003 M.Ed., University of Texas at Brownsville

**Maggie Solis** 2002  
*Assistant Master Technical Instructor Accounting Technology*  
 1987 B.B.A., University of Texas-Pan American at Brownsville  
 2003 M.B.A., University of Texas at Brownsville

**Mary M. Sullivan** 1971  
*Associate Professor Business Technology*  
 1966 B.A., 1969 M.A., Stephen F. Austin State University

**School of Education**

*Carl A. Stockton, Ph.D., Dean*

**Department Chairs and Program Directors**

**Curriculum and Instruction Department**

*Reynaldo Ramirez Jr., Chair*

**School Specialties Department**

*Olivia Rivas, Chair*

**Child Care and Development**

*Vacant, Program Director*

**Teacher Certification**

*Gayle L. Brogdon, Assistant Dean & Certification Officer*

**Field Experiences/Student Teaching**

*Gayle L. Brogdon, Assistant Dean & Certification Officer*

**Kinesiology Department**

*Zelma D. Mata, Chair*

**Alternative Certification Program**

## Faculty

### Curriculum and Instruction Department

- Chuey Abrego** 2001  
Lecturer Elementary/Secondary Education  
1990 B.S., University of Texas-Pan American  
1997 M.Ed., Southwest Texas State University
- Javier Ayala** 1991  
Associate Professor Reading  
1972 B.A., 1977 M.Ed., Pan American University  
1984 Ph.D., University of Wisconsin-Madison
- Kathy Bussert-Webb** 2000  
Associate Professor Reading  
1984 B.A. Indiana University  
1989 M.A., 1997 Ph.D. Indiana University
- Elva Cerda-Perez** 1993  
Associate Professor Elementary Bilingual Education  
1976 B.S., Corpus Christi State University  
1981 M.S., University of Houston  
1990 Ed.D., Texas A&I University
- Joseph R. Corbeil** 1998  
Assistant Professor Educational Technology  
1982 B.S., University of Texas-Pan American  
1997 M.Ed., University of Texas at Brownsville  
2003 Ed.D., University of Houston
- Georgianna Marie Duarte** 1994  
Professor Early Childhood  
1980 B.A., Georgia State University  
1982 M.A., Edinoboro State University  
1986 Ph.D., Pennsylvania State University
- David Freeman** 2005  
Professor Language Arts/Literacy  
1966 B.A., Dartmouth College  
1967 M.A., Stanford University  
1982 M.A., 1987 Ph.D., University of Arizona
- Yvonne S. Freeman** 2005  
Professor Bilingual/Dual Language  
1966 B.A., University of California-Santa Barbara  
1967 M.A., Stanford University  
1984 M.A., 1987 Ph.D., University of Arizona
- Verónica Galván-Carlan** 1999  
Assistant Professor Early Childhood Education  
1975 B.S., 1980 M.Ed., University of Texas at Pan American  
2000 Ed.D., University of Houston
- Jaime H. Garcia** 1998  
Associate Professor Curriculum & Instruction  
1980 B.A., San Jose State University  
1990 M.Ed., University of Texas at Austin  
1995 Ph.D., University of Georgia
- Nancy C. Garcia** 1999  
Field Base Teaching Specialist Elementary/Secondary Teacher Education  
1992 B.A., Southwest Texas University  
1999 M.Ed., University of Texas at Brownsville
- Richard Gomez, Jr.** 2005  
Associate Professor Bilingual Education/ESL  
1985 B.A., Pan American University  
1989 M.A., University of Texas-Pan American  
1994 Ph.D., Texas A&M University
- Juan Hinojosa** 2000  
Field Based Teaching Specialist Educational Technology  
1992 B.S. Texas A&I University  
2000 M.Ed. University of Texas at Brownsville
- Bobbette M. Morgan** 2000  
Associate Professor Secondary Education  
1972 B.S., Ferris State University  
1981 M.A., Central Michigan University  
1987 Ed.D., University of Southern California
- Julio Noboa** 2004  
Assistant Professor Curriculum and Instruction  
1974 B.A., University of Illinois  
1981 M.A., Northwestern University  
2003 Ph.D., University of Texas at Austin
- Cheng-Chang "Sam" Pan** 2004  
Assistant Professor Educational Technology  
1995 B.Ed., National Changhua University of Education  
2000 M.A., University of Central Florida  
2003 Ph.D., University of Central Florida
- Paula Parson** 1985  
Professor Reading  
1966 B.A., Central Washington University  
1982 M.Ed., Pan American University  
1992 Ph.D., University of Texas at Austin
- Sylvia C. Peña** 1996  
Professor/Houston Endowed Chair for Education Bilingual Education  
1963 B.A., Texas A&I University  
1970 M.A., 1976 Ed.D., University of Houston
- Reynaldo Ramirez, Jr.** 1996  
Associate Professor/Chair Secondary and Science Education  
1973 B.S., 1986 M.S., Pan American University  
1996 Ed.D., University of Houston
- Alma Rodriguez** 2004  
Assistant Professor English as a Second Language  
1995 B.A., 1997 M.Ed., University of Texas at Brownsville  
2003 Ph.D., University of Houston
- Graciela P. Rosenberg** 1981  
Professor Bilingual Education  
1970 B.A., Goddard College  
1972 M.A., Middlebury College  
1976 M.A., University of Vermont  
1981 Ed.D., Texas A&I University
- Renee Rubin** 1998  
Assistant Professor Reading  
1976 B.J., University of Missouri  
1986 M.A., New Mexico State University  
2003 Ed.D., University of Houston
- Michael J. Sullivan** 1996  
Associate Professor Educational Technology  
1973 B.A., University of San Francisco  
1975 M.Ed., University of Texas-El Paso



