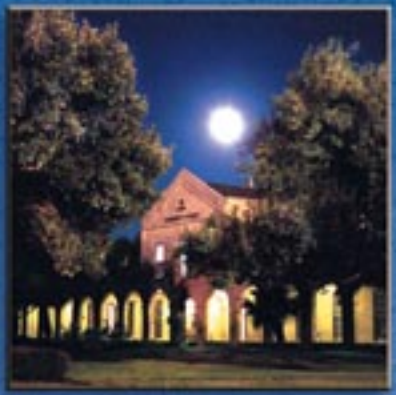
2002

UTB/TSC Undergraduate Catalog 2002-2004

University of Texas at Brownsville

Texas Southmost College



UNDERGRADUATE CATALOG

2002-2004

UTB
TSC

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 initia tive 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, upper-division 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 liberal arts and sciences, and 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, or disability.

Printed December 2002

The University of Texas at Brownsville

The University of Texas at Brownsville is part of The University of Tesxas 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 bachelor's and master's degrees.

Affiliations

American Assocaition of Colleges for Teacher Education

American Council on Education

Association of American Colleges

Association of Texas Colleges and Universities

Southern Assocation 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 associate level degrees.

Affiliations

Texas Association of Community Colleges

Association of Texas Colleges and Universities

Southern Assocation 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 course schedule 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.

ADMISSIONS & REGISTRATION

Admissions Policy

TSC maintains an "open door" admissions policy, but admission does not imply admission to all programs. Admission to some TSC programs and UTB undergraduate and graduate programs have specific requirements. Information about these programs is available at the Academic Advising Center in Tandy Hall #214 and at the Office of Graduate Studies and Sponsored Programs at the Champion Hall.

Admission Requirements

Anyone meeting one of the following conditions may be admitted:

1. By High School Graduation. A copy of the official high school transcript showing the date of graduation must be submitted to the Enrollment Office prior to registration.
2. By Examination. Applicants who did not graduate from high school may be admitted by successfully completing the General Education Development Testing Program (GED). A copy of the Certificate of High School Equivalency with test scores must be submitted to the Enrollment Office prior to registration.
3. By Individual Approval. People who do not qualify for admission under either of the above 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 Enrollment Office. People admitted on Individual Approval will be under academic probation for the initial enrollment period (semester).
4. By Transfer from Another College. Students who have attended other colleges must submit official transcripts from each institution prior to registration.

   ** Veterans applying for benefits must provide a transcript since credit for previous education must be verified.
5. By a Fresh Start. An applicant for admission may seek to enter this institution pursuant to the state's "academic fresh start" statute, Texas Education Code, §51.931. If the applicant informs the Enrollment Office in writing of his or her election under the statute, the institution will not consider academic course credits or grades earned by the applicant 10 or more years prior to the starting date of the semester in which the applicant seeks to enroll. An applicant who 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 "fresh start" and the other criteria stated herein.
6. By Concurrent/Dual Enrollment. Students who have completed their junior year of high school may, upon recommendation of their high school principal, be permitted to enroll. The Request for Concurrent Enrollment Form is available at the Enrollment Office. Concurrently enrolled students receive college credit only. Dual enrolled students receive high school and college credit. Students must pass all sections of the exit-level TAAS before they can attempt the official TASP test, including alternative tests. Students who are interested in concurrent enrollment must have met the TASP requirement.
7. Adult and Continuing Education. People who register within this category will not be required to submit academic or residency documentation until they attempt to enroll for credit courses.
8. By Audit Enrollment is offered on a space available basis for auditing some courses. Interested people should contact the Enrollment Office.

All documents submitted become property of UTB/TSC.

The University Plan

The University Plan is a program where entering freshman at UTB will benefit from:

- Specialized course selection
- Collaborative studies through cohort placement
- Additional scholarship opportunities
- Field work in diverse settings and student exchange opportunities
- Early focus on career track

Students are admitted to UTB/TSC, then admitted to The University Plan programs in Business, Education, Engineering Technology and Music under the following admission criteria:

- Business: To be admitted, students in the top 50% of their graduating classes must submit official SAT or ACT scores. Students who have successfully completed the General Education Development Testing Program (GED) and those who graduated in the bottom 50% of their graduating classes must have an official SAT score of 860 or an ACT Composite score of 18.
- Education: Admission requires that students pass the Reading and Writing portion of the TASP test. Math test scores must be on file. For more information about Education, call 983-7219.
- Engineering: Admission to the Bachelor of Science in Engineering Technology (B.S.E.T.) program at UTB requires advanced placement in Mathematics, Science and Language. Entering students are expected to start in Calculus and college-level Chemistry and Physics courses. High school graduating class placement, scores on ACT, SAT and TASP will be used to determine eligibility for this unique program. It is expected that students will have graduated in the top 20% of their high school graduating class and will have had high grades in pre-calculus and calculus classes in high school. For more information about Engineering Technology, call 574-6639.
- Music: Admission requires that students pass the reading and writing portion of the TASP test, a department audition, and a Music Theory Placement Test. For more information about Music, call 544-8247.

Steps for Undergraduate Admission

√ Step 1 – Submit completed Admission Application to Enrollment Office.

Enrollment Office Tandy Hall #105 544-8254

- Incoming Freshman – White Form
- Returning Student – Yellow Form
- Transfer Student – Yellow Form

√ Step 2 – Submit one of the following academic credentials to Enrollment Office.

- Incoming Freshman – Official high school transcript, or 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 Enrollment Office.

- 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 License/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

Testing Office, Tandy Hall #216 • 544-8875

- Freshman – All incoming freshman who are not exempt must take the Texas Academic Skills Program (TASP) test or an approved alternative. Individuals failing any section of the TASP will be required to take an assessment test. Visit the Testing Office located in Tandy Hall 216 or call 544-8875 for further information.
- Transfer Student – Submit official TASP scores or Alternative TASP to the Testing Office located in Tandy Hall 216 or call 544-8875 for further information.

√ Step 5 – Advising

- Freshman Only – All incoming freshman must meet with an academic advisor. Visit the Academic Advising Center located in Tandy Hall #214 or call 983-7362.

√ Note: Orientation

- Freshman – All incoming freshman must attend Orientation. Visit the New Student Relations Office in the Student Center (544-8860 or 1-877-UTB-TSC1) to complete the Orientation registration form. A $10 orientation fee is required.

Determining Student Residency

Upper Division and UTB University Plan

Under the state statutes and regulations, an upper-division student, UTB University Plan student, or prospective student is classified as a resident of Texas, a nonresident, or a foreign student.

- A resident is an individual who is either a U.S. citizen, national naturalized citizen or permanent resident alien or an alien who has been permitted by Congress to adopt the United States as his or her domicile while in the United States and who has otherwise 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 generally require a minimum of 12 months residence in Texas prior to enrollment.
- A nonresident is a citizen, national naturalized citizen or permanent resident of the U.S. or an alien who has been permitted by Congress to adopt the U.S. as his or her domicile while in this country and who has not met the State's requirement for establishing residency for tuition purposes. While these state requirements for establishing residency are complex and should be referred to in each particular circumstance, they generally require a minimum of 12 months residence in Texas prior to enrollment.
- A foreign student is an alien who is not a permanent resident of the U.S. or has not been permitted by Congress to adopt the U.S. as his or her domicile. An individual classified as a foreign student may qualify, under certain exemptions specified in rules set forth by the Texas Higher Education Coordinating Board, for resident tuition rates and other charges while continuing to be classified as a nonresident or a foreign student. Information on residency, reclassification, tuition exceptions and waivers is available at the Enrollment and/or Financial Aid offices.

Lower Division

- Residents/In-District are residents of the taxing district of Texas Southmost College, which includes Brownsville, Port Isabel, South Padre Island, Laguna Vista, Bayview, Los Fresnos, Olmito, Rancho Viejo, and routes 3, 5, 6, 7, 8 and 9 in San Benito pay in-district tuition rates. 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.
- Residents/Out-of-District are residents who do not reside in the taxing district described above. 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 U.S. 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 Enrollment Office.

An alien who is living in this country under visa permitting permanent residence such as A-1, A-2, A-3, E-1, E-2, G-1, G-2, G-3, G-4, G-5, H-1B, H-4 only if parents hold H-1B, I, K-1, K-2, L-1, L-2, NATO 1,2,3,4,5,6 & 7, O-1, O-3 only if parents hold O-1, R-1, R-2, Valid I-551 or I-688 or has filed with the proper immigration authorities a declaration of intention to become a citizen has the same privilege of qualifying for residence status for fee purposes under the new ruling of Coordinating Board as a citizen of the United States.

Note: In order for these cardholders to be quoted in-state tuition, they must establish residency in the State of Texas for 12 months.

Student Responsibilities

Oath of residency. §54.0521, Texas Education Code, provides for an oath of residency. The student is responsible for registering under the proper residence classification and for providing documentation as required by the 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 admin-

istrative 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.

- Reclassification as a nonresident. People who have been classified as residents of Texas will be reclassified as nonresident 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 nonresidents and will be required to pay the difference between resident and nonresident fees for those semesters in which they were erroneously classified.
- Reclassification as a resident. People classified as nonresidents of Texas upon first enrollment are presumed to be nonresidents while they continue as students. The presumption may be overcome only upon timely application and presentation of the required evidence which must include evidence unequivocally indicative of a fixed intention to reside permanently in the state. If students have been erroneously classified as nonresident students and subsequently prove to the satisfaction of the appropriate officials of an institution of higher education that they should have been classified as resident students, they will be classified as residents of Texas and will be entitled to a refund of the difference between the resident and nonresident fees for the semesters in which they were erroneously classified. Normally, the refund must be requested and substantiated during the current term. Supporting documentation for reclassification must be submitted to the Enrollment Office prior to the official record date. The Enrollment Office will make the final determination on residency status. After residing in Texas for at least 12 months, a nonresident may be reclassified as a resident student as provided in the rules and regulations adopted by the Coordinating Board, Texas College and University System. Any individual reclassified as a resident student is entitled to pay the tuition fee for a resident of Texas at any subsequent registration as long as he continues to maintain his legal residence in Texas.

Registration Requirements

1. Clear Admissions. See Steps for Undergraduate Admissions:.
2. Clear Outstanding Financial Balances. No debts may be outstanding with UTB/TSC.
3. Complete testing requirements.
4. Receive Advising. All new students are required to receive academic advising. For more information visit the Academic Advising Center at Tandy Hall #214 or call 983-7362.
5. Attend Orientation. All freshman are required to attend an Orientation session. For more information, visit the New Student Relations Office at the Student Center or call 544-8860.

Registration Blocks

Block Type	Contact, Phone, Location
Suspension	Counseling Center, 544-8292, Tandy #205
Admissions	Enrollment Office, 544-8254, Tandy #105
Foreign Student	International Counselor, 544-8292, Tandy #205
TASP	Academic Advising Center, 983-7362, Tandy #214
Graduate Status	Enrollment Office, 544-8254, Tandy #105
Departmental Approval	Respective Department Office
Undergraduate Course Load	Dean of School/College
Graduate Course Load	Graduate Studies, 548-6552, Champion Hall
Financial Holds & Bars	Business Office, 544-8202, Tandy #107

Examples of outstanding financial holds and bars 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 Citations
- Library Fines

For all other registration block questions, contact the Academic Advising Center at Tandy Hall #214 or call 983-7362.

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 2.0 (4.0=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 Counseling Center.

Admission of International Students

International students applying for admissions to undergraduate studies must apply for an I-20 A-B Form and must comply with the following:

- Submit an application for admission, Tandy Hall #105.
- Submit official transcripts for high school and/or college work previously completed whether taken in a foreign country or in the United States. (Foreign transcripts must be officially translated into English and evaluated when necessary.) Information on these services is available at the Enrollment Office, Tandy Hall #105, and with the International student counselor, Tandy Hall #205.
- Request form I-20 AB from the Enrollment Office, Tandy Hall #105. To obtain this form you must present the following:
  - Affidavit of financial support as evidence of ability to bear academic and living expenses while studying in this country.
  - Official documentation proving the above, with bank statements or letters from sponsoring government or company.

– A degree plan Program of Study that may be obtained with from the International student counselor Academic Advising Center, Tandy Hall #205.

The I-20 must be presented along with a valid passport and copy of affidavit of financial support to the nearest American Embassy or consulate in order to obtain a student (F-1) visa.

Visa and I-20 will be processed at the U.S. Port of Entry.

Copies of these documents must be presented to the Enrollment Office at Tandy Hall #105 prior to registration.

- International students holding non-immigrant visas will be automatically charged for comprehensive health insurance every semester at the time of registration. The cost of the insurance is in the amount of the premium approved by the U.T. System health insurance plan. This charge may not be paid in installments. Mexican nationals, except those on J-1 visas, are exempt from this requirement.
- A waiver may be obtained by providing proof of an acceptable alternate insurance to the Health services Director. Proof of insurance must include identification card with insurer's name and policy coverage with effective and expiration dates including coverage of at least $100,000.00 in medical benefits. It must be in English. If the required medical evacuation and repatriation coverage is not included, these may be purchased separately at the Business Office, Tandy Hall #108, for $35.00 (annual fee). This is a one-time charge per academic year. For information contact the international student counselor, Tandy Hall #205.
- U.S. residents who wish to purchase health insurance may contact the Student Health Services director for more information.
- International students holding other types of visas may attend full or part time without obtaining an I-20 AB form or changing to student visa. For more information regarding types of visas, contact the Enrollment Office at Tandy Hall #105 or the International Student Counselor at Tandy Hall #205.
- Effective Fall 1998, TASP scores or an alternative test score must be submitted to the Enrollment Office, Tandy Hall #205.
- Undergraduate students whose native language is not English will be assessed for basic skills using an institutional test. Performance on the test will indicate course level to the enrolled in.
- All incoming students must attend Freshmen Orientation. Students can sign up at the New Student Relations Office, Tandy Hall #205.
- After completing the enrollment process, students must go to the Advisement Center, Tandy Hall #214, to schedule an advising session.

For admissions procedures and required tests for Graduate Studies consult the office of Graduate Studies and Sponsored Programs at the Champion Hall, 1st Floor.

Admission for Non-Degree Students

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

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 amount number of hours credited on acceptable transfer courses.

Courses that do not transfer 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, welding, carpentry, plumbing and masonry. (There will be limited exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences Degree.)
3. Terminal courses offered at many community colleges that are not intended for transfer to senior colleges. Examples of such courses are auto mechanics, machine shop, electricity, data processing, and welding. (There will be limited exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences degree.)
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 limited exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences degree when this credit has been validated and placed on the transcript by an accredited community college or technical institution.

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
Total	18.5	

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
Total	24.5

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.
Total	24.5

Resolution of Transfer Disputes for Lower Division Courses

The following procedures (as outlined in the Texas Higher Education Coordinating Board rule Chapter 5, Subchapter A, §5.393) 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 Enrollment Office.

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

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 Enrollment Office. Students will not be excused from penalties on grounds of not receiving communications if the new address was not reported.

Change of Name

Records of students' names are based upon the application for admission. Subsequent changes of name should be promptly reported to the Enrollment Office.

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 $1.00. Official copies of academic records or transcripts will not be released for students who have a delinquent financial obligation or financial "hold" at UTB/TSC.

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

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)

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 postmarked 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) 983-7981 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
- Student's 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 on page 19 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 on page 16 for additional information.
- Students enrolled in University Plan courses (i.e., course 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 on page 16 for additional infor-

mation.

- Students who may take both TSC courses and UTB courses and graduate courses are classified as concurrently enrolled students. 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?

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)
- complete the form and sign the 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 of tuition and fees 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

Note: 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.

Note: 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 §54.204 and §54.205 of the Texas Education Code.

To obtain the exemption, an approved application must be on file with the Financial Aid Office 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; 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 Financial Aid Office at Tandy Hall 206 and/or refer to the Texas Education Code, §54.201, et seq.

2002-03 Tuition Rates

Lower Division

TSC In-District Students ..... 26.00 .. per semester credit hour; $75.00 minimum.
TSC Out-of-District Students ..... 42.00 .. per semester credit hour; $120.00 minimum.
Non-Resident Students ..... 262.00 .. per semester credit hour.

Upper Division and UTB Undergraduate (Courses with abbreviations ending with letter U)

Resident Students ..... 69.00 .. per semester credit hour; $120.00 minimum ($60.00 for summer sessions)
Non-Resident Students ..... 287.00 .. per semester credit hour.
Out-of-State Web-based ..... 309.00 .. per semester credit hour.

Graduate Level

Resident Students ..... 83.00 .. per semester credit hour; $120.00 minimum ($60.00 for summer sessions)
Non-Resident Students ..... 299.00 .. per semester credit hour.

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

Fees based per semester or summer session

Student Services Fee 10.00
Per semester credit hour; $150.00 maximum, prorated for May Session.

Student Union Fee 41.56
Per-long semester; pro-rated to $18.89 for each summer session, regardless of length.

Building Use Fee 25.00
Per semester credit hour, for TSC students only.

Computer Use Fee	5.00	Per semester credit hour.
Records Fee	5.00	Per semester.
Automated Services Fee	30.00	Per semester.

Other Fees

Fees based per semester or summer session

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.

Admission to School of Business Upper Division Fee 50.00
One time fee for students admitted into Upper Division in the School of Business.

Advising Fee 25.00
Fee for first-time freshmen, undeclared majors, and transfer students

Auditing Fee 50.00
Per class audited, if the instructor permits auditing a course, this is a nonrefundable fee.

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.

Deficiency Plan Fee – School of Education 40.00
Accessed to students in the School of Education.

Distance Learning Fee-UTB/TSC 10.00 per semester credit hour
Web-based/interactive video fee for UTB/TSC based course

Distance Learning Fee-UT Telecampus 25.00 per semester credit hour
Web-based/interactive video fee for UT TeleCampus-based course. This non-refundable fee is charged to defray costs associated with distance learning infrastructure (hardware, software, network, and human services), costs of course content maintenance and courseware development.

Emergency Loan Late Payment Fee 15.00
For every 30 days payment is late.

Freshman Orientation Fee 10.00
Accessed to all first-time freshman.

Foreign Insurance Fee per semester 214.00
Fee subject to change without notice.

Graduate Students Application Fee 15.00
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 another period must pay an additional fee of $5.00.

Identification Card Replacement Fee 10.00
Per card.

Induction fee for School of Health Sciences 10.00
Induction fee for the student in the School of Health Sciences.

Installment Payment Fee 22.50
Available ONLY during Fall and Spring semesters for Undergraduate and Graduate Students.

Laboratory Fee
See Course and Laboratory Fees for more information.

Late Payment Charges 5.00
See Installment Payment for more information.