1993 Ph.D., University of Texas at Austin

**John A. Sutterby** 2001  
*Assistant Professor* *Early Childhood Education*  
1989 B.S., 1996 M.Ed., 2002 Ph.D., University of Texas at Austin

**James Telese** 1995  
*Associate Professor* *Secondary & Mathematics Education*  
1982 B.S., Texas A&M University  
M.S., Corpus Christi State University  
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### ***School Specialties Department***

**Michelle Abrego** 1991  
*Assistant Professor* *Educational Administration*  
1981 B.S. Michigan State University  
1982 M.A. Michigan State University  
1990 M.Ed. Texas A&M University-Corpus Christi  
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**Steven Chamberlain** 1999  
*Associate Professor* *Special Education*  
1985 B.A., 1989 M.Ed., 1999 Ph.D., University of Texas at Austin

**Mary Grace Curtis** 1994  
*Associate Professor* *Special Education*  
1978 B.S., 1980 M.A., Southern Illinois University  
1993 Ph.D., University of Illinois

**Alma G. Leal** 1988  
*Professor* *Counseling and Guidance*  
1973 B.S., 1974 M.Ed., Pan American University  
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**Olivia Rivas** 1979  
*Professor/Chair* *Counseling and Guidance*  
1970 B.A., 1974 M.Ed., Pan American University  
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1964 B.S., Concordia College (Nebraska)  
1967 M.S., University of Michigan  
1983 M.A., Stanford University  
1997 Ph.D., University of Texas at Austin

**Andres N. Vallado** 1992  
*Associate Professor* *Educational Administration*  
1961 B.S., University of Corpus Christi  
1964 M.A., Texas A&I University  
1975 Ed.D., University of Houston

**Selma Yznaga** 2002  
*Assistant Professor* *Counseling and Guidance*  
1987 B.S.Ed., Southwest Texas State University  
1994 M.Ed., University of Texas at Brownsville  
2000 Ph.D., St. Mary's University

**Manuel Zamarripa** 2004  
*Assistant Professor* *Counseling and Guidance*  
1995 B.A., University of Notre Dame  
1997 M.S., Our Lady of the Lake University  
2005 Ph.D., University of Wisconsin-Madison