Late Arena Registration Fee 15.00

Library Fees

Overdue items According to time the item is overdue.	Variable
Lost items According to original or replacement costs of item plus a $25.00 service fee.	Variable
Damaged items According to the extent of the damaged and cost of repair or replacement.	Variable
Off-Campus Fee, per course	15.00
Reinstatement Charge See Installment Payment for more information.	25.00
Returned Check Charge 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 insuffi cient funds, account closed, irregular signature, stopped payment, etc.	25.00
School of Education –F oreign Field Experience Fee Fee for students who take EDEC 6310.65 and BILC 6322.65.	550.00
Student Liability Insurance Fee Per academic year; Fee subject to change without notice.	18.13
Teacher Education Program Admission Fee For students in the School of Education upon application to the Teacher Education Program.	50.00
Testing Fees (Subject to change without notice)	
Graduate Record Exam (GRE)	99.00
Graduate Management Admissions Test (GMAT)	199.00
Quick TASP Fee New fee for students that take the Quick TASP in lieu of the regular.	10.00
TASP Test of English as a Foreign Language (TOEFL)	100.00
Thesis Binding Fee 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.	48.00
Transcript Fee (official)	5.00
Tuition Installment Incidental Charge See Payment by Installment for more information.	7.50
Vehicle Registration/Operation Permit All students, who will operate a motor vehicle in the campus area, must register the vehicle with the Campus Police Office and obtain 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:	20.00
Parking Classifications	
Faculty, Staff, Students (annual fee)	60.00
Disabled Students Permit	No charge*
Afternoon Students (1-4:30 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 Articles 6675a-5e and 6675a-5e.1 of Vernon's Texas Civil Statutes.	
Vocational Nursing Graduation Certificate Fee	8.00

Course and Laboratory Fees

Subject	Fee	Courses
Accounting Technology [ACNT]	8.00	1229, 1391, 1403, 1404, 1411, 1413, 2366
Air Conditioning/Refrigeration [HART, MAIR]	5.00	1407
Air Conditioning/Refrigeration [HART, MAIR]	30.00	1369, 1449, 1445, 2309, 2310, 1501, 1507, 1541, 1545, 2538
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
Applied Music [MUAP]	70.00	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
Art [ARTS]	45.00	2313, 2356, 2357, 4331
Art [ARTS]	45.00	1316, 1317, 2233, 3323
Art [ARTS]	45.00	1311, 1312, 2333, 4333
Art [ARTS]	70.00	1376, 2316, 2317, 3321, 4337
Art [ARTS]	95.00	2326, 2327, 2346, 2347, 3371, 4391
Art [ARTS]	95.00	3314
Auto Body Repair [ABDR]	5.00	1101
Auto Body Repair [ABDR]	20.00	1403
Auto Body Repair [ABDR]	25.00	1541
Auto Body Repair [ABDR]	30.00	1402, 1404, 1405, 1406, 1407, 1408, 1409, 1519, 1453, 1411, 1431, 2549, 2255, 2257
Automotive Mechanics [AUMT]	5.00	1101, 1402, 1403, 1404
Automotive Mechanics [AUMT]	10.00	1406
Automotive Mechanics [AUMT]	15.00	1409
Automotive Mechanics [AUMT]	20.00	1405, 1201, 2305, 1419, 2417, 2434, 1445
Automotive Mechanics [AUMT]	30.00	1407,1408, 1410, 1416, 2209, 2425
Biology [BIOL]	15.00	1106, 1107, 1108, 1109, 2101, 2102, 2121, 2428
Biology [BIOL]	20.00	3403, 3408, 3409, 3412, 3414, 4170, 4199, 4299, 4309, 4330, 4331, 4399, 4404, 4410, 4402, 4414, 4420, 4450, 5170, 6303, 6306, 6308,

6309
Building Trades [CNBT] 1301, 1305, 1307, 1342, 1366 5.00
Building Trades [CNBT] 1302, 1311 25.00
Building Trades [CRPT] 1325, 1329 5.00
Building Trades [CRPT] 1311, 1315, 1323, 1341, 1345 30.00
Building Trades [ELPT] 1349, 1364 5.00
Building Trades [ELPT] 1325 10.00
Building Trades [ELPT] 1311 15.00
Building Trades [ELPT] 1321 20.00
Building Trades [ELPT] 1329, 1342, 1345 30.00
Building Trades [PFPB] 2437 5.00
Building Trades [PFPB] 1345, 1421, 2301, 2408, 2409 30.00
Building Trades [WDWK] 1313 25.00
Business Law-Technical [BUSG] 2317 8.00
Business Management [BMGT] 1301 8.00
Chemistry [CHEM] Lower Division Lab Courses 8.00
Chemistry [CHEM] 3103, 3105, 3110, 3112, 3303, 3403, 4105, 4320 15.00
Child Care and Development [CDEC] 8.00
1331, 1358, 1359, 1367, 1401, 1406, 1411, 2366, 2587
Communication [COMM] 2303, 2324, 2325, 2373 8.00
Computer Information Systems [ITSC, ITSE, ITSW, POFI] Lab Courses 8.00
Computer Sciences [COSC] 15.00
1310, 2312, 2314, 2318, 1305, 1315, 1418, 2316, 2317, 3310, 3325, 3330, 3345, 3355, 3380, 4300, 4310, 4313, 4330, 4332, 4342, 4346, 4360, 4380
Criminal Justice [CRIJ] 4401, 2314 25.00
Dance [DANC] 8.00
Diesel Mechanics [DEMR] 1402, 1404, 1406, 1408,1409 5.00
Diesel Mechanics [DEMR] 1101,1407 15.00
Diesel Mechanics [DEMR] 30.00
1403, 1405,1413, 1419, 1423, 1521, 1506, 1505, 1510, 1516
Drafting Technology [DFTG] 1409, 1452, 1448 20.00
Drafting Technology [DFTG] 1410, 1417, 1421, 1456 12.00
Drafting Technology [DFTG] 1444, 1454, 1493, 2410, 2465 15.00
Drafting Technology [DFTG] 2448, 2460 25.00
Drama [DRAM] 1351 8.00
Drafting [TDRA] 8.00
Education – Curriculum and Instruction [EDCI] 4310, 4311, 4312, 4398 12.50
Education – Curriculum and Instruction [EDCI] 4309, 4315, 4611, 4641 25.00
Education [EDSC] 4305, 4374 10.00
Education [EDSC] 4309, 4315, 4375 25.00
Electronics [TELC] 8.00
Engineering [ENGR] 1304, 1407 8.00
Electronics [ELEC] 1302, 1421 8.00
Electronics [ELET] 20.00
Electronics Engineering Technology [ELET] 2140 15.00
Emergency Medical Technology [EMSP] 8.00
1147, 1149, 1209, 1356, 1401, 2135, 2444, 2290, 2315, 1208, 2243, 2434
Emergency Medical Technology [HPRS] 1204 8.00
Engineering Technology [ENGT] 1101,1201 25.00
Engineering Technology [ENGT] 2201, 2401 30.00
Geology [GEOL] All Lab courses 8.00
Hospitality Cooperative Education [THRM] 2401, 2405 8.00
International Business [IBUS] 1301, 2331, 2339, 2341, 2345, 2366 8.00
Kinesiology [KINE] All Activity courses 8.00
Legal Assisting [LGLA] 8.00
Machine Shop [MCHN] 1300, 1317,1332, 1338 5.00
Machine Shop [MCHN] 1305 15.00
Machine Shop [MCHN] 1405 20.00
Machine Shop [MCHN] 1403 25.00
Machine Shop [MCHN] 1253, 1254, 1302, 1320, 1341, 1352, 2433, 2437 30.00
Marketing-Technical [MRKG] 1311 8.00
Mathematics [MATH] 0100, 0120, 0320, 0321, 0322, 0420, 0421, 0422 30.00
Manufacturing Engineering Technology [MFET] 2321 8.00
Manufacturing Engineering Technology [MFET] 2140 15.00
Manufacturing Engineering Technology [MFET] 2420 20.00
Mechanical Engineering Technology [MEET] 1301, 2321 8.00
Mechanical Engineering Technology [MEET] 2140 20.00
Medical Laboratory Technology [MLAB] 8.00
All except 1290, 2290, 2293, 2296
Music [MUSI] 1181, 1183, 1184, 1189, 1192, 1193, 2166, 2168, 2189 8.00
Music [MUSI] 3308, 3309 15.00
Music [MUSI] 1311, 1312, 2311, 2312 20.00
Nursing [NURS] 8.00
Nursing [RNSG] 1205, 1215, 1301, 1423, 2414 8.00
Nursing [TVNU] 1266 30.00
Physics [PHYS] Lower Division Lab Courses 8.00
Physics [PHYS] 3201, 3202, 3400, 3410, 3430, 4200 8.00
Professional Office Information [POFI] 2331, 2431 8.00
Professional Office Legal [POFL] 1305, 1359, 2301 8.00
Professional Office Technology [POFT] 1192, 1227, 1192, 1227, 1302, 1309, 1313, 1319, 1331, 1345, 2301, 2303, 2312, 2321, 2380, 2381 8.00
Radiologic Technology [RADR] 1411, 1213, 2305, 2309 8.00
Radiologic Technology [DMSO] 1441, 2441 8.00
Reading [READ] 0100, 0300, 0320, 0321, 0322 30.00
Respiratory Therapy [HPRS] 1106, 1204 8.00
Respiratory Therapy [RSPT] 8.00
1241, 1290, 1315, 1316, 2135, 2139, 2201, 2305, 2314, 2353
Special Education [SPED] 4313 12.50
Sting Success Series [NCB] 1000, 2000 75.00
Technical Electronics [CETT] 1429 25.00
Technical Electronics [IEIR] 1406 15.00
Technical Electronics [IEIR] 1402, 2465 18.00
Technical Electronics [IEIR] 1404 22.00
Technical Electronics [CETT] 1445 24.00
Technical Electronics [INTC] 1307 25.00
Technical Electronics [EECT] 2439 28.00
Technical Electronics [CETT] 1321, 1425, 1441, 2425 30.00
Technical Electronics [RBTC] 1405 30.00
Word Processing and Spreadsheets [ITSW] 8.00
1301, 1304, 1310, 2331, 2365

2002-03 Lower Division Tuition and Fee Tables

Fall Semester 2002/Spring Semester 2003

Resident In-District

Semester Credit hrs	Tuition $26.00/hr	Required Fees*	Total Credit hrs min $75.00
1	$75.00	$116.56	$191.56
2	$75.00	$156.56	$231.56
3	$78.00	$196.56	$274.56
4	$104.00	$236.56	$340.56
5	$130.00	$276.56	$406.56
6	$156.00	$316.56	$472.56
7	$182.00	$356.56	$538.56
8	$208.00	$396.56	$604.56
9	$234.00	$436.56	$670.56
10	$260.00	$476.56	$736.56
11	$286.00	$516.56	$802.56
12	$312.00	$556.56	$868.56
13	$338.00	$596.56	$934.56
14	$364.00	$636.56	$1,000.56
15	$390.00	$676.56	$1,066.56
16	$416.00	$706.56	$1,122.56
17	$442.00	$736.56	$1,178.56
18	$468.00	$766.56	$1,234.56
For each additional hour add:			$56.00

Resident Out-of-District

Semester Credit hrs	Tuition $42.00/hr	Required Fees*	Total min $120
1	$120.00	$116.56	$236.56
2	$120.00	$156.56	$276.56
3	$126.00	$196.56	$322.56
4	$168.00	$236.56	$404.56
5	$210.00	$276.56	$486.56
6	$252.00	$316.56	$568.56
7	$294.00	$356.56	$650.56
8	$336.00	$396.56	$732.56
9	$378.00	$436.56	$814.56
10	$420.00	$476.56	$896.56
11	$462.00	$516.56	$978.56
12	$504.00	$556.56	$1,060.56
13	$546.00	$596.56	$1,142.56
14	$588.00	$636.56	$1,224.56
15	$630.00	$676.56	$1,306.56
16	$672.00	$706.56	$1,378.56
17	$714.00	$736.56	$1,450.56
18	$756.00	$766.56	$1,522.56
For each additional hour add:			$72.00

Non-Resident

Semester Credit hrs	Tuition $262/hr	Required Fees*	Total
1	$262.00	$116.56	$378.56
2	$524.00	$156.56	$680.56
3	$786.00	$196.56	$982.56
4	$1,048.00	$236.56	$1,284.56
5	$1,310.00	$276.56	$1,586.56
6	$1,572.00	$316.56	$1,888.56
7	$1,834.00	$356.56	$2,190.56
8	$2,096.00	$396.56	$2,492.56
9	$2,358.00	$436.56	$2,794.56
10	$2,620.00	$476.56	$3,096.56
11	$2,882.00	$516.56	$3,398.56
12	$3,144.00	$556.56	$3,700.56
13	$3,406.00	$596.56	$4,002.56
14	$3,668.00	$636.56	$4,304.56
15	$3,930.00	$676.56	$4,606.56
16	$4,192.00	$706.56	$4,898.56
17	$4,454.00	$736.56	$5,190.56
18	$4,716.00	$766.56	$5,482.56
For each additional hour add:			$292.00

For each Fall or Spring session, a student may enroll for no more than 18 semester credit hours. Enrollment in more than 18 semester credit hours in a single 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: Building Use Fee ($25.00/hr), Student Service Fee ($10.00/hr, $150.00 maximum), Computer Fee ($5.00/hr), Student Union Fee ($41.56), Automated Fee ($30.00), and Records Fee ($5.00).

2002-03 Upper Division/UTB Undergraduate Tuition and Fee Tables

Fall Semester 2002/Spring Semester 2003

Resident In-District

Semester Credit hrs	Tuition $69.00/hr**	Required Fees*	Total
1	$69.00	$91.56	160.56
2	$138.00	$106.56	244.56
3	$207.00	$121.56	328.56
4	$276.00	$136.56	412.56
5	$345.00	$151.56	496.56
6	$414.00	$166.56	580.56
7	$483.00	$181.56	664.56
8	$552.00	$196.56	748.56
9	$621.00	$211.56	832.56
10	$690.00	$226.56	916.56
11	$759.00	$241.56	1000.56
12	$828.00	$256.56	1084.56
13	$897.00	$271.56	1168.56
14	$966.00	$286.56	1252.56
15	$1,035.00	$301.56	1336.56
16	$1,104.00	$306.56	1410.56
17	$1,173.00	$311.56	1484.56
18	$1,242.00	$316.56	1558.56
For each additional hour add:			$74.00

Non-Resident (Foreign and Out of State)

Semester Credit hrs	Tuition $287/hr	Required Fees*	Total
1	$287.00	$91.56	$378.56
2	$574.00	$106.56	$680.56
3	$861.00	$121.56	$982.56
4	$1,148.00	$136.56	$1,284.56
5	$1,435.00	$151.56	$1,586.56
6	$1,722.00	$166.56	$1,888.56
7	$2,009.00	$181.56	$2,190.56
8	$2,296.00	$196.56	$2,492.56
9	$2,583.00	$211.56	$2,794.56
10	$2,870.00	$226.56	$3,096.56
11	$3,157.00	$241.56	$3,398.56
12	$3,444.00	$256.56	$3,700.56
13	$3,731.00	$271.56	$4,002.56
14	$4,018.00	$286.56	$4,304.56
15	$4,305.00	$301.56	$4,606.56
16	$4,592.00	$306.56	$4,898.56
17	$4,879.00	$311.56	$5,190.56
18	$5,166.00	$316.56	$5,482.56
For each additional hour add:			$292.00

*For each Fall or Spring session, a student may enroll for no more than 18 semester credit hours. Enrollment in more than 18 semester credit hours in a single Fall or Spring session requires authorization by the appropriate Dean. *All students are required to pay the following fees for each Summer session, regardless of length: Designated Tuition Fee ($25.00), Student Service Fee ($10.00/hour), Computer Fee ($5.00/hour), Student Union Fee, ($37.78), Automated Fee ($30.00) and Records Fee ($5.00).*

Important: Tuition and Fee Tables for 2003-04 will be available upon approval online at www.utb.edu or in the 2003-04 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 holidays):

Fall and Spring semesters	
Prior to the first class day of the semester	100%
During the (first) five class days of the semester	80%
During the (second) five class days of the semester	70%
During the (third) five class days of the semester	50%
During the (fourth) five class days of the semester	25%
After the 21st class day of the semester	0%
Any Summer Session	
Prior to the first class day of the semester	100%
During the first, second or third class day of the semester	80%
During the fourth, fifth or sixth class day of the semester	50%
After the sixth class day of the semester	0%

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 or holidays):

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

Refunds for Mini-Courses or Flex Entry Courses

Students who are enrolled for mini or flex entry courses and officially withdraw or drop 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 mini or flex entry courses offered at UTB/TSC, students must consult the Business Office or the refund schedule.

Title IV Program Refunds

When a recipient of Federal Title IV grant or loan assistance withdraws from UTB/TSC during the payment period in which the student began attendance, UTB/TSC must determine the amount of Title IV grant or loan assistance that the student earned as of the student's withdrawal date.

The date, as determined by UTB/TSC, that the student began the withdrawal is the date used for calculating the percentage used in the formula for Return of Title IV funds. The number of days from the first 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, the student has earned 100% of the Title IV funds. Federal Work-Study is not included in this calculation.

If the total amount of Title IV grant and/or loan assistance that was 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 exceed amount originally disbursed):

Unsubsidized FFEL Stafford Loans
Subsidized FFEL Stafford Loans
Perkins (n/a at UTB/TSC)
FFEL Plus
Federal Pell Grant
Federal SEOG
Other Title IV assistance (not including Federal Work-Study)

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. The student returns "unearned" Title IV funds that he or she has received from loan and/or grant programs.

The school must return Title IV funds due to 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 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 period of enrollment. If the student does not repay the amount owed to the Title IV programs or does not make satisfactory payment arrangements with the 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. Contact the Office of Student Financial Assistance for full policy and sample calculation.

As an institution participating in programs under Title IV of the Higher Education Act of 1965 as amended ("Act"), UTB and TSC are required to refund unearned tuition, fees, room and board and other charges to certain students attending the institution for the first time who have received a grant, a loan, or work assistance under Title IV of the Act or whose parents have received a loan on their behalf under 20 U.S.C. §1087-2.

A refund is required if the student does not register for, withdraws from, or otherwise fails to complete the period of enrollment for which the financial assistance was intended.

No refund is required if the student withdraws after a point in time that is 60 percent of the period of enrollment for which the charges were assessed. A student who withdraws prior to that time is entitled to a refund of tuition, fees, room and board, and other charges that is the larger of the amount provided for in the Texas Education Code, §54.006, or a pro-rate refund calculated pursuant to §484B of the Act, reduced by the amount of any unpaid charges and a reasonable administrative fee not to exceed the lesser of five percent of the tuition, fees, room and board, and other charges that were addressed for the enrollment period, or $100. If the student charges were paid by Title IV funds, a portion or all of the refund will be returned to these programs.

Students who receive funds through the Title IV program (Pell Grants, Supplemental Educational Opportunity Grants, National Direct Student Loans) or state grants and scholarships or institutional grants and scholarships will not receive a refund until the aforementioned programs, or any combination thereof, have been totally reimbursed. Note: This refund policy is subject to change without notice.

ACADEMIC SERVICES

Academic Advising Center

The Academic Advising Center at Tandy Hall #214 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/college departments are available to assist students who have chosen a Program of Study Certificate Program, Associate Degree Program, or Bachelor's Degree Program. The faculty and staff in the Academic Advising Center 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,
  - TASP,
  - 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.

Distance Education

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. Student may record the programs with their own VCRs or view tapes in selected sites such as libraries. Students are encouraged to enjoy the convenience of study times that fit busy work or family schedules.

A rapidly growing source of courses and complete programs of study is internet-based instruction. With a personal computer students may work on their assignments and interact with the instructor and other students' 24 hours a day, from any part of the world. Self-disciplined and highly motivated students find Distance Education to be both a convenient and an effective means of obtaining higher education courses and degrees.

Supporting the faculty and students is the Office of Distance Education which provides 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, or by calling (956) 983-7600. People outside Brownsville may call toll free at 1-866-654-4555.

STUDENT SERVICES

Office hours for Student Support Services Offices are
7:30 a.m. to 5:00 p.m. Monday through Thursday;
7:30 a.m. to 1:30 p.m. Friday, unless otherwise noted

Counseling Center

Tandy Hall #205 *544-8292*
Extended office hours to 7:00 p.m. Monday through Thursday

The Counseling Center provides a variety of services to all students pursuing academic or vocational/technical programs of study. The Center offers both group and individualized programs to help students deal with academic, career, and personal concerns.

Personal Skills Development

- University Adjustment/Success/Mentoring Program (STING)
- Stress Management
- Mentoring Program
- Personal Counseling
- Individual and Group Counseling
- Referral to Community Resources
- Workshops/seminars
- Educational and Enrichment Resource Library

Disability Services

- Registration Assistance
- Test Accommodations
- Adaptive Technology
- Use of Scanners/Adaptive Technology
- Volunteer Notetaking
- Taped Textbooks
- Sign Language Interpreting
- Classroom Furniture Arrangements

- Referrals to other Campus/Community Services
- Counseling
- Campus Disability Club
- Notetaking
- Taped Textbooks
- Testing Assistance
- Adaptive Technology Training
- Individual Counseling
- Registration Assistance
- Sign Language Interpreting
- Disability Awareness Club

Equity Services
- Individual Counseling
- Transportation Services
- Child Care Services

Student Support Services (ASPIRE)
- Personal Counseling
- Study Skills
- Tutoring
- Career Exploration

New Student Relations
- New Student Orientation
- Tours
- Recruitment
- Community/School Liaison

International Students
- Immigration Information
- Campus Support Services
- Cultural Enrichment Activities
- Community Resources
- Scholarships and Financial Aid
- Workshops

On/Off-campus Employment Career Counseling
- Career Exploration & Guidance
- Career Assessments & Inventories
- Researching Careers & Majors
- Developing a Career Plan
- Workshops

Students are required to set up an appointment to obtain an official degree plan. Occupational-technical degree plans are issued at each department.

Athletics

Gymnasium, 1st floor *548-8291*

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.

Career Services & Placement

Tandy Hall #205 *544-8866*

The Career Services and Placement Office provides students assistance in choosing a major, planning a career, and meeting their college expenses and/or gaining work experience in their chosen field. Students are assisted with career decision-making and planning, career resource utilization and exploration, as well as evaluation of interests and preferences in occupations.

The Career Services and Placement Office also helps students to develop job-hunting skills by providing workshops and individual consultation on job search strategies. The office provides students with information about writing résumés, cover letters, and developing networking skills.

Conflict Resolution Center

Tandy Hall #205H *983-7235*

The Conflict Resolution Center offers students free and 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. For more information or an appointment, contact the Conflict Resoultion Center in Tandy 205H at 983-7235, or send e-mail to resolve@utb1.utb.edu.

Student Financial Assistance

Tandy Hall #206 *544-8277*

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 Financial Assistance periodically regarding the availability of on-and off-campus scholarships.

Students subject to selective service registration are required to file a statement that he has registered or is exempt from selective service registration in order to be eligible to receive financial assistance funded by State revenue.

Students are required to maintain certain scholastic standards in order to continue receiving certain financial aid. See page 37 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 Financial Assistance before a loan will 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 by the first class day. 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 me 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.