### ***Child Care and Development Program***

**Leticia Diaz** 1984  
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1981 A.A.S., Texas Southmost College  
1985 B.S., Corpus Christi State University

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1988 B.A., University of North Bengal  
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2003 Ph.D., Virginia Polytechnic Institute & State University

### ***Kinesiology Department***

**Mark Bailey** 2004  
*Assistant Professor* *Kinesiology/Exercise Science*  
1976 B.S., University of Wisconsin  
1982 M.S., 1989 Ph.D., Indiana University

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*Associate Professor/Assistant Dean* *Kinesiology*  
1965 B.S., 1966 M.Ed., East Texas State University  
Ed.D., North Texas State University

**Phillip K. Conatser** 2005  
*Assistant Professor* *Health Education/Pedagogy*  
1989 B.S., West Texas A&M University  
1991 M.Ed., Texas Tech University  
1999 Ph.D., University of Virginia-Charlottesville

**Susan Hart** 2001  
*Associate Professor* *Kinesiology*  
1984 B.S., Southwestern University  
1990 M.Ed., Tarleton State University  
1996 Ph.D., Texas A&M University

**Jack L. Loff** 1985  
*Assistant Professor* *Kinesiology*  
1970 B.S., 1974 M.Ed., 1982 M.S., Pan American University

**Zelma D. Mata** 1978  
*Associate Professor/Chair* *Kinesiology*  
1977 B.S., 1978 M.Ed., Pan American University  
1993 Ed.D., University of Houston

**George Solis** 2002  
*Lecturer* *Kinesiology*  
1991 B.A., University of Mary Hardin-Baylor

**Carl A. Stockton** 2004  
*Professor/Dean* *Health Education/School Health*  
1981 B.A., 1982 M.A., University of Florida  
1984 Ph.D., University of Tennessee

**David K. Wittenburg** 2005  
*Assistant Professor* *Kinesiology/Exercise Science*  
1984 B.S., Angelo State University  
1994 M.Ed., Texas State University  
2000 Ph.D., Texas A&M University

# School of Health Sciences

*Eldon L. Nelson, Ph.D., Dean*

## Academic Department Chairs and Program Directors

### Allied Health Department

*John L. McCabe, Chair*

Bachelor of Applied Technology-Health Services Track

*John L. McCabe, Program Director*

Diagnostic Medical Sonography

*Marti Flores, Program Director*

Emergency Medical Technology

*Elizabeth A. Chavez, Program Director*

Medical Laboratory Technology

*Matilde Perez-Lozano, Program Director*

Radiologic Technology

*Manuel Gavito, Program Director*

Respiratory Therapy

*Betty Chong-Menard, Program Director*

SHS Core Curriculum Studies

*Grant Olbeter, Program Coordinator*

### Nursing Department

*Katherine Dougherty, Chair*

Registered Nurse Programs

Master of Science in Nursing

*Eloisa G. Tamez, Program Director*

Bachelor of Science in Nursing

*Katherine Dougherty, Program Director*

Associate Degree Nursing

*Joe R. Lacher, Program Director*

Vocational Nursing;

*Karen Fuss-Sommer, Program Director*

## Faculty

### Allied Health Department

#### Otis J. Bouwsma, DMD

*Associate Professor of Clinical Research*

1968 B.S., Piedmont College

1969 M.S., Northeast Louisiana University

1977 Ph.D., University of Georgia

1984 D.M.D., University of Mississippi

2004

*Clinical Research*

#### Elizabeth Chavez

*Technical Instructor*

*Emergency Medical Technology*

1996 A.A.S., University of Texas at Brownsville

2005 B.A.T., University of Texas at Brownsville

2000

#### Betty Chong-Menard, CRTT, RRT, RN

*Assistant Master Technical Instructor*

*Respiratory Therapy*

1987 A.A.S., Texas Southmost College

1990 A.A.S., University of Texas at Brownsville

2003 B.A.T., University of Texas at Brownsville

2000

#### Shamina Davis, M.T. ASCP

*Master Technical Instructor*

*Bachelor of Applied Technology*

1981 B.S., Pan American University

1995 M.S., Texas A&M University-Corpus Christi

1988

#### Marti Flores, RMDS

*Assistant Master Technical Instructor*

*Diagnostic Medical Sonography*

1983 A.A.S., Texas Southmost College

1990 B.S., Texas A&M University

1997 M.S., Midwestern State University

2003

#### Adiel Garcia, NREMT-P

*Assistant Master Technical Instructor*

*Emergency Medical Technology*

2003, 2005 A.A.S., University of Texas at Brownsville

2004

#### Luis M. Garcia, M.D.

*Medical Director*

*Medical Laboratory Technology*

M.D., Universidad Autonoma de Nuevo Leon

#### Manuel Gavito, R.T. ARRT, CMRT

*Associate Master Technical Instructor*

*Radiologic Technology*

1988 B.S., Pan American University

1975

#### Constance Hayes, RNC, FNP

*Instructor*

*Bachelor of Applied Technology*

1976 B.S.N., Indiana University

1993 M.S.N., University of Texas Health Science Center at San Antonio

1995 F.N.P., Texas A&M University-Corpus Christi

2003

#### Ana Linville, MT (AMT)

*Assistant Master Technical Instructor*

*Medical Laboratory Technology*

1975 A.A.S., Laredo Junior College

1992 B.A.A.S., University of Texas at Brownsville

2002

#### John L. McCabe, R.R.T., CPFT

*Associate Professor*

*Bachelor of Applied Technology/Respiratory Therapy*

1979 B.S., 1981 M.A., 1987 Ph.D., University of Iowa

1991

#### William McKinney, M.D.

*Medical Advisor*

*Radiologic Technology*

B.S., M.D., University of Oklahoma

Board Certified General Radiology

#### Kim Morris-Garcia, R.R.T., CRTT

*Associate Master Technical Instructor*

*Bachelor of Applied Technology/Respiratory Therapy*

1996 B.S., Southwest Texas State University

2003 M.Ed., University of Texas at Brownsville

1996

#### Eldon L. Nelson

1964 B.S., B.A., 1971 M.A., East Carolina University

1974 Ph.D., University of Florida

2000

#### Grant Olbeter, EMT-B

*Lecturer*

*SHS Core Curriculum Studies*

2002 B.S., Virginia Tech University

#### Eusebio Ortiz, R.T., ARRT, CMRT

*Associate Master Technical Instructor*

*Radiologic Technology*

1960 ARRT, 1991 A.A.S., Texas Southmost College

1994 B.A.A.S., 1997 M.Ed., University of Texas at Brownsville

1993

#### Lorenzo R. Pelly, M.D.

*Medical Director*

*Respiratory Therapy*

B.A., Washington University

M.D., University Autonoma Estado de Monterrey

#### Matilde Perez-Lozano, MT (ASCP)

*Assistant Master Technical Instructor*

*Medical Laboratory Technology*

1973 B.S., Pan American University

2001 M.S., Texas A&M University-Corpus Christi

2004

- Mahandran Rajasuriar, R.R.T.** 1996  
*Assistant Master Technical Instructor* *Core Curriculum Studies*  
 1987 A.A.S., Texas Southmost College  
 1996 B.S., Texas A&M University-Corpus Christi  
 2000 M.Ed., University of Texas at Brownsville
- Ariel Villanueva, RSMS, RT(R)** 2004  
*Assistant Professor* *Diagnostic Medical Sonography*  
 1984 M.D., Universidad Valle del Bravo, Reynosa, Tamps.  
 2000 A.A.S., 2004 A.A.S., University of Texas at Brownsville
- Richard Joe Ybarra, M.D.**  
*Medical Director* *Emergency Medical Technology*  
 B.S., Houston Baptist University  
 M.D., Baylor College of Medicine
- Nursing Department**