Learning Assistance Center

North Hall #122 *544-8208*

Extended 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 by the Learning Assistance Center:

Classroom Presentations

Computer Lab open to all students with UTB/TSC ID

Computer-Assisted Instruction
- Basic Skills (Reading, Writing & Mathematics)
- Mathematics Tutorials
- Spanish Tutorials
- Phlebotomy Tutorials
- GRE Preparation
- GRE Preparation
- Psychsims
- EGAN
- TASP Preparation

English as a Second Language
- Practice in Conversational English

Independent Activities
- Reading Programs
- Audio Tapes
- Video Tapes
- Word Processing

Supplemental Instruction

Tutoring (by appointment or walk-in)
- Mathematics
- Reading
- Writing
- History
- Government
- Geography
- Spanish
- Medical Terminology
- Other subject areas by request
- All English and Math courses
- Physics
- Statistics
- Biology
- Anatomy & Physiology
- Chemistry
- Accounting
- French

Workshops
- TASP
- Mathematics and Chemistry Review Sessions, Reading, Writing
- Studying for A's
- Memory Techniques Learning and Study Skills
- Relieving Test-Taking Anxiety
- Nursing Mathematics, Study Skills

Library

Library *544-8221*

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.

Office of the Dean of Students

Student Union 1.20 *554-5141*

The role of the Dean of Students is to be 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 goal achievement and improved self-esteem. To provide a comprehensive offering of services and programs, the Dean of Students works with the offices of Student Activities, Student Publications, Student Health Services, and Career Services and Placement. Student input is an important element and is strongly encouraged.

Office of New Student Relations

Tandy Hall #115 *544-8860*

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

The Office of New Student Relations offers an Orientation program designed to introduce new students to the services offered. This mandatory session of Freshman Orientation helps make the transition from high school to college easier and assists students with the academic, social and personal adjustments that are common with first-time students. The half-day event provides freshman information on clubs and organizations, college professors, special programs, learning assistance, student employment, counseling and course advisement, career exploration, campus tours and

registration.

University Outreach Center

Tandy Hall #262 *544-8243*

The University Outreach Center houses several outreach programs funded and supported by UTB and TSC, along with other affiliates.

The Center provides 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.

The Center 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
- Careers in Science Program (CISP)
- Endowment Scholarship
- Hispanic Mother/Daughter Program
- South Texas Engineering, Mathematics and Science (STEMS)
- Project Mujer
- University Talent Search
- Upward Bound University

Camp 2000 Services

- Parental Workshops
- Job site visits
- Televised learning
- Faculty & NASA workshops
- Community speakers
- 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

Hispanic 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

Project Mujer Services

- Academic classes in Mathematics, Reading, and Writing and Computer Lab
- Workshops in Family Literacy, Parenting, Career Counseling, Employment and Survival Skills
- Assistance with application for admissions, financial aid, and testing

STEMS Services (located at Eidman Hall)

- 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

Upward Bound Services

- Academic- and career-related support to complete high school and enter post-secondary programs
- Academic support/tutorials
- Summer academic bridge
- On campus social and cultural activities
- Parent support
- Help participants ~~to~~ graduate from post-secondary institution with associate's or bachelor's degrees

Veterans' Benefits

Tandy Hall #206 *544-8277*

UTB and TSC are approved by the Texas Education Agency for VA educational benefits for veterans and their children and spouses.

Texas Veterans of World War I, World War II, the Korean War, or Vietnam who have no remaining Veterans Administration education benefits are exempted from payment of tuition and fees excluding general property deposit and student services fees. To obtain the exemption of tuition under this act, an approved application must be on file with the Office of Financial Assistance six 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. are also entitled to an exemption.

Student veterans may receive assistance from the Office of Financial Assistance in applying for benefits. To expedite payments, veterans should contact the Enrollment Office at least 60 days prior to the first class day of each semester or term to complete all necessary paper work for that period of study.

Texas veterans who have no remaining VA Educational Benefits may be eligible for exemption of tuition and required fees.

Benefits for Children of Texas Veterans: Exemption from payment of certain fees also extends to children of members of the armed forces who were killed in action or died while in military service in World War II or the Korean Conflict. For procedures to follow under this provision, contact the Financial Aid Office.

Veterans Cost of Instruction Program: The VCIP provides the following services:

- Information and referrals
- Individualized V.A. tutoring
- Explanation of educational benefits
- Assistance with V.A. educational benefit applications
- Assistance in resolving problems with receipt of educational benefits or eligibility.

Satisfactory Standards to Receive Financial Assistance and/or VA Training Benefits: Students must be making satisfactory progress in order to receive financial aid, including VA training benefits. Student records are reviewed

each year to verify satisfactory progress to receive financial assistance. Students receiving VA educational benefits must maintain the following cumulative Grade Point Averages to be making satisfactory progress:

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

SPECIAL SERVICES

Disability Services

Tandy Hall #205 544-8292

Students with disabilities may request assistance through Disability Services, component of the Counseling Center.

Some of the services available include notetaking, taped textbooks, registration assistance, diagnostic testing, special test conditions and sign language interpreting. An Adaptive Technology and Testing Service is available for student use. 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. Proof of disability is required. (Individual documentation requirements vary depending on the disability.) Students bear the responsibility of making their abilities and limitations known to the Coordinator. Together, the student and the Coordinator will decide on the appropriate accommodations and decide on a course of action for informing instructors, if necessary. Students must request services each semester, as needed.

Students who need help with registration or with adds/drops should contact the Coordinator for assistance. Permits for parking in spaces designated for the handicapped may be obtained at the Campus Police Department. Proof of disability is required.

TDD users who wish to contact the University by phone may call through Relay Texas at 1-800-735-2989. Relay Texas provides interpreting service between people who can hear and those who are deaf, hard of hearing, deaf-blind, and speech disabled. This catalog is available in alternate formats upon request. For information, contact Disability Services.

Student Health Services

Cavalry Hall *544-8951*

For after-hour emergencies, call Campus Police at 544-8233

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: Td. MMR, Hepatitis B, TB test, flu shots
- 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

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.

CAMPUS LIFE

Student Housing

The Village at Fort Brown *554-5137*

Student housing is available at the Village at Fort Brown, formerly the Holiday Inn Fort Brown Hotel. For more information, contact the Student Activities/Student Housing Office at 554-5137.

Intramurals/Recreation

Kinesiology Department, Gymnasium *544-8290*

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.

Student Activities Office

Student Union 1.19 *554-5144*

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

The Office of Student Activities provides a variety of activities, oversight and support for university-wide student activities which foster student participation, student leadership development, cultural diversity, and edu-

cational development beyond the classroom to enhance the overall educational experience for UTB/TSC students. Through these culturally diverse and educational experiences, our students will develop leadership, proper decision making, and self-direction. The Student Activities Office hosts various events throughout the year. These events include informative presentations on a variety of topics, a Drug Alert Program, festivals, and musical entertainers. The Calendar of Events and bulletin boards offer information on dates and locations.

The Office of Student Activities also provides oversight, guidance, and leadership development for all registered student organizations on campus. Other areas include special events and community service. The Office of Student Activities at UTB/TSC also serves an auxiliary function to provide support and guidance to the Student Government Association, and any of its many functions as the liaison between students and the administration.

The Office of Student Activities is prepared to assist all students become involved on the campus. We welcome and strongly encourage all of our students to become active learners by fostering an environment that is conducive to student development at all levels of campus activities and participation.

Calendars and Student Guides are available at Arena Registration or in the Student Activities Office during the semester. The Calendar provides dates for upcoming student activities and important dates from other university offices.

Student Government Association

Student Union 1.16 *554-5033*

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 *554-5144*

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
- 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 544-8264.

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 544-8247.

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.

Students are invited to participate in the program by joining Gorgas Science Society. The Society is open to any student, regardless of major field of study. Classes and opportunities in continuing education are offered at the station through the Biology Station Program, Honors Program, and Biology Department.

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

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 an Occupational Training Certificate in eight skilles areas, Certificates of Proficiency in 12 programs of study and/or an Associate in Applied Science degree in 16 academic 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 appearning on the transcript theytook in high school which may be applied toward meeting the requirements for the appropriate certificate or degree upon enrolling at UTB/TSC.

The following is alist of current Occupational Training Certificates (O.T.C.), Certificates of Proficiency (C.P.) and the Associate in Applied Science (A.A.S.) degrees:

Accounting Technology – C.P.*, A.A.S.

Air Conditioning and Refrigeration – O.T.C.*

Auto Body Repair – O.T.C.*

Automotive Mechanics – O.T.C.*

Building Trades (carpentry) – O.T.C.*

Building Trades (electrical worker) – O.T.C.*

Building Trades (plumbing) – O.T.C.*

Child Care and Development – C.P.*, A.A.S.

Computer Information Systems – C.P.*, A.A.S.

Criminal Justice – A.A.S.

Diagnostic Medical Sonography – A.A.S.

Diesel Mechanics – O.T.C.

Drafting – C.P.*, A.A.S.

Electronics Technology – A.A.S.

Emergency Medical Technology – C.P., A.A.S.

Engineering Technology/Electronic – C.P., A.A.S.

Engineering Technology/Manufacturing – C.P., A.A.S.

Engineering Technology/Mechanical – C.P., A.A.S.

International Business – C.P.*, A.A.S.

Legal Assisting Specialist – C.P.

Legal Secretarial – A.A.S.

Machine Shop – O.T.C.

Medical Laboratory Technology– A.A.S.

Nursing: Vocational Nursing (VN) – C.P.

Office Specialist – C.P.*, A.A.S.

Radiologic Technology – A.A.S.

Respiratory Theraphy – A.A.S.

Word Processing Specialist – A.A.S.

** TASP-waived certificate programs (less than 42 semester credit hours)*

"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
- pass all sections of the TASP (or an alternative TASP test) before enrolling at TSC (including TASP waived programs).

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 Application with the school's official seal and signature to the Office of Student Financial Assistance.

Young Scholars Program

The Young Scholars Program is a three-week enrichment program for academically talented intermediate school students conducted by faculty members each summer as part of the Honors Program.

Applications are available through middle school counselors in Brownsville, Los Fresnos, Port Isabel, and Harlingen. Students are selected on the basis of grade point averages, standardized test scores and letters of recommendation. For information, call 544-8865.

Associate in Arts Degree

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

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 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 a counselor the transferability of courses and refer to the School of Business for additional courses required for the baccalaureate degree.

Associate in Applied Science Degree

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

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 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 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 transfer ability apply 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 Arts
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 124 semester credit hours including a minimum of 36 advanced hours is required, with an overall minimum grade point average of 2.00.
2. A minimum grade point average of 2.00 in the Core Curriculum, the major field and the minor field is required. Graduates who seek certification as elementary or secondary teachers must have a minimum grade point average of 2.50.
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. Any changes in a Program of Study to comply with a later catalog must be approved by the Vice President for Academic Affairs.
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. At least 25 of the total hours of course work required by UTB/TSC for the baccalaureate degree must be taken in residence at UTB/TSC and at least the last 24 semester credit hours of course work must be taken at UTB/TSC. At least 21 hours of advanced course work must be taken in residence at UTB/TSC.
7. 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 six of advanced course work in the major field of study must be completed in residence.
8. After students declare a major, a Program of Study approved by the student's academic advisor must be on file with the Dean of the School or College before the deadline for applying for a degree. Any deviations from a Program of Study must be approved by the Dean of the School or College.
9. An application for a degree must be filed by the student with the Director of Enrollment on or before the date specified in the UTB/TSC calendar.
10. 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. No credit will be awarded for "life experience" except in the case of the Bachelor of Applied Arts and Sciences degree.

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 12 must be for advanced courses, with at least six 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.

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.

For education programs leading to Teaching Certifications refer to the School of Education 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 in Interdisciplinary Studies
Master of Science in Public Health Nursing

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

ACADEMIC REGULATIONS

Student Responsibility

Students are expected to inform themselves 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 the Undergraduate Catalog and Student Guide.

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 Conduct

Students capable of doing university work are assumed to be aware of generally accepted rules of good conduct. Good conduct is expected at all times. Students are expected to be courteous, tolerant of others, and honest.

Students may be dismissed from the institution for misconduct, for dishonesty, for lack of seriousness of purpose, for unsatisfactory work, or for general undesirability as university students.

On recommendation of the instructor concerned and with the approval of the Dean, 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.

For more detailed information on codes of student conduct and discipline, see the Student Guide, which is available at the Student Activities Office.

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 regulations, TSC regulations, and instructions issued by administrative officials in the course of their duties.

When students violate the prescribed codes of behavior, disciplinary action may be initiated through the Office of the Vice President for Student Affairs.

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 Part One, Chapter VI, Section 3 and HOOP, §§ 6.4.1 and 6.4.2. Copies of these documents are available in the Office of the Vice President for Student Affairs. Student disciplinary information is also published in the Student Guide.

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 the TASP test. 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 first week of classes in the Fall and Spring semesters. After the Add and Drop period, a student may add or drop a course for academic reasons only with permission of the appropriate Dean. The determination of the Dean is final.

Students may not drop developmental courses except under extenuating personal circumstances and with the approval of the Director of Counseling and Guidance. After the Add/Drop period, a student may withdraw with a "W" from an academic course before the deadline at the Enrollment Office located at Tandy Hall 105. 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 and with the approval of the Dean, 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 a "WF" 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 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. "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. 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 Enrollment Office and pay the appropriate audit fee at the Business Office. 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." (Regents Rules and Regulations, Part One, Chapter VI, Section 3, Subsection 3.2, Subdivision 3.22.)

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 according to the number of semester credit hours of university credit they have earned.

- 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 – an undergraduate degree and have been 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

For each regular semester a 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.

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.

- 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 3301, means that the course is given at the junior level and carries three hours of credit per semester.

Course Schedule

A Course Schedule booklet is published before telephone 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.

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
G	Must Repeat Course	Not used in computing GPA *(Developmental courses only)*
I	Incomplete	Not used in computing GPA
P	Pass	Not used in computing GPA
Cr	Credit	Not used in computing GPA *(Advanced Placement and CLEP credit only)*
NR	No Grade Reported	Not used in computing GPA *(Enrollment Office use only)*
S	Satisfactory	Not used in computing GPA *(Non-course based remediation only)*
U	Unsatisfactory	Not used in computing GPA *(Non-course based remediation only)*
W	Withdrawal	Not used in computing GPA

Grades are awarded in courses in which students are officially enrolled after the last day to withdraw from a course without receiving a grade. This deadline to withdraw, one week before the beginning of final exams, 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.

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 by telephone may call 982-5800 during the times designated in the course schedule.

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	D	3 sem. hours	X 1 pts. per hour = 3
History	3314	A	3 sem. hours	X 4 pts. per hour = 12
Chemistry	3403	B	4 sem. hours	X 3 pts. per hour = 12
Kinesiology	1101	B	1 sem. hour	X 3 pts. per hour = 3
Total hours attempted			**14 sem. hours**	
Total grade points				**42 points**
Total grade points		**÷**	**Total semester hours attempted**	**=GPA**
42		**÷**	**14**	**= 3.00**

Grade Changes

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. If the grade change is made after graduation, for a course taken prior to graduation, the change request form must have written justification by the instructor, recommendation of the Department Chair, and approval by 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 an application for a degree to the Enrollment Office. Check the class schedule for deadline dates for submitting applications.

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

Graduation GPA

Graduation GPA is calculated on all credit course work attempted. Developmental course work is not included. For calculation, refer to Grades and Grade Point Averages scale.

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
  - receipt of transcripts at the Enrollment Office.
- The card is nontransferable. Loss or mutilation must be reported to the Circulation Desk at the Library. A charge of $5.00 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. A current valid Statement of Charges is required to obtain a photo ID or validate an ID Card.

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 course work in addition to that assigned to the entire 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 Enrollment Office.

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 2.0 is required for graduation. A Grade of C or better may be required in other courses, departments or degree programs. For example, students must have at least a C in each freshman-level English course and College Algebra. Students must also make an average of 2.0 in both their major and minor fields.

Students who expect to be certified as teachers must have a grade point average of 2.50 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 and the printed course schedule for each semester session. Information on registration procedures and deadlines may be obtained at the Academic Advising Center or at the Enrollment Office in Tandy Hall.

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 TASP 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

Refer to Academic Program Calendar.

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 16 weeks.

The Summer Session: The summer session is divided into two terms – Summer I and Summer II. Each sessions meets for classes approximately 500 minutes per week for five weeks.

Withdrawing From Classes

After the official record date, students may withdraw from classes other than developmental classes and receive a "W" on their permanent records. This deadline to withdraw, one week before the beginning of final examinations, 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.

The Drop/Add form must be date-stamped by the Enrollment Office for the drop/add to become official. The student is responsible for ensuring that the drop/add form is received at the Enrollment Office 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 will 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 Programs

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 Scholastic Standing	Conditional Progress	Scholastic Probation	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 2.0 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 Admissions 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 Subsequent 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 Admissions Committee for permission to enroll on a conditional basis. The appeals process has two parts, a written appeal and an appearance before the Admissions Committee.

Written Appeal

The written appeal to the Admissions Committee must explain extenuating circumstances which kept the student from meeting required academic standards. The written appeal must be submitted to the Admissions Committee before the late registration process begins for the semester in which the student seeks to enroll on a conditional basis.

Appearance Before the Admissions Committee

The appearance before the Admissions 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 Admissions Committee, contact the Counseling and Guidance Center in Tandy #205.

Scholastic Standards to be considered for Federal Financial Aid Programs (Undergraduates)

These requirements apply to the student's entire academic history, whether financial aid was received or not.

- Students with 0 to 59 credit hours earned are required to pass 70% of the courses they attempt.
- Students with 60 credit hours or more earned must pass 80% of the courses they attempt.
- Student must maintain a GPA within the Standards of Work as indicated in the Undergraduate Catalog.
- The maximum hours for receiving financial aid are 185 earned credit hours.

Suspension from Financial Aid

Students failing to meet any of the scholastic standards will be placed on financial aid suspension. No funds will be awarded until the student successfully completes a minimum of six credit hours, earning a "C" grade or better for *all attempted hours within one semester.* Student is responsible for payment of all tuition and fees during the suspension period.

Appeal of Suspension from Financial Aid

In some cases, appeals to financial aid suspension can be considered for extenuating circumstances. To appeal the suspension, students must submit to the Financial Assistance Office, a written appeal detailing unusual circumstances that prevented the student from meeting scholastic standards. Supporting documentation should be provided. Allow 10 days for appeals to be processed.

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: Full-time students who earn a 4.0 semester grade point average

Dean's List: Full-time students who earn a 3.5 to 3.99 semester grade point average

Phi Theta Kappa: Candidates for membership must have completed 12 semester hours of Associate Degree work with a grade point average of 3.5, 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 3.5 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 bachelor's 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 university-level 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

TESTING POLICIES

UTB/TSC is a test center for a variety of institutional and national standardized examinations. They include:

- American College Test (ACT)
- Scholastic Aptitude Test (SAT)
- Texas Academic Skills Program Test (TASP) – paper and pencil; computer-based
- Graduate Record Examination (GRE) – computer-based
- Graduate Management Admissions Test (GMAT) – computer-based
- Credit by Examination Testing Program
- Medical College Admissions Test (MCAT)
- Test of English as a Foreign Language (TOEFL) – computer-based
- Quick TASP

In addition, UTB/TSC also has test registration bulletins for several testing programs. For more information, contact the Testing Office at 544-8875.

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 TASP test,

– 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 on 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 ~~such~~ 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 appear below.

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 in Tandy Hall.

Texas Academic Skills Program (TASP)

The TASP test is designed to measure college readiness in reading, writing and mathematics.

In accordance with Texas Education Code, §51.306, all students in the following categories who enter public institutions of higher education must take the TASP test:

- All full-time and part-time freshman enrolled in a certificate program degree program; and
- Any other student, including transfers from private or out-of-state institutions, prior to the accumulation of nine or more college-level semester credit hours or the equivalent in a Texas public institution of higher education.

The law exempts the following categories of students:

- those who have earned at least three college-level semester credit hours before Fall 1989.
- those who have a composite score on the TAAS, ACT, or SAT at or above the level set by the Texas Higher Education Coordinating Board. A current list of qualifying standards can be found in the TASP Registration Bulletin or at the THECB web site at http://www.thecb.state.tx.us.
- blind and deaf students until September 1, 1995. Effective this date, blind students must take the TASP test, but only if the test is administered with proper accommodations, and deaf students must take the Stanford Achievement Test as nationally normed on the hearing-impaired population by Gallaudet University.
- those in certificate programs of less than one year.
- those who enroll on a temporary basis and are also enrolled in a private or independent institution of higher education or an out-of-state institution of higher education or have graduated from an institution of higher education.

Students with three or more semester credit hours or the equivalent awarded prior to the Fall semester 1989 are exempt from the Texas Academic Skills Program regardless of any election pursuant to the "academic fresh start" statute, §51.929, Texas Education Code. An institution may also exempt a person 55 years of age or over who is not seeking a degree or certificate.

Transfer Student TASP Requirements

Students who are enrolling on a temporary basis only may be exempt from these requirements when appropriate documentation is submitted.

Students who are enrolling on a temporary basis only may be waived from these requirements when appropriate documentation is submitted. For information, visit the Testing Office in Tandy #216.