- Eric Stoerm Anderson, R.N.** 1993  
*Lecturer* *Vocational Nursing*  
 1993 A.A.S., University of Texas at Brownsville  
 1996 B.S.N., University State of New York  
 1998 M.S.N., University of Phoenix  
 2003 M.Ed., University of Texas at Brownsville
- Beatrice Cabrera, R.N.** 2003  
*Lecturer* *Vocational Nursing*  
 1998 Certificate, University of Texas at Brownsville  
 2000 A.A.S., South Texas Community College  
 2003 B.S.N., 2005 M.S.N., University of Texas at Brownsville
- Sylvia Campbell, R.N.** 1995  
*Associate Master Technical Instructor* *Associate Degree Nursing*  
 1975 B.S.N., University of Texas at Austin  
 1994 M.S.N., University of Texas Health Science Center at San Antonio
- Margie Chavez, R.N., CNS-CH** 1994  
*Associate Professor* *Master of Science in Nursing*  
 1993 B.S.N., 1993 M.S.N., University of Texas Health Science Center at San Antonio  
 2000 Ed.D., NOVA Southeastern
- Sonia Cunningham, R.N.** 1993  
*Associate Professor* *Associate Degree Nursing*  
 1974 B.S.N., Herbert Lehman College  
 1992 M.S., Corpus Christi State University
- Helene M. Dixon, R.N.** 2004  
*Instructor* *Associate Degree Nursing*  
 1982 B.S., Cornell University  
 1987 Nursing Diploma, Sisters of Charity Hospital  
 1990 B.S.N., 1991 M.S.N., State University of New York-Buffalo
- Katherine B. Dougherty, R.N.** 1993  
*Associate Professor* *Bachelor of Science in Nursing*  
 1957 B.S.N., College of Mount St. Vincent  
 1978 M.S., University of Scranton  
 1993 M.S.N., University of Texas Health Science Center at San Antonio  
 1995 Ed.D., University of Houston
- Suzanne V. Dougherty, R.N.** 2002  
*Assistant Professor* *Associate Degree Nursing*  
 1984 B.S., Pan American University  
 1994 B.S.N., University of Texas-Pan American
- 2002 M.S.P.H.N., University of Texas at Brownsville
- Elizabeth Freeth, R.N.** 1998  
*Associate Master Technical Instructor* *Associate Degree Nursing*  
 1974 B.S.N., Trenton State College  
 1998 M.S.N., University of Texas Health Science Center at San Antonio
- Karen Fuss-Sommer, R.N.** 1995  
*Associate Master Technical Instructor* *Vocational Nursing*  
 1981 Diploma, Ryerson Polytec Institute at Toronto  
 1997 B.Ed., Texas A&M University-Corpus Christi  
 B.S.
- Sharon Helsley-McGinley, R.N.** 1993  
*Assistant Professor* *Associate Degree Nursing*  
 1989 B.S.N., University of Texas at Arlington  
 1992 M.S.N., University of Texas Health Science Center at Houston
- Ofelia Hess, R.N.** 2001  
*Technical Instructor* *Vocational Nursing*  
 1970 Certificate, Texas Southmost College  
 1989 A.A.S., Texas Southmost College
- Joe R. Lacher, R.N., CNA, BC** 1988  
*Associate Professor* *Associate Degree Nursing*  
 1965 L.P.N., State School of Science  
 1970 A.D.N., Dickinson State, North Dakota  
 1984 B.S.N., Pan American University  
 1988 M.S.N., Corpus Christi State University
- Norma Lee Loya, R.N.** 1999  
*Assistant Master Technical Instructor* *Vocational Nursing*  
 1977 Certificate, Texas Southmost College  
 1982 A.A.S., Texas Southmost College
- Linda MacDonald, R.N.** 1996  
*Assistant Professor* *Associate Degree Nursing*  
 1973 A.D.N., Illinois Central College  
 1978 B.A.N., Sangamon State University  
 1985 M.S., Northern Illinois University
- Virginia Maldonado-Maxwell, R.N.** 1997  
*Assistant Master Technical Instructor* *Vocational Nursing*  
 1979 B.S.N., University of Texas at El Paso
- Ava S. Miller, R.N., HNC** 1995  
*Associate Professor* *Bachelor of Science in Nursing*  
 1967 Diploma, Providence Hospital School of Nursing  
 1973 B.A., Oakland University  
 1984 M.Ed., Pan American University  
 1995 M.N. University of Phoenix  
 1997 Ed.D., University of Houston
- Nora Montalvo-Liendo, R.N.** 1999  
*Instructor* *Associate Degree Nursing*  
 1993 A.D.N., 2001 B.S.N., 2003 M.S.P.H.N., University of Texas at Brownsville
- Anne Rentfro, R.N., CS** 1990  
*Associate Professor* *Bachelor of Science in Nursing*  
 1974 B.S.N., University of Rochester  
 1982 M.S.N., University of Texas at Austin