Students transferring to UTB/TSC from a private or out-of-state institution must meet TASP requirements prior to being allowed to enroll in any collegiate-level work. Students who transfer to UTB/TSC with 60 or more semester credit hours or the equivalent must take and pass all sections of TASP or an approved alternative test prior to enrolling in any upper-division coursework. Students who fail one or more sections of TASP or an approved alternative test will be limited to lower division and developmental coursework only.

Students transferring from a Texas public institution to UTB/TSC are responsible for ensuring that UTB/TSC receives an official TASP score. Official scores are:

1. Sent directly from the testing company or
2. Reported on an official transcript.

TASP Policies

1. Students who fail one ore more parts of the TASP test or an approved alternative test must register for developmental courses or enroll in developmental programs in each area they failed until they meet standards set by the State of Texas.
2. No student may withdraw from a developmental course except under extenuating circumstances and with permission of the appropriate Dean. Financial aid recipients should consult a financial aid advisor before withdrawing from developmental courses.
3. Students who fail to remain in a state-required developmental program or fail to attend developmental courses will be automatically withdrawn from all college-level courses.
4. On completion of the developmental coursework, the student shall retake that portion of the TASP for which developmental education was required.
5. A student who initially fails one or more sections of the TASP test or an approved alternative test must successfully complete the developmental program(s) prescribed by the institution and must then retake the appropriate sections of the TASP test. A student who fails the retake may then be allowed to take a collegiate level course in the appropriate skill area to satisfy the TASP requirement. A student who earns a grade of "B" or better in such a course shall not be required to achieve the minimum passing standard on the TASP test and shall not be prohibited from graduation or continuing with his/her Program of Study. It is after this sequence, test-developmental coursework-test, that the "B" or better rule may be applied.

The following courses have been approved by the Texas Higher Education Coordinating Board for applying the "B" or better rule.

Writing

ENGL 1301	Composition I, or
ENGL 1302	Composition II

Reading (courses selected for reading at any institution must be reading intensive)

HIST 1301 or HIST 1302	U.S. History
ENGL 2322 or ENGL 2323	British Literature
ENGL 2332 or ENGL 2333	World Literature
PSYC 2301	General Psychology, or
GOVT 2301, 2302	American Government

Mathematics

MATH 1332	Mathematics for Liberal Arts
MATH 1314	College Algebra, or
MATH 1316	Trigonometry or higher
MATH 1324	Business Algebra

6. Students who have not satisfied all three skill areas of TASP by achieving the minimum required score or by completing the "B" or better sequence may not register for any 3000-4000-level courses if the number of college hours they already have earned plus the number of hours for which they register totals 60 or more.
7. Concurrent enrollment students and international students are subject to the same TASP requirements as all other students.
8. TASP scores are considered official only if they are sent directly from the testing company to UTB/TSC, or if they appear on an official transcript from another Texas college or university.
9. Students must satisfy all three skill areas of TASP by achieving the minimum required score or by completing the "B" or better sequence prior to completion and award of a certificate or degree.

Additional TASP information, including the rules adopted by the Texas Higher Education Coordinating Board, and information about special provisions relating to certain disabilities, is available at the Testing Office, Tandy Hall #216.

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 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.

1 Refer to the respective School or College for course selection recommendations for particular degree programs.

2 Does not have to be in the same science; must include two semester credit hours of associated laboratory experience

3 Music majors may take modern language courses in two different languages.

College of Liberal Arts

Certificates & Degrees Offered

Behavioral Sciences Department

Psychology
- Bachelor of Arts – Psychology
- Psychology Minor

Social Work
- Associate in Arts in Social Work

Sociology
- Bachelor of Arts – Sociology

Sociology Minor
- Master of Arts in Interdisciplinary Studies – Sociology

Criminal Justice Department

Associate in Science – Criminal Justice
Bachelor of Science in Criminal Justice – Police Administration
Bachelor of Science in Criminal Justice – Correctional Administration
Criminal Justice Minor

English and Speech Department

Bachelor of Arts – English (Non-teaching)
Bachelor of Arts Teacher Certification in English Language Arts (4th – 8th grade)
Bachelor of Arts Teacher Certification in English Language Arts (8th – 12th grade)
Master of Arts – English
Master of Arts in Interdisciplinary Studies – English

Fine Arts Department

Art
- Associate in Fine Arts – Art
- Bachelor of Arts – Art
- Art Minor
- Art History Minor

Music
- Associate in Fine Arts – Music
- Bachelor of Arts – Music
- Music Minor (Applied Music)

Modern Languages Department

Associate in Arts – Spanish Translation
Bachelor of Arts degree – Translation Studies Minor
Bachelor of Arts – Spanish
Spanish Minor
Master of Arts – Spanish
Master of Arts in Interdisciplinary Studies – Spanish Concentration
Master of Arts in Interdisciplinary Studies – Interpreting supporting field

Social Sciences Department

Government
- Bachelor of Arts – Government
- Government Minor
- Master of Arts in Interdisciplinary Studies – Government

Behavioral Sciences Department

The Behavioral Sciences Department offers Bachelor of Arts degrees in sociology and psychology and minors in sociology, psychology, and an Associate in Arts degree in Social Work. Other course offerings are in anthropology. The Behavioral Sciences Department prepares students for careers in public and private agencies dealing with human relations. The programs of study are also designed to prepared interested students for graduate school which is required for careers in the more challenging and specialized fields. High academic standards are required of those students planning to do graduate work in the behavioral sciences.

Students majoring in psychology or sociology are encouraged to complete a Declaration of Major form during the sophomore year. This form may be obtained from the Academic Resource Coordinator (ARC) in the South Hall, #253. This begins the academic advising process. Once students have declared a major in the Behavioral Sciences Department they will be assigned a faculty advisor. Students are encouraged to consult with their faculty advisor as soon as possible to plan their course of study.

Psychology

Bachelor of Arts – Psychology; Psychology Minor

A major in psychology offers the student an opportunity to enter various careers in such fields as counseling, medicine, social welfare, business and law.

A student majoring in psychology must complete a minimum of 34 hours of psychology, 18 of which must be upper division. An additional 18 hours in another discipline for a minor must be included to complete a total of 124 semester hours required for the degree. Courses in introduction, statistics, research methods, and senior seminar are required of all majors.

Program of Study

Bachelor of Arts – Psychology

General Education Core Curriculum	48 hours
Psychology Major	34 hours
Minor Requirement	minimum 18 hours
Electives	
*Total number of hours required	124 hours

* 36 hours must be advanced (3000, 4000 level)

Psychology Major Requirement

PSYC	2301	Introduction to Psychology	3
PSYC	2317	Statistics of Psychology and Sociology	3
PSYC	3301	Research Methods in Psychology	3
PSYC	4101	Senior Seminar	1

Students are required to take at least one course in Category A: Psychology as a Field of Study, and Category B: Psychology as a Science. Students are required to take at least two courses from Category C: Psychology as an Application of Knowledge. Students may take additional courses from any of the categories according to their interests. Students are encouraged to discuss these options with their faculty advisors.

Category A: Psychology as a Field of Study **3**

PSYC	2308	Child Psychology
PSYC	2314	Life-span Development
PSYC	3326	Social Psychology
PSYC	3302	Adolescent Psychology

PSYC	3303	Adulthood and Aging	
PSYC	3363	Human Sexuality	
PSYC	4312	Psychology of Gender	
PSYC	4313	Abnormal Psychology	
PSYC	4333	Theories of Personality	
PSYC	4363	History and Systems	
PSYC	4374	Topics in Psychology	
Category B: Psychology as a Science			**3**
PSYC	3318	Theories of Learning	
PSYC	3322	Biopsychology	
PSYC	4302	Advanced Statistics for Psychology	
PSYC	4319	Cognitive Psychology	
PSYC	4322	Sensation and Perception	
Category C: Psychology as an Application of Knowledge			**6**
PSYC	4305	Behavior Management and Modification	
PSYC	3324	Health Psychology	
PSYC	3343	Testing and Measurement	
PSYC	4306	Conflict Resolution	
PSYC	4356	Industrial and Organizational Psychology	
PSYC	4360	Clinical and Counseling Psychology	
PSYC	4380	Independent Study	
* Psychology Electives (6 hours must be advanced)			12
Total Psychology hours required			34

Psychology Minor

A minor in psychology requires 18 semester hours in psychology, of which nine must be advanced, and must include PSYC 2301.

Social Work

Associate in Arts Degree in Social Work

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 Bachelor's degree in Social Work. A total of 63 hours are required for the Associate in Arts degree in Social Work.

Program of Study

Associate in Arts in Social Work

General Education Core Curriculum	48 hours
Degree Elements	15 hours
Total number of hours required	63 hours

A.A. Social Work Requirements

General Education Core Curriculum	48 hours
Degree Elements	15 hours

A. 3 hours of electives.
Computer literacy highly recommended (COSC 1310 or other COSC course)

B. Behavioral Science (12 hours)
3 semester hours of Psychology (PSYC 2301)
3 semester hours of Sociology (SOCI 1301)
6 semester hours of Social Work (SOCW 2361, 2362)

Sociology

Bachelor of Arts – Sociology Major; Sociology Minor

A major in sociology offers the student an opportunity to enter various careers in such fields as business, law, international development, medicine, and social welfare. A student majoring in sociology must complete 34 hours in sociology; 18 hours must be advanced. Training in statistics, research methods, and theory are required of all majors. An additional 18 hours of another discipline as a minor is also required. A total of 124 semester hours are required for the degree.

Program of Study

Bachelor of Arts – Sociology

General Education Core Curriculum	48 hours
Sociology Major	34 hours
Minor Requirement	minimum 18 hours
Electives	
*Total number of hours required	124 hours
* 36 hours must be advanced (3000, 4000 level)	
Sociology Major Requirement	34 hours

Required Courses

SOCI	1301	Introduction to Sociology	3
SOCI	2317	Statistics of Psychology and Sociology	3
SOCI	3305	Methods of Social Research	3
SOCI	3335	Social Theory	3
SOCI	4184	Senior Seminar	1

Distribution Courses

Students must select at least one course in each of the following thematic areas; Community, Stratification, Authority and Alienation. At least one of these courses must be at the 4000 level. A total of five distribution courses (15 credits) are required. Students must also choose two additional courses (6 credit hours) from either the thematic areas or the Elective Courses listed below. Students are encouraged to discuss course options with their faculty advisors in order to select courses which reflect their interests and career plans.

Category 1: Community

SOCI	2301	Marriage and Family
SOCI	3333	American Communities
SOCI	4323	The Mexican American People
SOCI	4325	Population and Migration Problems

Category 2: Stratification

SOCI	3363	Sex and Gender
SOCI	3364	Minorities
SOCI	4352	Social Inequality

Category 3: Authority

SOCI	3324	Health Systems
SOCI	3373	Mass Communications and Culture
SOCI	3374	Religion in Society
SOCI	4375	Organizations and Work

Category 4: Alienation

SOCI	1306	Social Problems
SOCI	3313	Criminology
SOCI	3393	Aging
SOCI	4314	Deviance

Electives: 6 hours; choose from these or thematic areas listed above

SOCI	4311	El Contexto Social de la Novela Mexicana
SOCI	4383	Independent Study

Sociology Minor

A minor in sociology requires 18 semester hours in sociology, which must include SOCI 1301, SOCI 3335 and SOCI 4352. At least 12 credit hours must be advanced.

Criminal Justice Department

Associate in Applied Science Degree (Criminal Justice),
Bachelor of Science in Criminal Justice (Police Administration, Correctional Administration)

Criminal Justice Minor

A major in criminal justice offers students the opportunity to prepare to enter careers in law enforcement, criminal justice planning and research, probation, parole, institutional corrections, youth services, or police management at all levels of government. The degree program also offers an excellent background for individuals interested in private and/or industrial security. The well-rounded academic experience offered by the Criminal Justice Program additionally serves as a strong foundation for students interested in graduate study in criminal justice.

Curriculum

The criminal justice curriculum is designed for students currently employed in a criminal justice related occupation; for students planning to pursue a Bachelor's degree in criminal justice or a related discipline; or for students wishing to be employed in other areas of criminal justice.

Program Areas

The criminal justice academic program offers graduates the opportunity to obtain the knowledge to:

- understand the American system of criminal justice in relation to the political, socioeconomic, religious, and philosophical influences which affect it;
- cooperate with the various agencies which make up the American criminal justice system;
- understand the basic concepts behind laws, the actions of law enforcement agencies, court proceedings, and correctional ideologies and practices;
- know and communicate the rights of individuals under criminal proceedings as enumerated in the U.S. Constitution and the U.S. Bill of Rights;
- identify the different components of the criminal justice system and the purposes and objectives of these components and their places in our society;
- apply the above concepts in practical settings and situations;
- transfer to an upper division academic institution to attain a higher degree in criminal justice or closely related discipline;
- meet or exceed minimal education requirements for employment in a variety of criminal justice agencies.

Program of Study

Associate in Applied Science – Criminal Justice

Criminal Justice	21 hours
General Education Core Curriculum	41 hours
Electives	3 hours
Total	65 hours

Freshman Year

First Semester			Credit hours
CJSA	1322	Introduction to Criminal Justice	3
ENGL	1301	Composition I **	3
SOCI	1301	Introduction to Sociology	3
SPCH	1315	Fundamentals of Speech	3
KINE		KINE activity or health/wellness course	1
		Elective***	3
Total hours			**16**

Second Semester			**Credit hours**
CRIJ	1310	Fundamentals of Criminal Law	3
ENGL	2311	Technical and Business Writing**	3
HIST	1301	U.S. to 1877	3
ARTS	1301	Art Appreciation or	
MUSI	1306	Music Appreciation	3
COSC	1310	Computer Literacy+	3
KINE		Any KINE activity	1
Total hours			**16**

Summer Session

PSYC	2301	Introduction to Psychology	3

Sophomore Year

First Semester			**Credit hours**
CRIJ	2313	Correctional Systems & Practices*	3
CRIJ	2322	Juvenile Justice Systems*	3
GOVT	2301	American Government I	3
CRIJ		Elective (1000 or 2000 level)	3
MATH	1332	Math for Liberal Arts**	3
Total hours			**15**

Second Semester			**Credit hours**
CRIJ	2328	Police Systems & Practices*	3
HIST	1302	United States from 1877	3
ENGL		English Literature (2000 level)	3
GOVT	2302	American Government II	3
CJSA	2388	Criminal Justice External Learning	3
Total hours			**15**
Total number of hours required			**65 hours**

**Must have completed ENGL 1301 and ENGL 2311 with a grade of "C" or better. ENGL 2311 may be concurrent enrollment with approval from instructor.*

***Must pass with a minimum grade of "C."*

**** Electives may be any non-developmental college course not previously taken, preferably in the Social Science, Computer Science, Biological Science or Modern Language area.*

+Can substitute COSC 1305 or any higher COSC course if proficiency allows.

Program of Study

Bachelor of Science in Criminal Justice – Police Administration

The Bachelor of Science in Criminal Justice degree with an emphasis in police administration offers students the opportunity to prepare to enter a career in law enforcement at any level of government or in the field of private/corporate security. The criminal justice degree in police administration is a four-year degree program. The police administration major is a broad field major incorporating sociology, psychology and government.

General Education Core Curriculum	**48 hours**
Criminal Justice Core	**27 hours**

CRIJ	1301	Introduction to Criminal Justice

CRIJ	1310	Fundamentals of Criminal Law
SOCI	1301	Introduction to Sociology
CRIJ	1313	Juvenile Justice System
CRIJ	3302	Current Lit and Research in Criminal Justice
CRIJ	3303	Nature of Crime
CRIJ	4301	Practicum-Field Experience
GOVT	4321	American Constitutional Law: Civil Liberties
CRIJ	4370	Senior Seminar in Criminal Justice Policy Issues

Police Administration Concentration **15 hours**

CRIJ	2328	Police Systems and Practices
CRIJ	3315	Legal Aspects of Evidence
CRIJ	4311	Advanced Police Organization & Administration
CRIJ	4312	Principles of Law Enforcement
CRIJ	4313	Seminar of Issues in Law Enforcement

Criminal Justice Electives **12 hours**

Select four courses from those designated as CRIJ not previously taken for credit.*

Interdisciplinary Social Science Support Courses **18 hours**

Six advanced (3000-4000 level) semester credit hours from each of the following three disciplines: sociology, psychology, government.

Free Electives **6 hours**

Total hours **126 hours**

*CRIJ 4362 Special Topics in Criminal Justice may be taken twice for credit.

Courses taken in high school law enforcement programs under Tech-Prep must be evaluated by the student's criminal justice faculty advisor to ensure they are applied to the appropriate degree. CJSA courses do not apply to this degree.

PROGRAM OF STUDY

Bachelor of Science in Criminal Justice – Correctional Administration

The Bachelor of Science in Criminal Justice degree with an emphasis in corrections offers students the opportunity to prepare to enter a career in various aspects of adult and juvenile corrections whether at institutions or in probation, parole, or other forms of community-based correctional treatment. The corrections major is also a broad field major incorporating sociology, psychology and government.

General Education Core Curriculum **48 hours**

Criminal Justice Core **27 hours**

CRIJ	1301	Introduction to Criminal Justice
CRIJ	1310	Fundamentals of Criminal Law
SOCI	1301	Introduction to Sociology
CRIJ	1313	Juvenile Justice System
CRIJ	3302	Current Lit and Research in Criminal Justice
CRIJ	3303	Nature of Crime
CRIJ	4301	Practicum-Field Experience
GOVT	4321	American Constitutional Law: Civil Liberties
CRIJ	4370	Senior Seminar in Criminal Justice Policy Issues

Correctional Administration Concentration **15 hours**

CRIJ	2313	Correctional Systems and Practices
CRIJ	3331	Legal Aspects of Corrections
CRIJ	3345	Correctional Administration
CRIJ	4341	Correctional Casework and Counseling
CRIJ	4343	Seminar of Issues in Corrections

Criminal Justice Electives **12 hours**

Select four courses from those designated as CRIJ not previously taken for credit.*

Interdisciplinary Social Science Support Courses **18 hours**

Six advanced (3000-4000 level) semester credit hours from each of the following three disciplines: sociology, psychology, government.

Free Electives **6 hours**

Total hours **126 hours**

*CRIJ 4362 Special Topics in Criminal Justice may be taken twice for credit.

Courses taken in high school law enforcement programs under Tech-Prep must be evaluated by the student's criminal justice faculty advisor to ensure they are applied to the appropriate degree. CJSA courses do not apply to this degree.

Criminal Justice Minor

The minor in Criminal Justice is intended for students whose area of major academic expertise could benefit from a specified concentration of criminal justice coursework.

Requirements: 18 semester hours of Criminal Justice, 9 hours of which must be advanced (3000-4000 level); must include CRIJ 1301 and CRIJ 3302.

ENGLISH & SPEECH DEPARTMENT

Bachelor of Arts – English Major

The Department of English and Speech offers a major in English which provides training in the study of language, literature, and composition. This course of study is designed to improve students' skills as readers, writers, thinkers, and researchers. Such analytical and communication competencies – along with other skills acquired through the study of English, such as academic discipline, an understanding of the nature of language, and technological skills – provide students with a foundation for continued study, for entrance into the work world, and for the pursuit of lifelong learning.

Bachelor of Arts – English Language Arts (4th-8th grades)

Bachelor of Arts – English Language Arts (8th-12th grades)

The Department of English and Speech with the School of Education also offers two teacher-certification programs in English Language Arts, 4th-8th and 8th-12th grades. These courses of study are designed to improve students' skills as readers, writers, thinkers, and researchers and to prepare students for careers as English Language Arts teachers.

English

Bachelor of Arts – English

The bachelor's degree with a major in English requires 39 hours of advanced credit in English language and literature. Prior to beginning studies toward the English major, students must have completed ENGL 1301 (Composition I), ENGL 1302 (Composition II), and three hours of 2000-level literature courses with a minimum G.P.A. of 2.75.

The 39 advanced hours must include the core courses for the major and a distribution of courses in language, literature, and composition. Before or during the first semester of enrollment in any upper-division (3000-4000-level) literature course, students must complete ENGL 3302, Literary Analysis, with a grade of C or higher. Students who do not complete ENGL

3302 with a grade of C or higher must repeat the course and earn a grade of C or higher before enrolling in any further upper-division literature courses. All majors must successfully complete the capstone course ENGL 4350 (English Studies: The Theory and Practice) and ENGL 4325 (Composition Techniques) in their final year and must submit a portfolio prior to graduation. With their advisors' approval, students may elect to use up to 6 hours of upper-division courses in Spanish literature to meet the 39-hour requirement. Students who choose this option can earn a biliteracy acknowledgment in literature on their transcripts.

Courses of study leading to the bachelor's degree in English do not require a minor concentration. If students pursuing a degree without teacher certification wish to develop a second concentration, however, they may choose a minor field from one of the following areas: Art, Art History, Biology, Chemistry, Computer Science, Criminal Justice, Government, History, Kinesiology, Mathematics, Music (Applied Music), Physics, Psychology, Sociology, and Spanish.

PROGRAM OF STUDY

Bachelor of Arts in English (Non-Teaching Option Without A Minor)

General Education Core Curriculum			48 hours
Core Courses for the English Major			18 hours
ENGL	3302	Literary Analysis	
ENGL	3312		
	or 3313	Survey of American Literature I or II	
ENGL	3319	Introduction to Descriptive Linguistics	
ENGL	4301	Shakespeare	
ENGL	4325	Composition Techniques	
ENGL	4350	English Studies: The Theory and Practice	
English Electives (3000 and 4000 level courses)			21 hours
Free Electives			37 hours
Total Number of hours Required*			124 hours

* 36 hours must be advanced (3000, 4000 level)

PROGRAM OF STUDY

Bachelor of Arts in English (Non-Teaching Option With A Minor)

General Education Core Curriculum			48 hours
Core Courses for the English Major			18 hours
ENGL	3302	Literary Analysis	
ENGL	3312		
	or 3313	Survey of American Literature I or II	
ENGL	3319	Introduction to Descriptive Linguistics	
ENGL	4301	Shakespeare	
ENGL	4325	Composition Techniques	
ENGL	4350	English Studies: The Theory and Practice	
English Electives (3000 and 4000 level courses)			21 hours
Minor Concentration			18-30 hours

(available in Art, Art History, Biology, Business, Chemistry, Computer Science, Criminal Justice, Government, History, Kinesiology, Mathematics, Music, Physics, Psychology, Sociology, and Spanish, Spanish Translation)

Free Electives	7-19 hours
Total number of hours required*	124 hours

** 36 hours must be advanced (3000, 4000 level)*

PROGRAM OF STUDY

Bachelor of Arts Teacher Certification Plan English Language Arts (4th-8th Grade)

The Bachelor of Arts Teacher Certification Plan for English Language Arts 4th-8th grade requires 27 hours of upper-division (3000-and 4000-level) English literature and language courses and 3 additional hours of 2000-level literature beyond the 3 hours of 2000-level literature required in the General Education Core Curriculum.

Prior to enrolling in upper-division literature courses students must have completed ENGL 1301 (Composition I), ENGL 1302 (Composition II), and six hours of 2000-level literature courses with a minimum G.P.A. of 2.75. Before or during the first semester of enrollment in any upper-division (3000-4000-level) literature course, students must complete ENGL 3302, Literary Analysis, with a grade of C or higher. Students who do not complete ENGL 3302 with a grade of C or higher must repeat the course and earn a grade of C or higher before enrolling in any further upper-division literature courses. Students must successfully complete the capstone course ENGL 4350 (English Studies: The Theory and Practice) and ENGL 4325 (Composition Techniques) in their final year.

General Education Core Curriculum			48 hours
2000-level literature beyond the Core			3 hours
Required 3000- and 4000-level language and literature courses			27 hours
ENGL	3302	Literary Analysis	
ENGL	3312		
	or 3313	Survey of American Literature I or II	
ENGL	3319	Introduction to Descriptive Linguistics	
ENGL	3330	English Grammar	
ENGL	3331	History of the English Language	
ENGL	4301	Shakespeare	
ENGL	4325	Composition Techniques	
ENGL	4328	Introduction to English as a Second Language	
ENGL	4350	English Studies: The Theory and Practice	
Pedagogy, professional responsibility, support, and other certification field required courses			60 hours
Total number of hours required			138 hours

PROGRAM OF STUDY

Bachelor of Arts Teacher Certification Plan English Language Arts (8th-12th Grade)

The Bachelor of Arts Teacher Certification Plan for English Language Arts 8th-12th grade requires 45 hours of upper-division (3000- and 4000-level) English literature and language courses.

Prior to enrolling in upper-division literature courses students must have completed ENGL 1301 (Composition I), ENGL 1302 (Composition II), and six hours of 2000-level literature courses with a minimum G.P.A. of 2.75. Before or during the first semester of enrollment in any upper-division (3000-4000 level) literature course, students must complete ENGL 3302, Literary Analysis, with a grade of C or higher. Students who do not complete ENGL 3302 with a grade of C or higher must repeat the course and earn a grade of C or higher before enrolling in any further upper-division literature courses. Students must successfully complete the capstone course ENGL 4350, English Studies: The Theory and Practice; and ENGL 4325, Composition Techniques in their final year.

General Education Core Curriculum	48 hours
Required 3000- and 4000-level language and literature courses	30 hours

ENGL	3302	Literary Analysis	
ENGL	3309	Major British Authors*	
ENGL	3312		
	or 3313	Survey of American Literature I or II	
ENGL	3319	Introduction to Descriptive Linguistics	
ENGL	3330	English Grammar	
ENGL	3331	History of the English Language	
ENGL	4301	Shakespeare	
ENGL	4325	Composition Techniques	
ENGL	4328	Introduction to English as a Second Language	
ENGL	4350	English Studies: The Theory and Practice	

3000- and 4000-level elective literature courses 15 hours
Pedagogy, professional responsibility, and other certification field required courses 45 hours
Total number of hours required 138 hours

FINE ARTS DEPARTMENT

Associate in Fine Arts – Art
Bachelor of Arts – Art
Art Minor
Art History Minor
Music
Associate in Fine Arts – Music
Bachelor of Arts – Music
Music Minor (Applied Music)
Art

PROGRAM OF STUDY

Associate in Fine Arts (A.F.A.) in Art

General Education Courses 32 hours

Composition

ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315	Fundamentals of Speech or	
SPCH	1318	Interpersonal Communications or	
SPCH	1321	Business and Professional Communication	3

Science (Select any one 4-hour science course) or

Mathematics (select one) 3-4

MATH	1314	College Algebra
MATH	1324	Business Algebra
MATH	1332	Math for Liberal Arts
MATH		Higher-Level Math Course

American History

HIST	1301	United States to 1877	3
HIST	1302	United States from 1877	3

American Government

GOVT	2301	American Government I	3
GOVT	2302	American Government II	3

Kinesiology

KINE	Kinesiology Activity	1

Modern Language (other than English) 6
Art Courses (Minimum 30 hours) 30

The Department recommends the use of the Art Minor to fulfill these 30 hours of art courses

Electives
Recommended – COSC
Additional
Total number of hours required 62 hours

Art

PROGRAM OF STUDY

Bachelor of Arts – Art (Teacher Certification – All Level)

General Education Core Curriculum 48 hours
Art Major Courses 60 hours
Professional Development 24 hours
Reading (READ 4351) 3 hours
Total number of hours required 135 hours

Art Major

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
ARTS	3381	Perception and Expression in Art I	3
ARTS	3384	Perception and Expression in Art II	3
ARTS	3383	Art in the Secondary School	3
ARTS	4393	Senior Exhibit	3

Nine hours from the following courses: 9

ARTS	2313	Computer Imaging I
ARTS	2316	Painting I
ARTS	2233*	Drawing III
ARTS	2333	Printmaking I
ARTS	2356	Photography
ARTS	2326	Sculpture I
ARTS	2346	Ceramics I

Nine hours from the following courses: 9

ARTS	2313	Computer Imaging I
ARTS	2317	Painting II
ARTS	2233*	Drawing III
ARTS	2334	Printmaking II
ARTS	2357	Photography II
ARTS	2327	Sculpture II
ARTS	2347	Ceramics II

15 hours from the following courses: 15

ARTS	3303	Italian Renaissance Art (1400-1650)
ARTS	3352	Contemporary Art
ARTS	3382	19th Century European Art History (1789-1900)
ARTS	4353	American Art
ARTS	4354	Latin American Art & Architecture
ARTS	4355	Span Medieval, Renaissance & Baroque Art
ARTS	4387	Far Eastern Art History
ARTS	3314^	Individual Problems
ARTS	3321^	Advanced Painting
ARTS	3323^	Advanced Drawing
ARTS	3326^	Advanced Sculpture
ARTS	3371^	Advanced Ceramics
ARTS	4331^	Advanced Computer Imaging

ARTS	4333^	Graphic Design
ARTS	4391^	Studio Art General
ARTS	4337	Internship in Art Studio

Note: All art majors must take at least 6 hours of advanced art history

@ ARTS 1303 Art History Survey I is counted as part of the humanities core requirement

** May be used for credit in only one area*

^ May be repeated four times for credit

Professional Development Courses (For Art – 24 hours)

EDCI	4301	Foundations of Education in a Multicultural Society	3
EDCI	4305	Instructional Planning & Curriculum Develop.	3
EDCI	4306	Instructional Methods and Classroom Mgmt.	3
EDCI	4374	Secondary Curriculum	3
EDCI	4377	Methodology & Tech Teaching Art in Sec Sch	3
EDCI	4311	Residency (Student Teaching)	3
EDCI	4398	Student Teaching – Secondary II	3
Choose one of the following courses:			3
EDCI	4302	Educational Psychology in Elem Sch	
EDCI	4303	Understanding Learners & Living Environment	

PROGRAM OF STUDY

Bachelor of Arts – Art (Non-Teaching Degree)

General Education Core Curriculum	48 hours
Art Courses	75 hours
Electives	3 hours
Total number of hours required	126 hours

Students planning to major in art must complete 75 hours of art courses, 39 of which must be upper division.

Art Major

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
ARTS	4310	Senior Experience in Art	3
ARTS	4393	Senior Exhibit	3
Nine hours from the following courses:			**9**
ARTS	2313	Computer Imaging I	
ARTS	2316	Painting I	
ARTS	2233*	Drawing III	
ARTS	2333	Printmaking I	
ARTS	2356	Photography I	
ARTS	2326	Sculpture I	
ARTS	2346	Ceramics I	
Nine hours from the following courses:			**9**
ARTS	2313	Computer Imaging I	
ARTS	2317	Painting II	
ARTS	2233*	Drawing III	
ARTS	2334	Printmaking II	
ARTS	2357	Photography II	
ARTS	2327	Sculpture II	
ARTS	2347	Ceramics II	
6 to 12 hours from the following courses:			**6-12**
ARTS	3303	Italian Renaissance Art (1400-1650)	
ARTS	3352	Contemporary Art	
ARTS	3382	19th Century European Art History (1789-1900)	
ARTS	4353	American Art	
ARTS	4354	Latin American Art & Architecture	
ARTS	4355	Span Medieval, Renaissance & Baroque Art	
ARTS	4387	Far Eastern Art History	
24-30 hours from the following courses:			**24-30**
ARTS	3314^	Individual Problems	
ARTS	3321^	Advanced Painting	
ARTS	3323^	Advanced Drawing	
ARTS	3326^	Advanced Sculpture	
ARTS	3371^	Advanced Ceramics	
ARTS	4331^	Advanced Computer Imaging	
ARTS	4333^	Graphic Design	
ARTS	4391^	Studio Art General	
ARTS	4337	Internship in Art Studio	

Note: All art majors must take at least 6 hours of advanced art history

@ ARTS 1303 Art History Survey I is counted as part of the humanities core requirement

* May be used for credit in only one area

^ May be repeated four times for credit

Art Minor

The bachelor's degree with a minor in art requires 30 semester hours in art, nine of which must be advanced.

Course	**Credit 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
Three hours of the following courses:			3
ARTS	2316	Painting I	
ARTS	2346	Ceramics I	
ARTS	2326	Sculpture I	
ARTS	2313	Computer Imaging I	
ARTS	2333	Printmaking I	
Upper-division Art History and/or Studio			**9**
Total			**30**

Note: This is not a teaching certification minor.

Art History Minor

The bachelor's degree with a minor in art history requires 18 semester hours in art, 12 of which must be advanced.

Course	Credit hours
Art History Survey I and II	6
Upper-division Art History	12
Total	18

Note: This is not a teaching certification minor.

Art Minor – Secondary Option II (36 hours)

All students seeking Option II certification must complete the following 8 hours of core art courses:

ARTS	1303	Art History Survey I
ARTS	1304	Art History Survey II

ARTS	1311	Two Dimensional Design
ARTS	1312	Three Dimensional Design
ARTS	1316	Drawing I
ARTS	1317	Drawing II

Additionally the student must select from one of the following tracks:

Track 1

ARTS	2346	Ceramics I
ARTS	2347	Ceramics II
ARTS	3371	^ Advanced Ceramics

Track 2

ARTS	2316	Painting I
ARTS	2317	Painting II
ARTS	3321	^ Advanced Painting

Track 3

Choose 18 hours from the following:

ARTS	3303	Italian Renn Art
ARTS	3352	Contemporary Art
ARTS	3382	19th Century European Art
ARTS	4353	American Art
ARTS	4354	Latin American Art & Architecture
ARTS	4355	Span Med-Baroque Art
ARTS	4387	Far Eastern Art

Track 4

ARTS	3323	Advanced Drawing
ARTS	3314	Individual Problems

^Must be repeated four times for credit

Music

Program of Study

Associate in Fine Arts (A.F.A.) in Music

General Education Courses			**32 hours**
Composition			
ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315	Fundamentals of Speech or	
SPCH	1318	Interpersonal Communications or	
SPCH	1321	Business and Professional Communication	3
Science (Select any one 4-hour science course) or			
Mathematics (select one)			3-4
MATH	1314	College Algebra	
MATH	1324	Business Algebra	
MATH	1332	Math for Liberal Arts	
MATH		Higher-Level Math Course	
American History			
HIST	1301	United States to 1877	3
HIST	1302	United States from 1877	3
American Government			
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
Kinesiology			
KINE		Kinesiology Activity	1
Modern Language (other than English)			6
Total General Education Courses			**32**
Music Courses (Minimum 30 hours)			**30**

The department recommends the use of the Music Minor to fulfill these 30 hours of music courses

Electives			
Recommended – COSC			
Additional Electives			
Total number of hours required			**62 hours**

Minor in Jazz Studies

MUSI	1263	Jazz Improvisation & Theory (2 semesters)	4
MUSI	3363	Intermediate Improvisation	3
MUSI	2310	Special Topic– J azz History & Interpreting	3
MUSI	1115	Keyboard Skills II– Chord Voicing	3
MUSI	3311	Jazz Arranging #	3
MUSI	3136	Upper Level Jazz Ensemble (4 semesters)	4
		(8 hours lower level & 10 hours upper)	*18*

**Prerequisite MUSI 1311 Music Theory I*

#Prerequisite MUSI 1114 Keyboard Skills I

Music Minor

MUSI	1181	Class Piano	1
MUSI	1308	Music Literature I	3
MUSI	1311	Music Theory I	3
MUSI	1312	Music Theory II	3
MUSI	3289	Introduction to Conducting	2
MUSI	3304	Elementary Music Techniques – General	3
MUSI		lower division ensemble (4 semesters)	4
MUSI		upper division ensemble (4 semesters)	4
MUAP		Applied Music (2 semesters)	4
Total			**27**

Note: student must be enrolled in MUSI 1181 piano class until the piano exam is passed.

Also note this is not a teaching certification minor.

Program of Study

Bachelor of Arts – Music (Teacher Certification – All Level)

Music Courses Required for All Music Majors

Course			**Credit hours**
MUSI	1308	Music Literature*	3
MUSI	1311	Music Theory I	3
MUSI	1312	Music Theory II	3
MUSI	2311	Music Theory III	3
MUSI	2312	Music Theory IV	3
MUSI	3211	Orchestration & Arranging	2
MUSI	3289	Introduction to Conducting	2
MUSI	3307	Secondary Instrumental Tech.	3
MUSI	3308	Music History I	3
MUSI	3309	Music History II	3
MUSI	3312	Counterpoint & Analysis	3
MUSI	4211	Computer Applications in Music	2
MUSI	4289	Advanced Conducting	2
MUSI	4301	Senior Experience in Music	3
Total			**38**

*Music Literature satisfies 3 hours of the humanities portion of the General Education Curriculum.

Instrumental Option

General Education Core Curriculum	48 hours
Music Courses Required of All Majors	35 hours
Instrumental Option Courses	26 hours

Professional Development Courses			24 hours
Reading (READ 4351)			3 hours
Total number of hours required (Instrumental Option)			**136 hours**

Instrumental Option (26 hours)

MUSI	1188	Percussion Class I	1
MUSI	2188	Percussion Class II	1
MUSI	1189	Strings Class	1
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	1
MUSI		Ensemble (7 semesters)	4
MUAP		Applied (7 semesters)	14
Advanced Elective			1

Vocal Option

General Education Core Curriculum	48 hours
Music Courses Required of All Majors	35 hours
Vocal Option Courses	24 hours
Professional Development Courses	24 hours
Reading (READ 4351)	3 hours
Total number of hours required (Vocal Option)	**134 hours**

Vocal Option (24 hours)

MUSI	1162	Diction I	1
MUSI	1165	Diction II	1
MUSI	1181	Piano Class (2 semesters)	2
MUSI	1183	Voice Class I	1
MUSI	1184	Voice Class II	1
MUSI		Ensemble (7 semesters)	4
MUAP		Applied (7 semesters)	14

Keyboard Option

General Education Core Curriculum	48 hours
Music Courses Required of All Majors	35 hours
Vocal Option Courses	24 hours
Professional Development Courses	24 hours
Reading (READ 4351)	3 hours
Total number of hours required (Keyboard Option)	**134 hours**

Keyboard Option (24 hours)

MUSI	1114	Keyboard Skills I	1
MUSI	1115	Keyboard Skills II	1
MUSI	1132	Acc/Cham Music (5 semesters)	5
MUSI		Ensemble (2 semesters)	2
MUAP		Applied (7 semesters)	14
Advanced Elective			1

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 (except when student teaching), 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.

Professional Development Courses (For Music – 24 hours)

EDCI	4301	Foundations of Education in a Multicultural Society	3
EDCI	4305	Instructional Planning & Curriculum Develop.	3
EDCI	4306	Instructional Methods and Classroom Mgmt.	3
EDCI	4328	Meth & Tech Teaching Music in Elem. Schools	3
EDCI	4329	Meth & Tech Teaching Music in Sec. Schools	3
EDCI	4311	Residency (Student Teaching)	3
EDCI	4398	Student Teaching – Secondary II	3
Choose one of the following courses:			**3**
EDCI	4302	Educational Psychology in Elem. Schools	
EDCI	4303	Understanding Learners and Living Environment	

PROGRAM OF STUDY

Bachelor of Arts – Music (Non-Teaching Degree)

Instrumental Option

General Education Core Curriculum	48 hours
Music courses required of all applied music majors	66 hours
Additional instrumental music courses	15 hours
Total number of hours required (Instrumental Option)	**129 hours**

Vocal Option

General Education Core Curriculum	48 hours
Music courses required of all applied music majors	66 hours
Additional vocal music courses	17 hours
Total number of hours required (Vocal Option)	**131 hours**

Keyboard Option

General Education Core Curriculum	48 hours
Music courses required of all applied music majors	66 hours
Additional keyboard music courses	17 hours
Total number of hours required (Keyboard Option)	**131 hours**

Music Courses Required of All Applied Music Majors

MUSI	1308	Music Literature*	3
MUSI	1311	Music Theory I	3
MUSI	1312	Music Theory II	3
MUSI	2311	Music Theory III	3
MUSI	2312	Music Theory IV	3
MUSI	3211	Orchestration & Arranging	2
MUSI	3289	Introduction to Conducting	2
MUSI	3308	Music History I	3
MUSI	3309	Music History II	3
MUSI	3312	Counterpoint & Analysis	3
MUSI	4211	Computer Applications in Music	2
MUSI	4289	Advanced Conducting	2
MUSI	4301	Senior Experience in Music	3
MUAP	3170	Recital Performance (3 semesters)	3
MUAP		Applied (8 semesters)	28
Total			**66**

**Music Literature satisfies 3 hours of the humanities portion of the General Education Curriculum*

Additionally one of the following groups of courses must be completed:

Instrumental Option Courses

MUSI	1181	Piano Class (2 semesters)	2
MUSI		Ensemble (8 semesters)	8
Advanced Electives			5
Total			**15**

Vocal Option Courses

MUSI	1162	Diction I	1
MUSI	1165	Diction II	1
MUSI	1181	Piano Class (2 semesters)	2
MUSI	1183	Voice Class I	1
MUSI	1184	Voice Class II	1
MUSI	Ensemble (8 semesters)		8

Advanced Electives			5
Total			**19**

Keyboard Option Courses

MUSI	1114	Keyboard Skills I	1
MUSI	1115	Keyboard Skills II	1
MUSI		Ensemble (4 semesters)	4
MUSI	1132	Accompanying & Chamber Music (6 semesters)	6
Advanced Electives			5
Total			**17**

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.

Modern Languages Department

Bachelor of Arts in Spanish
Spanish Minor
Bachelor's Degree with a Translation Studies Minor

Associate in Arts in Spanish Translation

The Department of Modern Languages offers a Bachelor of Arts degree with a major and a minor in Spanish, a minor in Translation Studies, and an Associate in Arts degree in Spanish Translation. In addition to the degree programs in Spanish and Translation, the department also offers courses in French, Italian, and German. At the graduate level, the department offers a Master of Arts degree in Spanish, and a Master of Arts degree in Interdisciplinary Studies with a Concentration in Spanish and a Supporting Field in Interpreting. These programs of study are designed to develop effective oral and written communication skills and to provide students with the requisite knowledge of the literary and cultural traditions of the Hispanic World that can prepare students for a variety of careers in education, translation and interpreting, government and business that are open to biliterate students with a Liberal Arts background in the new global society. Modern Languages, as a liberal study, involves literature, history, psychology, sociology – indeed, culture in its particulars as well as its universals. In this respect, the Modern Languages faculty believes that language studies offers an education that is as much a preparation for life as for employment.