**Sally Roach, R.N., HNC***Associate Professor*

1979 A.A.S., 1986 B.S.N., Pan American University  
 1993 M.S.N., University of Texas Health Science Center at San Antonio

**1990***Bachelor of Science in Nursing***Mabel Hockaday***Assistant Director*

B.A., University of Texas at Brownsville  
 M.L.S., University of North Texas

**John Hawthorne***Librarian*

B.A., M.L.I.S., University of Texas at Austin

**Norma Silva, R.N.***Technical Instructor*

1965 L.V.N., J.T.Canales School of Vocational Nursing  
 1972 A.D.N., 1985 B.S.N., Pan American University  
 2003 M.S.N., University of Phoenix

**2002***Associate Degree Nursing***Li Ma***Librarian*

B.A. People's University of China  
 M.L.S., University of Texas at Austin

**Eloisa G. Tamez, R.N., FAAN***Assistant Professor*

1956 Nursing Diploma, St. Mary's School of Nursing, Galveston  
 1968 B.S.N., Incarnate Word College  
 1973 M.S.N., University of Texas at San Antonio  
 1985 Ph.D., University of Texas at Austin

**2004***Master of Science in Nursing***Beatriz von Ohlen, WHNP, RNC***Technical Instructor*

1974 A.A.S., Waubensee Community College  
 1997 B.S.N., University of Texas at Brownsville

**2003***Associate Degree Nursing***Janet Williams, R.N.***Assistant Master Technical Instructor*

1975 A.D.N., Methodist Medical Center School of Nursing  
 1991 B.S.N., University of Texas-Pan American

**1998***Vocational Nursing***Bashir Tiwana***Librarian*

B.A., University of Punjab, Lahore, Pakistan  
 Advanced Arabic Language Certificate: Imam Muhammad Ibn Saud Islamic University  
 M.A., University of New South Wales, Sydney  
 Diploma, University of New South Wales, Sydney  
 M.A., University of Karachi, Karachi Pakistan  
 Diploma, University of the Punjab, Lahore, Pakistan

**Mark Williams***Librarian*

B.A., Wichita State University  
 M.L.I.S., University of Texas at Austin

**Rachel Wilson, R.N.***Lecturer**Medical/Health Sciences Continuing Education***2005**

## Developmental Studies

*Terry Jay Phillips, M.S., Dean***Jingshan Xiao***Librarian*

B.A., Hebei University of Economics and Business P.R. China  
 M.A., Emporia State University  
 M.L.S., Central Missouri State University

## Counselors

*Deborah K. Huerta, Director***Javier Ayala***Counselor*

B.A., M.Ed., Pan American University  
 M.Div., Oblate School of Theology

**Diana Bustamante***Counselor*

B.A., M.S., Texas A&M University-Kingsville

**Andreina Galvan***Counselor*

B.S., M.Ed., Pan American University

**Deborah K. Huerta***Director*

B.A., Stephen F. Austin University  
 M.S., St. Mary's University  
 Psy.D., Our Lady of the Lake University

**Thelma Gonzalez-Sullivan***Counselor*

B.A., University of Texas at Austin  
 M.A., Texas A&M University-Kingsville

**Steve Wilder***Counselor*

B.A., Kalamazoo College  
 M.S., National-Louis University  
 M.Ed., University of Texas at Brownsville