Spanish

The Bachelor of Arts in Spanish offers majors an integrated, sequenced course of study comprising 12 courses (36 semester hours), at the advanced 3000/4000-level.

Students begin their study with two Core foundation courses, SPAN 2321 and SPAN 2322, that introduce them to the major and develop the basic skills in language, culture, and literature that are required of subsequent advanced, 3000 and 4000-numbered courses. Upon completion of SPAN 2321 and SPAN 2322, majors enroll in twelve upper division (advanced) courses, totaling 36 semester hours, taken from a cohesive but diverse course of study distributed in four areas: language, literature, culture, and translation. Majors begin their advanced study with 3000-level language and literature courses, continue with more advanced 4000-level courses.

Program of Study

Bachelor of Arts – Spanish (Non-Teaching Spanish Major)

General Education Core Curriculum			48 hours
Spanish Major			36 hours
(36 advanced hours)			
Lower Division:		**Required Core Courses (6 hours Core)**	
SPAN	2321	Hispanic Literature and Civilization I	3
SPAN	2322	Hispanic Literature and Civilization II	3
Upper Division:		**Required Advanced Courses (24 hours)**	
SPAN	3301	Spanish Literature I (1100-1750)	3
SPAN	3302	Spanish Literature II (1750-present)	3
SPAN	3303	Advanced Spanish Composition	3
SPAN	3310	Masterpieces of Spanish American Literature I	3
SPAN	3311	Masterpieces of Spanish American Literature II	3
SPAN	3330	Spanish Grammar	3
SPAN	4303	Hispanic Civilization	3
SPAN	4310	Basic Concepts of Spanish Phonetics and Phonology,	
Upper Division:		**Four Advanced Spanish Electives (12 hours)**	
SPAN	Advanced Elective		3
SPAN	Advanced Elective		3
SPAN	Advanced Elective		3
SPAN	Advanced Elective		3
Minor (Minimum 18 hours)			**18 hours**
Electives			
***Total Number of hours required**			**124 hours**

**36 hours must be advanced*

Program of Study

Bachelor of Arts – Spanish (Teacher Certification Secondary Option I)

General Education Core Curriculum			48 hours
*SPAN 2321 and SPAN 2322 required in General Education Core			
Spanish Major			36 hours
(36 advanced hours)			
SPAN	3301	Spanish Literature I (1100-1750)	3
SPAN	3302	Spanish Literature II (1759-present)	3
SPAN	3303	Advanced Spanish Composition	3
SPAN	3310	Masterpieces of Spanish American Literature I	3
SPAN	3311	Masterpieces of Spanish American Literature II	3
SPAN	3330	Spanish Grammar	3
SPAN	4303	Hispanic Civilization	3
SPAN	4310	Phonology and Phonetics	3
SPAN	4316	Acquisition of the Spanish Language	3
SPAN	4371	Chicano Narrative	3
SPAN	4373	Studies in Hispanic Culture	3
SPAN		Advanced Elective (3000 or 4000 level)	3
Support Courses (Required)			
SPAN	3332	Intro. to Spanish/English Translation	3
SPAN	3333	Intro. to English/Spanish Translation	3
Professional Development Courses			26 hours
EDCI	4301	Foundations of Education/Diverse Multicult.	3
EDSC	4303	Understanding Learners and Learning Envir.	3
EDSC	4374	Designing Instruction for Grades 8-12	3

EDSC	4375	Strategies for Delivering Instruction in 8-12	3
EDSC	4376	Ethical Standards, Classroom Management 8-12	3
EDSC	4380	Teaching ESL in grades 8-12	3
EDCI	4203	Technology and the School Curriculum	2
EDSC	4641	Student Teaching	6
Reading (READ 4351)			3 hours
Total number of hours required			**129 hours**

Academic Specialization in Spanish
(For Elementary Certification – B.A.L.A.S.)

(30 hours, must be advanced)

Lower Division:		**Core Courses: 6 hours Core**	
SPAN	2321	Hispanic Literature and Civilization	3
SPAN	2322	Hispanic Literature and Civilization	3
Upper Division:		**Required Advanced Courses: 24 hours**	
SPAN	3303	Advanced Spanish Composition	3
SPAN	3330	Spanish Grammar	3
SPAN	4303	Hispanic Civilization	3
SPAN	4310	Spanish Phonetics and Phonology	3
SPAN	4316	Acquisition of the Spanish Language	3
SPAN	4368	Children's Literature	3
SPAN	4371	Chicano Narrative	3
SPAN		Advanced Spanish Elective	9

Spanish Minor (Non-Certification)

The bachelor's degree with a minor in Spanish requires 18 advanced semester hours.

Lower Division:		**Core Courses**	**(6 hours Core)**
SPAN	2321	Hispanic Literature and Civilization I	
SPAN	2322	Hispanic Literature and Civilization II	
Upper Division:		**Advanced Spanish Electives**	**18 hours**

Translation Studies

The bachelor's degree with a minor in Translation Studies in Spanish (TRSP) and the Associate in Arts degree in Spanish Translation prepare students to be practitioners of the art and science of translation and interpretation , enabling them to play a vital role in shaping the global society of the 21st century. These degree programs develop the analytical skills, cultural literacy, conduct, competence, and professional integrity needed to become superior translators and interpreters.

PROGRAM OF STUDY

Translation Studies Minor

The bachelor's degree with a minor in Translation Studies requires the completion of 18 hours of upper division Translation Studies in Spanish (TRSP) courses. A student planning to minor in Translation Studies must also complete a major field of study and satisfy all General Education Requirements. Students earning a baccalaureate degree may earn a minor in Translation Studies 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 two minors. Prerequisites for enrollment in Translation Studies courses include 6 hours of Freshman English and 6 hours of Spanish, chosen from the following courses: SPAN 1373, 2316, 2317, 2321, or 2322.

Translation Studies Minor Requirement

Course Requirements			
TRSP	3332	Introduction to Spanish/English Translation	3 hours
TRSP	3335	Topics in Translation	3 hours
TRSP	4332	Commercial Translation	3 hours
TRSP	4334	Legal Translation	3 hours
TRSP	4366	Interpreting I	3 hours
TRSP	4367	Interpreting II	3 hours
Total hours for Translation Studies Minor			**18 hours**

PROGRAM OF STUDY

Associate in Arts in Spanish Translation

General Education Courses			48 hours
Communication			
ENGL	1301	Composition I	3 hours
ENGL	1302	Composition II	3 hours
SPCH	1315	Fundamentals of Speech or	
SPCH	1318	Interpersonal Communications or	
SPCH	1321	Business and Professional Communication	3 hours
Science		(8 hours of Natural and/or Physical Sciences)	8 hours
Mathematics			
MATH	1314	College Algebra or	
MATH	1324	Business Algebra or	
MATH	1332	Math for Liberal Arts	3 hours
Humanities & Visual and Performing Arts			
ENGL		(3 hours of Sophomore Literature)	3 hours
ART/MUSI		(3 hours of Music Appreciation or Music Literature or Art Appreciation or Art History)	3 hours
Social Sciences			
HIST	1301	United States to 1877	3 hours
HIST	1302	United States from 1877	3 hours
GOVT	2301	American Government I	3 hours
GOVT	2302	American Government II	3 hours
Behavioral Sciences			
(3 hours of any Behavioral Science)			3 hours
Kinesiology			
KINE		Kinesiology Activity	1 hour
Modern Language			
SPAN	1373	Basic Spanish for Bilinguals I or	
SPAN	2321	Hispanic Lit. I	3 hours
SPAN	1374	Basic Spanish for Bilinguals II or	
SPAN	2322	Hispanic Lit. II	3 hours
Spanish Translation Program Courses: 15 hours			
SPAN	2316	Spanish for Specific Purposes	3 hours
SPAN	2317	Business Spanish	3 hours
SPAN	2322	Hispanic Literature and Civilization II	3 hours
SPAN	3332	Introduction to Spanish/English Translation	3 hours
SPAN	3333	Introduction to English/Spanish Translation	3 hours
Total hours for A.A. degree in Spanish Translation			**63 hours**

SOCIAL SCIENCES DEPARTMENT

Bachelor of Arts in Government; Government Minor;
Bachelor of Arts in History; History Minor

Government

Department of Social Science: Government Division

PROGRAM OF STUDY

Bachelor of Arts – Government

The bachelor's degree with a major in government requires 36 semester hours of government, at least 30 of which must be advanced.

Government majors and minors specialize in four fields:

- American government: local, state, national;
- Comparative government and international relations: totalitarian government, government and politics of Asia, comparative government, Western democracies, politics of emerging nations, Africa and Middle East, international politics and international organizations;
- Political theory and methodology: scope and methods of political science, political theory; and
- Public administration.

General Education Core Curriculum			**48 hours**
Government Major			**36 hours**
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
GOVT	3331	Methods and Political Science Research	3
GOVT	4390	Political Science Senior Seminar	3
Advanced Level Courses			21
Select 6 hours from:			6
GOVT	3314	American State Government	
GOVT	3363	American Hispanic Politics	
GOVT	4320	American Constitutional Law: Federalism	
GOVT	4321	American Constitutional Law: Liberties	
GOVT	4360	American Executive Process	
GOVT	4363	American Legislative Process	
GOVT	4366	American Political Parties & Politics	
GOVT	4367	American Judicial Process	
GOVT	4368	Special Topics in American Govt.	
Select 3 hours from Comparative Government or International Relations			3
GOVT	3322	Politics of Developing Nations	
GOVT	3343	International Politics	
GOVT	4369	Latin American Politics	
GOVT	4370	European Politics	
GOVT	4371	Contemporary International Issues	
Select 3 hours from Political Theory Methodology			3
GOVT	3331	Methods of Political Science Research	
GOVT	4332	American Political Theory	
GOVT	4372	Classical Political Theory	
GOVT	4373	Modern Political Theory	
Select 3 hours from Public Administration			3
GOVT	3323	Introduction to Public Administration	
GOVT	3385	Internship	
GOVT	4312	Urban and Metropolitan Planning	
GOVT	4365	American Administration Process	
GOVT	4374	American Public Policy	
Select 9 hours any advanced Government			9
6 hours Economic Principles			6
ECON	2301	Economic Principles I – Macro Economics	
ECON	2302	Economic Principles II – Micro Economics	
Minor (Minimum 18 hours)			18
Electives			
***Total number of hours required**			**124 hours**

**36 hours must be advanced*

Government Minor

The bachelor's degree with a minor in government requires 18 semester hours of government, at least nine of which must be advanced.

Course	Credit hours		
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
Upper Division Government Courses			12
Total			**18**

History

Department of Social Science: History Division

The History Division of the Social Science Department offers a major and a minor in history. Both help provide history students, who are part of a larger group of students in Liberal Arts, to develop analytical, reading, writing and speaking skills which help to prepare them for a variety of careers in education, government and business which are open to students with a Liberal Arts background. The study of history permits the student to discover how over time people, geography, ideas, science/technology, war and culture both shape and are shaped by the human experience. The history faculty believes that by pursuing historical studies, students will be guided toward a fuller realization of their maximum individual human potential.

History Major

Those history students planning to pursue careers in education will find a number of options available to them in both elementary and secondary education. Information on the specific programs available are included in the program descriptions of the School of Education.

History Major

The bachelor's degree in history requires 39 hours of credit. Students of history must also complete all of the General Education courses. In addition, all history majors must complete two capstone courses consisting of a U.S. History Senior Seminar, History 4390, and a World History Senior Seminar, History 4392.

Those history students planning to pursue a career in education may select the Bachelor of Arts Teacher Certification Plan for 8th-12th Grade History.

PROGRAM OF STUDY

Bachelor of Arts (B. A.) – History

General Education Core Curriculum			48 hours
Major requirements:			39 hours
Lower division requirements			9 hours
HIST	2321	World History to 1650	3

HIST	2322	World History since 1650	3
HIST	2380	Mexican-American History	3
Advanced requirements*			18 hours
HIST	3340	Texas History	3
HIST		American	(minimum) 3
HIST		European	(minimum) 3
HIST		Latin American	(minimum) 3
Senior Seminars American and World History			6
Advanced electives in major			(minimum) 12
Minor			(minimum) 18
Free electives			19 hours
Total number of hours required			**124 hours**

(36 hours must be advanced)
**See course listing for choices*

PROGRAM OF STUDY

Bachelor of Arts Teacher Certification Plan History (8th-12th Grade)

General Education Core Curriculum			48 hours
History (Required Courses)			18 hours
HIST	2321	World History to 1650	
HIST	2322	World History since 1650	
HIST	2380	Mexican-American History	
HIST	3340	Texas History	
HIST	4390	American History Senior Seminar	
HIST	4392	World History Senior Seminar	

Upper Level Electives

Minimum of 6 hours of American History chosen from:			
HIST	3313	American Colonial Era to 1783	
HIST	3324	Formative Period of the American Nation 1783-1840	
HIST	4303	The Emergence of Modern America 1877-1917	
HIST	4313	Twentieth Century America, 1917 to present	
HIST	4343	Era of 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	
Minimum of 6 hours of European (or Asian) History chosen from:			
HIST	4365	History of the Middle Ages	
HIST	4367	History of Early Modern Europe	
HIST	4370	The Renaissance and the Reformation 1300-1650	
HIST	4377	French-led Revolutionary Europe	
HIST	4378	German-Led Modern Europe	
HIST	4380	History of World War I and II	
HIST	4387	History of Asia and Russia	
Minimum of 6 hours of Latin American History chosen from:			
HIST	3333	Colonial Mexico, Central and South America	
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	
Additional Upper Level or Lower Level Electives chosen from of any GEOG, ECON or INDS			6 hours
Pedagogy and Professional Responsibility			26 hours
EDCI	4301	Foundations of Education In a Diverse Society	
EDSC	4303	Understanding Learners in 8-12	
EDSC	4374	Designing Instruction for Grades 8-12	
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12	
EDSC	4376	Ethical Standards and Classroom Management for 8-12	
EDSC	4380	Teaching ESL 8-12	
EDCI	4203	Technology and the School Curriculum	
EDSC	4641	Student Teaching, 8-12	
Combination of Subjects			16 hours
SPCH	1318	Interpersonal Communication	
EDCI	2101	School and Society	
EDLI	4350	Adolescent Literature	
EDLI	4351	Reading in the Content Areas	
EDSC	4380	Teaching ESL 8-12	
SPED	4386	Modifications in Inclusive Settings	
Total number of hours required			135 hours

History Minor

The bachelor's degree with a minor in history and no teaching options requires 18 semester hours of history beyond the 6 hours of history required in the General Education core. The 18 hours are to consist of:

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
Advanced electives in major			6
Total			**18**

Military Science

Military Science – Minor

The departmental objective is to develop selected men and women with potential to serve as commissioned officers in the Active Army, National Guard, or Army Reserve. The leadership and management experience gained through the Army Reserve Officers' Training Corps and service as a commissioned officer will benefit the student in civilian as well as in military science and national defense pursuits. Students in the program have the opportunity to:

- enhance leadership and managerial potential;
- attain basic understanding of military fundamentals and national security;
- attain clear understanding of the concept of military art and science; and
- develop a strong sense of personal honor, integrity, and individual responsibility.

Army Scholarship Program

Any student who meets prerequisites may compete for nationally awarded U.S. Army scholarships that pay for tuition, books, fees and other purely educational costs and a tax-free subsistence allowance for 10 months of each year the scholarship is in effect. A limited number of free rooms are available on campus with priority going to ROTC Scholarship winners.

Veteran's Assistance

Veterans who enroll in upper-level Military Science receive a tax-free monthly subsistence allowance for 10 months each of the two years, in addition to benefits provided by the Veteran's Administration, Army Reserve or National Guard.

Simultaneous Membership Program (SMP)

Eligible students are allowed to participate with Army Reserve or the National Guard combined with College ROTC. In addition to Reserve or National Guard pay, the student receives ROTC pay. In the SMP, the student's pay will be elevated to the rank of E-5 (Sergeant) and the student will fill the position of junior leader in that unit. Upon completion of a baccalaureate degree and the ROTC program, the student may be commissioned in the Active Army, Army Reserve or National Guard in the rank of second lieutenant.

Departmental Activities

The Military Science Department sponsors several extracurricular activities such as the annual Military Ball, Dining-Out, ROTC Day, Field Training Exercises, and Guadalupe River canoe trip. Additional opportunities to participate in team events are available in Color Guard, Rifle Team, and Ranger Challenge.

Army Training

Selected cadets enrolled in the course may be eligible to compete for attendance to either the Airborne, Air Assault, Northern Warfare, Mountain Warfare, and Cadet Troop Leadership Training. Selection is based upon motivation, physical condition, and performance in Military Science.

Minor in Military Science

The Military Science Department offers a minor in Military Science and a commission as an officer in the Active Army, Army Reserve or Army National Guard through the Reserve Officers' Training Corps (ROTC) program at the Edinburg campus.

No Commitment or Obligation for Lower Level Courses

Students need not seek a career in the U.S. Army to enroll in lower level courses such as Marksmanship and First Aid, Survival and Land Navigation Training, and Basic Leadership, which provide the opportunity to increase individual skills and knowledge in leadership and management techniques in and outside the classroom. Lower-level courses also fulfill the physical education requirement for general education.

Requirements for Advanced Military Science Standing and Commissioning

1. Complete four semesters of lower-level ROTC courses or have advanced credit as a Veteran, from USAR/ARNG Basic Training, ROTC Basic Camp, or ROTC credit and approval.
2. Maintain full-time student status.
3. Pass a military physical examination.
4. Pass the ROTC Physical Aptitude Examination
5. Pass the Officer Selection Battery.
6. Maintain an overall grade point average of 2.0.
7. Sign an Advanced ROTC and Commissioning Agreement.
8. Successfully complete four semesters of Advanced ROTC courses.
9. Successfully complete ROTC Advanced Camp.
10. Successfully complete an undergraduate degree program.
11. Successfully complete at least one departmentally approved Professional Military Education course from each of the listed: Written Communication Skills, Human Behavior, Computer Literacy, Mathematics and Military History

Military Science Minor

A minor in Military Science requires 18 semester hours of which 16 hours must be advanced Military Science courses plus ROTC 2302.

Course			Credit hours
ROTC	3202	Advanced Army Physical Development	2
ROTC	3401	Advanced Military Leadership	4
ROTC	3402	Small Unit Tactics	4
ROTC	4401	Staff Management & Responsibilities	4
ROTC	4403	Advanced Military Science	4
Total			**18**

Note: A student planning to minor in Military Science must see the ROTC representative at the College of Liberal Arts.

Pre-Law

Admission to law school is becoming increasingly selective. Applicants are selected primarily on these factors: the Law School Admissions Test (LSAT), which should be taken in the Junior or Senior year; a writing sample, which is a separate part of the LSAT; the student's overall grade point average; co-curricular activities and maturing experiences. Many law schools also request letters of recommendation.

Students should aim for a minimum GPA of 3.0 and a minimum LSAT score of 35. Virtually all law schools have admissions policies which allow exceptions to these figures, but the closer the student is to these scores, the better the chance of admission.

While any undergraduate major will assist in preparation for law school, those majors which emphasize the fundamental skills necessary for effective oral and written communication are advisable. Students are encouraged to seek courses of study which emphasize reading, writing, reasoning, and analyzing as these are skills tested most fully by the LSAT. Pre-law students should consult the current Pre-Law Handbook prepared by the Law School Admission Service.

College of Science, Mathematics and Technology

Certificates & Degrees Offered

Biological Sciences Department

Bachelor of Science – Biology
Biology Minor
Master of Science in Interdisciplinary Studies – Biology

Computer Sciences/Computer Information Systems Department

Certificate of Proficiency – Microcomputer Specialist
Associate in Applied Science – Computer Information Systems
Computer Science Minor
Bachelor of Science – Computer Science

Engineering Technology Department

Occupational Training Certificate – Machine Shop
Certificate of Proficiency – Drafting
Associate in Applied Science – Drafting
Associate in Applied Science – Electronics
Certificate of Proficiency – Engineering Technology
with concentration in Manufacturing/Mechanical or Electronics
Associate in Applied Science – Engineering Technology
with concentration in Manufacturing, Mechanical or Electronics
Bachelor of Science – Engineering Technology
with concentration in Manufacturing, Mechanical, or Electronics

Industrial Technology Department

Occupational Training Certificate
- Air Conditioning and Refrigeration
- Auto Body Repair
- Automotive Mechanics
- Building Trades
- Diesel Mechanics

Mathematics Department

Bachelor of Science – Mathematics
Mathematics Minor

Physical Sciences Department

Bachelor of Arts – Chemistry
Bachelor of Arts – Physics
Chemistry Minor
Physics Minor

Biological Sciences Department

Bachelor of Science – Biology Major; Biology Minor
Master of Science in Interdisciplinary Studies

The major in Biology is offered as a basic degree program for further studies or for employment in services not related to public education. The program is also designed for students desiring elementary or secondary teacher certification in Texas public education. Partial certifications can be found in this section. Additional information about certification must be obtained from the School of Education section in this catalog and the General Degree Requirements mentioned earlier in this publication. Please contact a member of the Department of Biological Sciences for additional information and/or help with degree programs. Biology graduate courses are also offered toward a Master of Science in Interdisciplinary Studies. See the Graduate Catalog, the Office of Graduate Studies, or the Graduate Coordinator in the Biological Sciences Department for information on this program.

The Biological Sciences Department provides support coursework to the Allied Health Sciences and Nursing programs.

Program of Study

Bachelor of Science Biology

In addition to the General Education Core requirements, the bachelor's degree with a major in biology requires 36 semester credit hours of biology courses with 24 semester credit hours from the Biology Core (15 hours advanced) and 13 semester credit hours from the list of Biology electives. In addition, 15 semester credit hours are to be selected from the support courses.

General Education Core Curriculum **48 hours**
Lower Division required courses **(11 hours Core)**
MATH 2313 or 2342
CHEM 1311 + 1111
CHEM 1312 + 1112

Biology Major

36 hours
Biology Core: 24 hours

BIOL	1306	Biological Principles I	3
BIOL	1106	Biological Principles I Laboratory	1
BIOL	1307	Biological Principles II	3
BIOL	1107	Biological Principles II Laboratory	1
BIOL	3301	Advanced Physiology	3
BIOL	3403	Genetics	4
BIOL	3409	Ecology	4
BIOL	3412	Cell Biology	4
BIOL	4100	Biology Seminar	4

****Biology Electives List** **12 hours; 9 advanced**

BIOL	2321	Microbiology
BIOL	2121	Microbiology Laboratory
BIOL	2428	Comparative Vertebrate Anatomy
BIOL	3408	Plant Morphology
BIOL	3414	Invertebrate Zoology
BIOL	4170	Laboratory Topics in Biology
BIOL	4199	Research Problems in Biology
BIOL	4299	Research Problems in Biology
BIOL	4309	Herpetology
BIOL	4370	Topics in Biology (limit of 3 hours)
BIOL	4390	Biology Internship
BIOL	4399	Research Problems in Biology
BIOL	4402	Marine Zoology

BIOL 4404 Ichthyology
BIOL 4410 Marine Botany
BIOL 4414 Plant Taxonomy
BIOL 4420 Plant Anatomy
BIOL 4440 Immunology
BIOL 4450 Ornithology

Support Courses: 19 hours

CHEM 2323 Organic Chemistry I (Lab required)
CHEM 2325 Organic Chemistry II (Lab required)
PHYS 1301 General Physics I (Lab required)
PHYS 1302 General Physics II (Lab required)
or GEOL 1403
COSC 1310 (or other higher level COSC course)

Minor (Minimum 18 hours; 9 advanced) 18 hours

Selecting Chemistry as the minor will reduce the required hours here to 9 advanced, and allow 9 hours additional electives.

Additional Electives:3 hours

(12 hours, if Chemistry is selected as the minor)

**Total minimum number of hours required for the Biology Major 124 hours*

Recommended Four-Year Matriculation for Biology Majors with No Deficiencies

Freshman Year

First Semester

General Education Core Courses
BIOL 1306 & 1106
CHEM 1311 & 1111
MATH 2313 or 2342

Second Semester

General Education Core Courses
BIOL 1307 & 1107
CHEM 1312 & 1112
COSC (see advisor)

Sophomore Year

Third Semester

General Education Core Courses
BIOL 3301 or 3403
CHEM 2323 (& 2123 recommended)

Fourth Semester

General Education Core Courses
BIOL 3301, 3403, 3409, or 3412
CHEM 2325 (& 2125 recommended)

Junior Year

Fifth Semester

General Education Core Courses
BIOL 3301, 3403, 3409, or 3412
BIOL Elective ** See list
PHYS 1301 & 1101
Minor Course (CHEM or other)

Sixth Semester

General Education Core Courses
BIOL 3301, 3403, 3409 or 3412
BIOL Elective ** See List
PHYS 1302 & 1102 or GEOL
Minor Course (CHEM or other)

Senior Year

Seventh Semester

General Education Core Courses
BIOL Electives ** See list
Minor Courses or electives
BIOL 4100 (or may be taken in Semester Eight)

Eighth Semester

BIOL Electives ** See List
Minor Courses or Electives
BIOL 4100

Students planning to pursue graduate study in a science, including Biology, Chemistry, Wildlife Science, Microbiology, Physiology, Molecular Biology, Ecology or most other areas need two semesters of Calculus, and should take it early. Statistics and/or Linear Algebra may also be recommended. Courses such as Speech, History, Government may be moved to later semesters to accommodate extra Mathematics.

Students planning to enter medical or other professional school requiring a background in science should consult with the pre-professional advisor as a freshman and follow the curriculum recommended.

Students with deficiencies, those who work, or who simply wish to reduce the intensity of the program may want to take longer to finish. Be sure to consult your advisor in order to sequence courses appropriately.

Biology Minor

The bachelor's degree with a minor in biology requires 24 to 25 semester credit hours of biology courses: 20 semester credit hours from the Biology Core (12 hours advanced) and 4-5 semester credit hours from the Biology Electives.

Biology Core 20 hours
BIOL 1106 Principles of Biology Laboratory I
BIOL 1306 Principles of Biology I
BIOL 1107 Principles of Biology Laboratory II
BIOL 1307 Principles of Biology II
BIOL 3403 Genetics
BIOL 3409 Ecology
BIOL 3412 Cell Biology

Biology Electives 4-5 hours
BIOL 2301 Anatomy and Physiology I
BIOL 2101 Anatomy and Physiology Laboratory I
BIOL 2321 Microbiology
BIOL 2121 Microbiology Laboratory
BIOL 2428 Comparative Vertebrate Anatomy
BIOL 3301 Advanced Physiology
BIOL 3408 Plant Morphology
BIOL 3414 Invertebrate Zoology
BIOL 4100 Biology Seminar
BIOL 4170 Laboratory Topics in Biology
BIOL 4199, 4299, or 4399 Research Problems in Biology
BIOL 4309 Herpetology
BIOL 4370 Topics in Biology (3 hours only)
BIOL 4402 Marine Zoology
BIOL 4404 Ichthyology
BIOL 4410 Marine Botany
BIOL 4414 Plant Taxonomy
BIOL 4420 Plant Anatomy
BIOL 4440 Immunology
BIOL 4450 Ornithology

Total Number of hours for the Minor **24-25 hours**

PROGRAM OF STUDY

Bachelor of Science in Science (4th-8th Grade Teacher Certification)

General Education Core			48 hours
Science Certification			48 hours
Biology: 23 hours			
BIOL	2301/2101	Anatomy and Physiology	3/1
BIOL	3301/4170	Animal Physiology	3/1
BIOL	4404	(Ichthyology)	4
BIOL	3408	Plant Morphology or 4420 Plant Anatomy or	4
BIOL	3414	Invertebrate Zoology, or 4402 Marine Zoology	
BIOL	4309	Herpetology	3
BIOL	4450	Ornithology	4
Support Courses:: 24 hours			
CHEM	1311/1111	General Chemistry I	3/1
CHEM	1312/1112	General Chemistry II	3/1
CHEM	2323/2123	Organic Chemistry I	3/1
CHEM	2325/2125	Organic Chemistry II	3/1
PHYS	1301/1101	Physics I	3/1
PHYS	1302/1102	Physics II	3/1
Pedagogy of Prof. Responsibility: 26 hours			
EDCI	4301	Foundations of Education in a Diverse Society	3
EDMG	4341	Understanding Learners in the Middle Grades	3
EDMG	4342	Instructional Planning and Curriculum for the Middle Grades 3	
EDMG	4343	Methods & Classroom Mgmt. in Middle Grades	3
EDMG	4346	Teaching Science and Math in Middle Grades	3
EDMG	4347	Teaching Eng. Language Learners in Mid. Grades	3
EDCI	4203	Technology in the Classroom	2
EDMG	4648	Student Teaching in the Middle Grades	6
Support Courses: 16 hours			
SPED	4370	Foundations of Special Education	3
SPED	4386	Modifications in Inclusive Settings	3
EDLI	4367	Teaching Reading to English Language Learner	3
KINE	3340	Principles of Wellness and Fitness	3
EDCI	2101	Schools and Society	1

Recommended

COSC 1310 or other course recommended by advisor 3

PROGRAM OF STUDY

Bachelor of Science (Grades 8-12 Teacher Certification)

General Education Core			48 hours
Pedagogy & Professional Responsibility			26 hours
EDCI	4301	Foundations of Education in a Diverse Society	3
EDSC	4303	Understanding Learners in 8-12	3
EDSC	4374	Designing Instruction for Grades 8-12	3
EDSC	4375	Strategies for Delivering Instruction Grades 8-12	3
EDSC	4376	Ethical Standards and Classroom Management	3
EDSC	4378	Teaching Mathematics in 8-12 Classrooms	3
or			
EDSC	4379	Teaching Science in 8-12 Classrooms	
EDCI	4203	Technology in the School Curriculum	2
EDSC	4641	Student Teaching 8-12	6
Science Certification			48 hours
(20 hours Biology /28 hours Physical Science)			
Biology: 20 hours			
BIOL	3301/4170	Animal Physiology	3/1
BIOL	3403	Genetics	4
BIOL	3409	Ecology	4
BIOL	3412	Cell Biology	4
BIOL	4414	Plant Taxonomy	4
Physical Science: 28 hours			
CHEM	1311/1111	General Chemistry I	3/1
CHEM	1312/1112	General Chemistry II	3/1
CHEM	2323/2123	Organic Chemistry I	3/1
CHEM	2325/2125	Organic Chemistry II	3/1
CHEM	3305/3105	Analytical Chemistry	3/1
PHYS	1301/1101	Physics I	3/1
PHYS	1302/1102	Physics II	3/1
Support (13 Credit hours)			
EDCI	2101	School and Society	1
EDLI	4351	Reading in the Content Areas	3
EDSC	4380	Teaching ESL 8-12	3
SPED	4386	Modifications in Inclusive Settings	3
COSC	1310	or other computer science as agreed with advisor	3
Total hours			**135**

Total hours advanced: 56

COMPUTER SCIENCES/ COMPUTER INFORMATION SYSTEMS DEPARTMENT

Bachelor of Science in Computer Science
Computer Science Minor
Microcomputer Specialist Certificate
Associate in Applied Science Degree

The Bachelor of Science in Computer Science (BSCS) degree provides students with a background for graduate study in the computer sciences and complements the academic background needed for careers in computer science related fields. The minors include the subject matter needed for certification for secondary school teaching.

Computer Information Systems (CIS), a two-year technical degree, emphasizes concepts and processes relevant to organizational functions and management. CIS graduates are prepared to work with information and computer technologies and use their training to develop and maintain an information system structure, solve problems, and improve systems.

Additionally, the teacher certification program prepares students to teach secondary level computer science courses.

Computer Sciences

Computer Science, the study of the structure, function, and application of computers, is central to the rapidly expanding use of information technology. Computers have traditionally been used in engineering and scientific applications and business, and now applications are found in almost all fields from art to zoology.

PROGRAM OF STUDY

Bachelor of Science in Computer Science

The Bachelor of Science in Computer Science degree requires a minimum of 128 semester credit hours. No minor is required because of the broad nature of the degree program.

General Education Core Curriculum: 48 hours

General Education Required Courses: 11 hours

A computer science major must take Calculus I as the required math course as part of general education. The science requirement must include PHYS 2425 University Physics I and PHYS 2426 University Physics II.

Free Electives: 12 hours

COSC 1315 Required

Students are required to possess the skills taught in COSC 1315 Logic and Computing and are strongly encouraged to enroll in this course at the beginning of their academic career. Students with extensive computer experience may take another three hour academic course in lieu of COSC 1315, upon approval from the Department Chair. A student required to take prerequisite courses leading to the basic math requirement of Calculus I, may use these prerequisite courses as free electives and will not receive credit in any other form. Any increase in the number of hours in math or other required courses may only be absorbed by the nine hours dedicated to free electives. A course with course-prefix beginning with a T is not eligible for a free elective.

Computer Science Foundation: 19 hours

COSC	1418	Programming Structures	4
COSC	2312	Foundations of Computer Science	3
COSC	2314	Computer Systems Tools or	
COSC	2316	Multimedia and Web Design or	
COSC	2317	Signals and Systems	3
MATH	2314	Calculus II	3
MATH	2342	Elementary Statistics	3
MATH	3373	Discrete Structures	3

Computer Science Core: 25 hours

COSC	2318	Programming Structures II	3
COSC	3310	Systems Program and Conc. Processes	3
COSC	3325	Digital Logic and Computer Organization	3
COSC	3330	Networking & Database Management	3
COSC	3345	Data and Information Structures	3
COSC	3355	Principles of Programming Languages	3
COSC	4310	Operating Systems	3
COSC	4346	Systems Analysis & Design	3
COSC	4190	Senior Project	1

Computer Science Electives: 12 hours

Select from following list:

COSC	4300	Compiler Construction
COSC	4313	Computer Networking
COSC	4330	Computer Graphics
COSC	4332	Graphical User Interfaces
COSC	4342	Database Management Systems
COSC	4360	Numerical Methods
COSC	4380	Special Topics

Technical Electives: 12 hours

12 hours of approved advanced upper level courses: 12

Four higher-level application-oriented courses (12 semester credit hours) must be taken from the areas of business, engineering, physical sciences, and/or math. Departmental approval is required in the selection of these electives.

Total minimum number of hours required 128 hours

Computer Science Minor

COSC	1418	Programming Structures I	4
COSC	2318	Programming Structures II	3
COSC	3310	Systems Programming and Concurrent Processes	3
COSC	3330	Networking & Database Management	3
COSC	3345	Data and Information Structures	3
COSC	4310	Operating Systems	3
COSC	4342	Database Management Systems	3
Approved upper division COSC, or MATH			3

Total minimum number of hours required 25 hours

PROGRAM OF STUDY

Bachelor of Applied Technology-Computer Information System Technology

General Education Core Corriculum 48 hours

Associate in Applied Science Technical Field 35 hours

Select from:

Computer Information Systems/Science Technology

Drafting/Computer Drafting and Design

Digital Imaging Technology

Network Information Management Technology

Computer Information System Technology Track[1] 34 hours

COSC	1418	Programming Structures I	4
COSC	3380	Special Topics	3
COSC	4380	Special Topics	3
MATH	3373	Discrete Structures	3
CIST	3330	Networking Database Management	3
CIST	4346	Systems Analysis and Design	3
CIST	4340	File Structures	3
COOP	4301[2]	Cooperative Education Internship	3
Advanced Electives or			9
TECT	3301	Foundations of Technology Training	
TECT	3302	Psychology of Technology Training	
TECT	3303	Training Methods in Industry	

Other Electives 3 hours

Total minimum number of hours required 120 hours

Minimum advanced credit hours for graduation 30 hours

[2] May be taken up to three times with different contents.

Computer Information Systems

Courses leading to an Associate in Applied Science degree or to a one-year Certificate of Proficiency in Computer Programming and Microcomputers are offered. Courses are also offered for students in other disciplines requiring general knowledge of computers.

The associate degree program is designed to give professional training and emphasize the application of the computer to a wide variety of needs and the design and development of computer-based systems. Such a broad and thorough training is excellent preparation for advanced college studies in the field of Computer Information Systems.

The Computer Information Systems courses and programs are not designed for students seeking a Bachelor's degree. However, in some instances,

universities do accept certain credits in transfer. Due to the variation in requirements at major universities, students wanting to pursue a bachelor's degree in computer information systems should consult a counselor to develop a degree plan suited to the university to which they intend to transfer.

PROGRAM OF STUDY

*Certificate of Proficiency – Microcomputer Specialist (*Tech-Prep)*

Program Competencies

Students who successfully complete the Microcomputer Specialist program should be able to:

- work with user personnel in preparing specifications and documentation;
- design program logic, and code and test programs; and
- implement conversion of systems on microcomputer hardware.

Freshman Year			
First Semester			**Credit hours**
ITSC	1431	Introduction to Basic Programming	4
ITSC	1409	Integrated Software Applications I	4
COSC	1310	Computer Literacy or	3
COSC	1315	Logic and Computing	3
ACNT	1403	Introduction to Accounting I	4
Total			**15**
Second Semester			**Credit hours**
ITSE	2409	Introduction to Database Programming	4
ITSC	1425	Personal Computer Hardware	4
POFI	2431	Desktop Publishing for the Office	4
		Elective*	4
Total			**16**
Total number of hours required			**31 hours**

Credit Hour Summary

TCIS Required	27 Credit hours
Elective	4 Credit hours
Total	31 Credit hours

** Approved Electives: ACNT 1404, ITSC 2435.*

Upon completion of the required courses for the certificate program – Microcomputer Specialist and during the final semester of coursework, students will be required to take their final comprehensive evaluation in an exit exam.

PROGRAM OF STUDY

*Associate in Applied Science (A.A.S.) – Computer Information Systems (*Tech-Prep)*

Program Competencies

Students completing the A.A.S. program will be offered the opportunity to develop skills to:

- apply current programming and computer application package techniques with a minimum of supervision;
- understand and operate most data processing equipment after a brief orientation period;
- properly document programming decisions and communicate with other computer specialists;
- analyze the needs of a company or office and design appropriate computer programs; and
- master new and special data processing techniques and/or continue their education at a four-year institution.

TSEC 1105 is recommended for students without previous typing or keyboarding experience.

Freshman Year			
First Semester			**Credit hours**
COSC	1310	Computer Literacy or	3
COSC	1315	Logic and Computing	
ITSE	1431	Introduction to Visual Basic Programming	4
ENGL	1301	Composition I*	3
MATH	1314	College Algebra,	3
Elective **			1-3
Total			**14-16**
Second Semester			**Credit hours**
ACNT	1403	Introduction to Accounting I	4
ITSC	1409	Integrated Software Applications I	4
ITSE	2449	Advanced Visual Basic Programming	4
ENGL	1302	Composition II *	3
Total			**15**
Summer Session			**Credit hours**
POFI	2431	Desktop Publishing for the Office	4
Elective **			1-4
Total			**5-8 hours**
Sophomore Year			
First Semester			**Credit hours**
ITSE	1418	Introduction to COBOL Programming	4
ITSE	2409	Introduction to Data Base Programming	4
ITSC	1425	Personal Computer Hardware	4
SPCH		Speech course*+	3
Total			**15 hours**
Second Semester			**Credit hours**
ITSE	1350	System Analysis and Design	3
ITSE	1414	Introduction to RPG Programming	4
ITSE	2451	Advanced COBOL Programming	4
ITSW	2365	Practicum (or Field Experience)-Data Processing Technology/Technician	3
		Social/Behavioral Science Course *++	3
Total			**17 hours**
Total number of hours required			**66-71 hours**

Credit Hour Summary

TCIS	49 Credit hours
*General Education	15 Credit hours
General Electives	2-7 Credit hours
Total	66-71 Credit hours

*** Electives may be any non-developmental courses.*

+ Choose from SPCH 1315, SPCH 1321, SPCH 1318.

++ Choose from ECON 1303, ECON 2301, PSYC 2301, or SOCI 1301.

Upon completion of the required courses for the A.A.S.-Computer Information Systems, and during the final semester of coursework, students will be required to take their final comprehensive evaluation in an exit exam.

ENGINEERING TECHNOLOGY DEPARTMENT

Associate in Applied Science degrees in Electronics

The Engineering Technology Department offers certificate, associate and bachelor's degrees in four academic and technical areas: Electronics Technology and Engineering Technology. These courses of study are designed to qualify the students for jobs as technicians and engineering technologists in a variety of design, Manufacturing and testing fields and to provide a basis for further study, advanced degrees and lifelong learning. Students acquire a valuable set of competencies in design, communications, listening, critical thinking and problem solving in addition to their expertise in the particular field of study.

Electronics Technology

The associate degree in Electronics Technology prepares students to work in a variety of industries and service firms with responsibility for design, installation, maintenance and troubleshooting of electronic and computer based control and data acquisition systems.

Graduates from this program should be able to analyze, specify and design complex computer-based control and data acquisition systems, test existing systems and components and evaluate and diagnose problems with new and existing systems.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Electronics Technology

Freshman Year			
First Semester			**Credit hours**
ENGL	1301	Composition I*	3
MATH	1314	College Algebra*	3
CETT	1425	Digital Fundamentals	4
IEIR	1402	DC Circuits	4
CETT	1429	Solid State Devices	4
Total			**18 hours**
Second Semester			**Credit hours**
SPCH	1315	Fundamentals of Speech*	3
MATH	1316	Trigonometry*	3
IEIR	1404	AC Circuits	4
CETT	1445	Microprocessor	4
CETT	1441	Solid State Circuits	4
Total			**18 hours**
Sophomore Year			
First Semester			**Credit hours**
EECT	2439	Communication Circuits or	
IEIR	1406	Electrical Motors	3
INTC	1307	Electronics Test Equipment	3
LOTT	1401	Introduction to Fiber Optics	4
CETT	2435	Advanced Microprocessor	4
*General Education Option			3
Total			**18 hours**
Second Semester			**Credit hours**
CPMT	1411	Computer Maintenance or	
IEIR	1410	Motor Controls	4
RBTC	1405	Robotics Fundamentals	4
RBTC	1401	Programmable Logic C	4
CETT	1321	E. Fabrication (Capstone)	3
*General Education Option			3
Total			**18 hours**
Total number of hours required			**72 hours**

Credit Hour Summary

Electronics	57 hours
General Education*	15 hours
Total	**72 hours**

Some courses have prerequisites.