## Faculty

**Leslie Kimberling Jones***Assistant Master Technical Instructor*

1993 B.A., University of Houston  
 2001 B.S., University of Texas at Brownsville

**2001***Developmental Reading***Angelica Fuentes***Assistant Master Technical Instructor*

2002 B.A., University of Texas at Brownsville

**2004***Developmental Reading***Arlene Ready***Assistant Master Technical Instructor*

1997 B.A., University of Texas at Brownsville

**2002***Developmental Reading***Karen V. Rendon***Assistant Master Technical Instructor*

1997 B.S., University of Texas at Brownsville

**2000***Developmental Mathematics*

## Librarians

*Doug Ferrier, M.L.S., Dean of Instructional Support**Mabel Hockaday, M.L.S., Assistant Director***Kathleen Carter***Librarian*

B.A., M.L.I.S., University of Texas at Austin

**Douglas Ferrier***Director*

B.A., University of Texas at Austin  
 M.A., University of Texas at Arlington  
 M.L.S. University of North Texas

# APPENDIX

# APPENDIX – OFFICIAL POLICY

## STATEMENTS

### AIDS, 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. 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.

### Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA), 20 U.S §1232g, and the Texas Public Information Act, Texas Government Code §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 (HOOP) 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.

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, and upon the condition that the student be notified and receive a copy of the record if desired;
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 accrediting organizations or organizations conducting educational studies, provided that these organizations do not release personally identifiable data and destroy such data when it is no longer needed for the purpose it was obtained;
6. To the parents of a dependent student as defined in §152 of the Internal Revenue Code of 1954, provided a reasonable effort is made

to notify the student in advance;

7. In compliance with a judicial order or subpoena, provided a reasonable effort is made to notify the student in advance unless such subpoena specifically directs the institution not to disclose the existence of a subpoena;
8. In an emergency situation if the information is necessary to protect the health or safety of the students or of other persons; or
9. To an alleged victim of any crime of violence, the results of the alleged perpetrator’s disciplinary proceeding may be released.

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 Corporate Compliance 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.

### Directory Information

At its discretion, UTB/TSC may release directory information which shall include:

1. name, address, telephone number
2. date and place of birth
3. major field of study
4. participation in officially recognized activities and sports
5. dates of attendance
6. most recent previous educational institutions attended
7. classification
8. degrees and awards received
9. date of graduation
10. physical factors (height and weight) of athletes
11. e-mail addresses
12. photographs

Students may withhold directory information by notifying the Office of the Registrar 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 the Registrar.

### 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**

- Office of Admissions: Director of Admissions
- Office of the Registrar: Registrar
- 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
- Financial Aid Office: Director of Financial Aid

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;
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 the decisions are in agreement with the student's request, the appropriate records 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.

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 Office of Admissions.

### **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, D 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 an outstanding institutional debts or institutional holds on academic records at UTB/TSC. Institutional holds may be placed on student records if the student is not in compliance with federal financial aid requirements or other institutional policies.

## **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 Regents' *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 prosecution.

## 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, Regents' *Rules and Regulations* Series 50101 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 of 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. UTB/TSC maintains a strict policy prohibiting unlawful harassment of any kind including sexual harassment. Any person who engages in such conduct will be subject to disciplinary action, including termination.

### Sexual Harassment

The unwelcome sexual advances, requests for sexual favors, verbal and written comments, or physical conduct of a sexual nature that 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 evaluation in making academic or personnel decisions affecting an individual; or
- creates an intimidating, hostile, or offensive university environment.

In addition to the above definition, sexual harassment may include and is not limited to the following:

- Unwelcome sexual flirtations, advances or propositions.
- Verbal remarks of a sexual nature (whether directed to an individual or a group, including sexually explicit or offensive jokes).
- Graphic or degrading verbal or written comments of a sexual nature about an individual or the individual's appearance.



- Suggestive or unwelcome physical contact.
- Physical assault.

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.

All sexual harassment complaints are filed with the Office of the Vice President for Business Affairs, located at Tandy Hall #109. Procedures for filing complaints are found in the Handbook of Operating Procedures, §3.3, page 2 of 6.

### **Consensual Relationships**

Consensual relationships that result in Sexual Harassment is found in the HOOP, §3.5, which prohibits such relationships between faculty or staff members in positions of authority with their subordinates or their students.

Reporting inappropriate consensual relationships that contain elements of sexual harassment are reported to the EEO Officer. Consensual relationships not resulting in sexual harassment involving students are reported to the Vice President of Student Affairs.

### **Sexual Offense**

Sexual offense is found in the HOOP, §3.6, page 1 of 5, and may be found at the Library. This section applies to complaints of sexual assault by any member of the UTB/TSC community against any other member, including students, staff members, and faculty. Complaints involving sexual assault that are not of a sexual harassment nature are reported to Campus Police, the Brownsville Police Department, or the Office of the Vice President for Student Affairs. Services such as pre-complaint counseling are available for students in the Counseling and Guidance Center.

### **Review**

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

## **Religious Holy Days**

The institution will allow a student who is absent from classes for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time after the absence if, not later than the 15th day after the first day of the semester, the student notifies the instructor of each class the student has scheduled on that date that the student will be absent for a religious holy day. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under §11.20, Tax Code.

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 the notification acknowledged and dated by the instructor or by certified mail, return receipt requested, addressed to the instructor of each class.

## **Solicitation Policy**

Regents' *Rules and Regulations* Series 80103 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 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) 20USC §§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 employees; 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 athletically-related 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.

## **Student Criminal Background Checks**

Recognizing a sound character is vital to health care professions, UTB/TSC may require applicants or students admitted to clinical degree programs undergo criminal background checks. Applicants or students shall conform to the specific policy and procedure adopted by each specific program/school for which the students apply or admitted.

The School of Education also requires criminal background checks for admission into the Teacher Education and the Alternative Certification Programs. Specific areas that require background checks are programs of study that require the completion of field experience requirements or field based activities completed in public school classrooms.

## **Student Travel Policy**

Student travel procedures apply to faculty, staff, and students who engage in transporting students off campus on any University business or related travel activities for student organizations. The procedures are considered to be minimum standard; departments may mandate additional procedures.

Failure to comply with these requirements may result in the suspension of student travel for the student organization responsible for arranging the trip.

### **Travel Requirements and Planning**

A designated university representative must accompany each student travel group when university funds are used to sponsor the trip. In the event that an advisor cannot attend the function with the student group another university staff and or faculty may attend in the place of the advisor. A travel itinerary and a passenger list shall be filed with the Office of Student Activities. Copies of these forms will then be submitted to Campus Police and the Dean of Students Office.

For the complete Travel Policy, visit the Student Travel/Trip Procedures website at [http://blue.utb.edu/sa/AVPSD/Travel\\_Procedures\\_2005-May.pdf](http://blue.utb.edu/sa/AVPSD/Travel_Procedures_2005-May.pdf).

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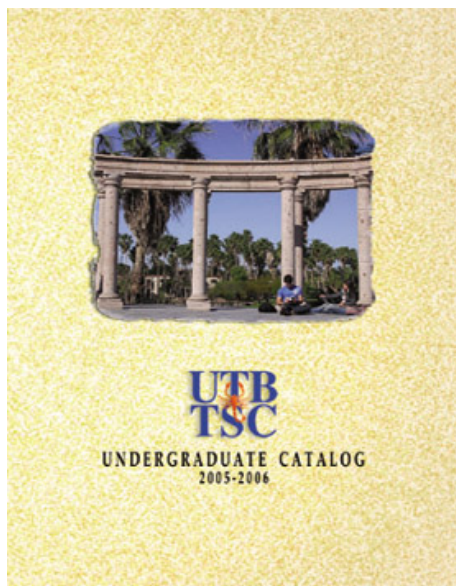
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