Engineering Technology

The Engineering Technology program offers certificates, Associate in Applied Science and Bachelor of Science degrees in Electronics, Mechanical and Manufacturing Engineering Technology. These degree programs prepare students at the certificate and associate levels for entry level jobs in Manufacturing and test operations. At the B.S. level, students are prepared for jobs as engineers and engineering technologists, capable of designing, producing and testing complex electronic and mechanical products and systems in Manufacturing and service operations. Graduates of these programs acquire increasing levels of skills in design, analysis, materials selection, production, testing, operations analysis and control of mechanical and electronic systems and products, depending upon their area of concentration.

PROGRAM OF STUDY

Certificate in Electronics Engineering Technology

Freshman Year			
First Semester			**Credit hours**
MATH	1412	Pre-Calculus	4
PHYS	1301	Physics I	3
PHYS	1101	Physics Laboratory I	1
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry Laboratory I	1
MEET	1301	Introduction to Computers	3
Total			**15 hours**
Second Semester			**Credit hours**
ENGT	2341	Applied Math for Technologists	3
PHYS	1302	Physics II	3
PHYS	1102	Physics Laboratory II	1
ELET	1410	Introduction to Electrical Technology	4
ENGR	1204	Engineering Graphics I	2
ENGR	2301	Statistics	3
Total			**16 hours**
Sophomore Year			
First Semester			**Credit hours**
ENGT	2303	Probability and Statistics	3
ELET	2330	Electronic Systems Technology	3
MFET	2420	Manufacturing Process Technology	4
ENGT	2342	Applied Math for Technology II	3
INMT	1291	Special Topics (Mini-Capstone)	2
Total			**15 hours**
Total number of hours required			**46 hours**

Credit Hour Summary

Engineering	33 hours
General Education	16 hours

Total			**46 hours**

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Electronics Engineering Technology

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3
ENGT	1101	Introduction to Engineering Technology	1
MEET	1301	Introduction to Computers	3
CHEM	1311	General Chemistry	3
CHEM	1111	General Chemistry Laboratory I	1
HIST	1301	United States to 1877	3
PHYS	1301	Physics I	3
PHYS	1101	Physics Laboratory I	1
Total			**18 hours**
Second Semester			**Credit hours**
MATH	1412	Pre-Calculus	4
PHYS	1302	Physics II	3
PHYS	1102	Physics Laboratory II	1
ENGR	1205	Engineering Graphics I	2
ENGT	2401	Engineering Materials	4
ELET	1410	Introduction to Electrical Technology	4
Total			**18 hours**

Sophomore Year

First Semester			**Credit hours**
ENGL	1302	Composition II	3
ENGT	2130	Engineering Communications	1
ELET	2301	Electrical Systems Technology	3
ELET	23XX	Technical Elective	3
HIST	1302	United States since 1877	3
ENGT	2341	Applied Math for Technology I or	
MATH	2313	Calculus I	3
Total			**16 hours**
Second Semester		**Credit hours**	
ENGT	2303	Probability and Statistics	3
SOCI	1301	Introduction to Sociology**	3
ENGT	2342	Applied Math for Technology II or	
MATH	2314	Calculus II	3
ELET	2330	Electronic Systems Technology	3
MFET	2420	Manufacturing Process Technology	4
INMT	1291	Special Topics (Mini-Capstone)	2
Total			**18 hours**
Total number of hours required			**70 hours**

Credit Hour Summary

Engineering*	39 hours
General Education	31 hours
Total	**70 hours**

**Students must also enroll in ENGT 2175, Engineering Technology Co-op Seminar along with completing an external work experience or qualified part-time or full-time employment while completing their studies.*

PROGRAM OF STUDY

Bachelor of Science (B.S.) – Electronic Engineering Technology

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3
ENGT	1101	Introduction to Engineering Technology	1
ELET	1150	Fabrication Lab	1
HIST	1301	United States to 1877	3
PHYS	1401	College Physics I and Lab	4
MEET	1301	Introduction to Computers	3
MATH	1412	Pre-Calculus	4
Total			**19 hours**
Second Semester			**Credit hours**
PHYS	1402	College Physics II and Lab	4
ELET	1460	Circuits I	4
MATH	2313	Calculus I	3
ENGL	1302	Composition II or	
ENGL	2311	Business and Technical Writing	3
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Lab	1
Total			**18 hours**

Sophomore Year

First Semester			**Credit hours**
HIST	1302	United States since 1877	3
ELET	2460	Circuits II	4
MATH	2314	Calculus II	3
ELET	2140	Instruments Lab	1
ELET	2415	Introduction to Engineering Programming	4
KINE	X1XX	Kinesiology	1
Total			**16 hours**
Second Semester			**Credit hours**
ENGT	3301	Advanced Analytical Math	3
ELET	2401	Introduction to Digital Circuits	4
ENGT	2303	Probability and Statistics	3
ELET	2410	Electronics I	4
ENGT	2130	Engineering Communications	1
INMT	1291	Capstone Experience	2
Total			**17 hours**

Junior Year

First Semester			**Credit hours**
SPAN	1313	Elementary Spanish I or	
SPAN	1373	Basic Spanish for Bilinguals I	3
ELET	2430	Electronics Systems Technology	4
ELET	3412	Introduction to Microprocessors	4
	X3XX	Social or Behavioral Science	3
	X3XX	Music or Art Appreciation	3
Total			**17 hours**
Second Semester			**Credit hours**
ELET	3413	Microprocessor Interfacing	4
ELET	3431	Introduction to Telecommunications	4
ELET	3314	Instrumentation and Control	3
ELET	3440	Electric Machinery	4
MFET	3311	International Quality Assurance Systems	3
Total			**18 hours**

Senior Year

First Semester			**Credit hours**
	X3XX	Technical Elective (3000, 4000)	3
SPAN	1314	Elementary Spanish II or	
SPAN	1374	Basic Spanish for Bilinguals II	3
GOVT	2301	American Government I	3
ENGT	4241	Senior Design Project I	2
ELET	4424	Power Distribution	4
MFET	4320	Materials and Processes	3
Total			**18 hours**
Second Semester			**Credit hours**
	X3XX	Technical Elective (Approval by Advisor)	3
GOVT	2302	American Government II	3
ENGT	4242	Senior Design Project II	2
ENGT	3320	Engineering Economics	3
SPCH	1315	Fundamentals of Speech	3
ENGL	23XX	Literature	3
Total			**17 hours**
Total number of hours required			**140 hours**

Credit Hour Summary

Engineering	86 Credit hours
General Education Core Curriculum	48 Credit hours
Electives	6 Credit hours
Total	**140 Credit hours**

PROGRAM OF STUDY

Certificate of Proficiency in Manufacturing or Mechanical Engineering Technology

Freshman Year

First Semester			**Credit hours**
MATH	1412	Pre-Calculus	4
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry Laboratory I	1
MEET	1301	Introduction to Computers	3
PHYS	1301	Physics I	3
PHYS	1101	Physics Laboratory I	1
Total			**15 hours**
Second Semester			**Credit hours**
ENGT	2341	Applied Math for Technology I	3
ENGT	2303	Probability and Statistics	3
ENGR	2301	Statics	3
ENGR	1204	Engineering Graphics I	2
ENGT	2401	Engineering Materials	4
Total			**15 hours**

Sophomore Year

First Semester			**Credit hours**
ENGT	2401	Engineering Materials	4
MFET	2420	Manufacturing Process Technology	4
ELET	1410	Introduction to Electrical Technology	4
INMT	1291	Special Topics (Mini-Capstone)	2
Total			**14 hours**

Credit Hour Summary

Engineering	32 hours
General Education	12 hours
Total	**44 hours**

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Manufacturing Engineering Technology or Mechanical Engineering Technology

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3
ENGT	1101	Introduction to Engineering Technology	1
ENGR	2301	Statics	3
PHYS	1301	Physics I and	3
PHYS	1101	Physics Laboratory	1
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry Laboratory I	1
HIST	1301	United States to 1877	3
Total			**16 hours**
Second Semester			**Credit hours**
MATH	1412	Pre-Calculus	4
MEET	2422	Statics and Strength of Materials	4
ENGR	1204	Engineering Graphics I	2
ENGT	2303	Probability and Statistics	3
ENGT	2401	Engineering Materials	4
Total			**17 hours**

Sophomore Year

First Semester			**Credit hours**
ENGL	1302	Composition II	3
ENGT	2130	Engineering Communications	1
ENGR	1205	Engineering Graphics II	2
HIST	1302	United States since 1877	3
MFET	2420	Manufacturing Process Technology	4
ENGT	2341	Applied Math for Technology or	
MATH	2313	Calculus I	3
Total			**16 hours**
Second Semester			**Credit hours**
	23XX	Technical Elective	3
SOCI	1301	Introduction to Sociology**	3
ENGT	2342	Applied Math for Technology II or	
MATH	2314	Calculus II	3
MFET	2321	Manufacturing Process Planning	3
ELET	1410	Introduction to Electrical Technology	4
INMT	1291	Special Topics (Mini-Capstone)	2
Total			**18 hours**
Total number of hours required			**68 hours**

Credit Hour Summary

Engineering*	41 hours
General Education	27 hours
Total	**68 hours**

**Students must also enroll in ENGT 2175, Engineering Technology Co-op Seminar along with completing an external work experience or qualified part-time or full-time employment while completing their studies.*

PROGRAM OF STUDY

Bachelor of Science (B.S.) – Manufacturing Engineering Technology

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3
ENGT	1101	Introduction to Engineering Technology	1
MEET	1301	Introduction to Computers	3
PHYS	1401	College Physics I and Lab	4
HIST	1301	United States to 1877	3
MATH	1412	Pre-Calculus	4
Total			**18**

Second Semester			**Credit hours**
CHEM	1311	Chemistry I	3
CHEM	1111	Chemistry Lab	1
PHYS	1402	College Physics II and Lab	4
MATH	2313	Calculus I	3
ENGR	1204	Engineering Graphics I	2
ENGL	1302	Composition II or	
ENGL	2311	Business and Technical Writing	3
MFET	2321	Manufacturing Processes Planning	3
Total			**19**

Sophomore Year

First Semester			**Credit hours**
ENGT	2401	Engineering Materials	4
MATH	2314	Calculus II	3
ENGR	1205	Engineering Graphics II	2
HIST	1302	American History Since 1877	3
CHEM	1312	Chemistry II	3
CHEM	1112	Chemistry Lab	1
KINE	X1XX	Kinesiology	1
ENGR	2301	Statics	3
Total			**20**

Second Semester			**Credit hours**
ENGT	2130	Engineering Communications	1
ENGT	3301	Advanced Analytical Math	3
ELET	1410	Introduction to Electrical Technology	4
ENGT	2303	Probability and Statistics	3
MFET	2420	Manufacturing Processes	4
INMT	1291	Capstone Experience	2
Total			**17**

Junior Year

First Semester			**Credit hours**
SPAN	1313	Elementary Spanish I or	
SPAN	1373	Basic Spanish for Bilinguals	3
ENGT	3303	Engineering Analysis	3
ELET	3314	Instrumentation and Control	3
X3XX	Social or Behavioral Science		3
ENGR	2332	Mechanics of Materials	3
ENGT	2303	Probability and Statistics	3
Total			**18**

Second Semester			**Credit hours**
MEET	3430	Transport Technologies I	4
SPAN	1314	Elementary Spanish II or	
SPAN	1374	Basic Spanish for Bilinguals II	3
MFET	3311	International Quality Assurance Systems	3
X3XX		Music or Art Appreciation	3
X3XX		Technical Elective	3
Total			16

Senior Year

First Semester			**Credit hours**
X3XX		Technical Elective	3
MFET	4321	Designed Experimentation	3
GOVT	2301	American Government I	3
ENGT	4241	Senior Design Project I	2
MFET	3320	Product and Process Design	3
Total			**14**

Second Semester			**Credit hours**
X3XX		Technical Elective	3
GOVT	2302	American Government II	3
ENGT	4242	Senior Design Project II	2
ENGT	3320	Engineering Economics	3
SPCH	1315	Fundamentals of Speech	3
ENGL	23XX	Literature	3
Total			**17**

Total number of hours required **139 hours**

Credit Hour Summary

Engineering	82 Credit hours
General Education Core Curriculum	48 Credit hours
Electives	9 Credit hours
Total	**139 Credit hours**

Bachelor of Science (B.S.) – Mechanical Engineering Technology

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3
ENGT	1101	Introduction to Engineering Technology	1
MEET	1301	Introduction to Computers	3
PHYS	1401	College Physics I	4
HIST	1301	United States to 1877	3
MATH	1412	Pre-Calculus	4
Total			**18**

Second Semester			**Credit hours**
PHYS	1402	College Physics II and Lab	4
CHEM	1311	Chemistry I	3
CHEM	1111	Chemistry Lab	1
MATH	2313	Calculus I	3
ENGR	1204	Engineering Graphics I	2
ENGL	1302	Composition II or	
ENGL	2311	Business and Technical Writing	3
X3XX	Social or Behavioral Science		3
Total			19

Sophomore Year

First Semester			**Credit hours**
ENGT	2410	Engineering Materials	4
MATH	2314	Calculus II	3
ENGR	1205	Engineering Graphics II	2
KINE	X1XX	Kinesiology	1
ENGR	2301	Statics	3
HIST	1302	American History Since 1877	3
Total			16

Second Semester			**Credit hours**
ELET	1410	Introduction to Electrical Tech.	4

ENGT	3301	Advanced Analytical Math	3
ENGT	2130	Engineering Communications	1
ENGT	2303	Probability and Statistics	3
MFET	2420	Manufacturing Processes	4
INMT	1291	Capstone Experience	2
Total			**17**
Junior Year			
First Semester			**Credit hours**
SPAN	1313	Elementary Spanish I or	
SPAN	1373	Basic Spanish for Bilinguals	3
ENGR	2302	Dynamics	3
ELET	3314	Instumentation and Control	3
ENGR	2332	Mechanics of Materials	3
ENGT	3303	Engineering Analysis	3
Total			**15**
Second Semester			**Credit hours**
SPAN	1314	Elementary Spanish II or	
SPAN	1374	Basic Spanish for Bilinguals II	3
MEET	3333	Mechanical Subsystem Design	3
MFET	3311	International Quality Assurance Systems	3
MEET	3430	Transport Technologies I	4
	X3XX	Technical Elective	3
Total			**19**
Senior Year			
First Semester			**Credit hours**
	X3XX	Technical Elective	3
GOVT	2301	American Government I	3
MFET	3320	Product and Process Design	3
MEET	4325	Mechanical Power Systems	3
ENGT	4241	Senior Design Project I	2
MEET	3431	Transport Technologies II	4
Total			**18**
Second Semester			**Credit hours**
	X3XX	Technical Elective	3
GOVT	2302	American Government II	3
ENGT	4242	Senior Design Project II	2
ENGT	3320	Engineering Economics	3
SPCH	1315	Fundamentals of Speech	3
ENGL	23XX	Literature	3
Total			**17**

Credit Hour Summary

Engineering	82 Credit hours
General Education Core Curriculum	48 Credit hours
Electives	9 Credit hours
Total	**139 Credit hours**

PROGRAM OF STUDY

Bachelor of Applied Technology-Technology Application/Training

General Education Core Corriculum	**48 hours**
Associate in Applied Science Technical Field	**35 hours**
Select from:	
Computer Information Systems/Science Technology	
Drafting/Computer Drafting and Design	
Engineering Technology - Manufacturing/Electronics/ Mechanical	
Network Information Management Technology	
Technology Application/Training Track	**34 hours**

MATH	1412	Pre-Calculus	4
ENGT	3320	Engineering Economics	3
ENGT	3307	Computer Applications in Technology I	3
ENGT	3308	Computer Applications in Technology II	3
MFET	3301	Manufacturing Materials and Applications	3
MFET	3302	Manufacturing Processes	3
ENGT	4350	Topics in Engineering Technology	3
COOP	4301	Cooperative Education (Internship)	3
Advanced Electives or			9
TECT	3301	Foundations of Technology Training	
TECT	3302	Psychology of Technology Training	
TECT	3303	Training Methods in Industry	

Other Electives	**3 hours**
Total minimum number of hours required	**120 hours**
Minimum advanced credit hours for graduation	**30 hours**

INDUSTRIAL TECHNOLOGY DEPARTMENT

Occupational Training Certificates (OTC)
Air Conditioning and Refrigeration
Auto Body Repair,
Automotive Mechanics
Building Trades
Diesel Mechanics

PROGRAM OF STUDY

Occupational Training Certificate – Air Conditioning and Refrigeration

The Air Conditioning and Refrigeration program is a one-year program that offers students the opportunity to prepare to enter the fields of air conditioning, heating, ventilation, and refrigeration system installation, service and repair. Classroom and laboratory work with state of the art equipment provides students with the opportunity to acquire the technical knowledge and skills and work attitude needed for employment in the Air Conditioning and Refrigeration industry.

Total number of hours required	36 Credit hours
Contact hours	1,376

Freshman Year

First Semester			**Credit hours**
CETT	1502	Electricity Principles	5
HART	1507	Refrigeration Principles	5
MAIR	1449	Refrigerators, Freezers, & Window Air Conditioners	4
Total			**14**
Second Semester			**Credit hours**
MAIR	1445	Dryers, Washers, Dishwashers	4
HART	1541	Residential Air Conditioning	5
HART	1545	Gas & Electric Heating	5
Total			**14**
Summer Sessions			**Credit hours**
HART	2538	A.C. Installation/Service	5
HART	1369	Practicum or	
HART	2536	Troubleshooting	3

Total			**8**
Total number of hours required			**36**

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

PROGRAM OF STUDY

Occupational Training Certificate – Auto Body Repair

The one-year auto body program offers students the opportunity to develop the skills needed to perform extensive body repairs under minimum supervision. Classroom and laboratory work with modern tools and equipment provides students the opportunity to acquire the technical knowledge and skills and the work attitude needed for employment in the auto body damage repair industry.

Total number of hours required — Credit hours – 36
Contact hours — 1,056

Freshman Year

First Semester			**Credit hours**
ABDR	1541	Structural Analysis & Damage Repair I	5
ABDR	1519	Basic Metal Repair	5
ABDR	1411	Vehicle Measurement & Damage Repair Procedures	4
Total			**14**
Second Semester			**Credit hours**
ABDR	1453	Fiberglass Repair	4
ABDR	1542	Structural Analysis & Damage Repair II	5
ABDR	1431	Basic Refinishing	4
Total			**13**
Summer Sessions			**Credit hours**
ABDR	2549	Advanced Refinishing I	5
ABDR	2255	Collision Repair Estimating	2
ABDR	2257	Collision Repair Shop Management	2
Total			**9**
Total number of hours required			**36**

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

PROGRAM OF STUDY

Occupational Training Certificate – Automotive Mechanics

The one-year automotive mechanics program offers students the opportunity to enter the fields of general or specialized automotive service repair. Classroom and laboratory work with state-of-the-art equipment and sophisticated vehicles provides students the opportunity to acquire the technical knowledge, skills and work attitude needed for employment in the automotive service and repair field.

Total number of hours required — Credit hours – 39
Contact hours — 1,136

Freshman Year

First Semester			**Credit hours**
AUMT	1201	Introduction & Theory of Auto. Technology	2
AUMT	2305	Theory of Automotive Engines	3
AUMT	1407	Automotive Electrical Systems	4
AUMT	2417	Engine Performance Analysis I	4
Total			**13**
Second Semester			**Credit hours**
AUMT	1419	Automotive Engine Repair	4
AUMT	2434	Engine Performance Analysis II	4
AUMT	1410	Brakes	4
AUMT	1416	Suspension & Steering	4
Total			**16**
Summer Sessions			**Credit hours**
AUMT	1445	Automotive Heating & A.C.	4
AUMT	2209	Manual Drive Train and Axle Theory	2
AUMT	2425	Automatic Transmission and Transaxle	4
Total			**10**
Total number of hours required			**39**

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

PROGRAM OF STUDY

Occupational Training Certificate – Building Trades

The one-year building trades specialization program offers students the opportunity to enter the field of construction, plumbing and electrical. Classroom and laboratory work with state-of-the-art equipment provides students the opportunity to acquire the technical knowledge, skills and work attitude needed for entry level employment in construction, plumbing and electrical.

First Semester			**Credit hours**
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
Total			**15**
Second Semester			
Carpentry Specialization			**Credit hours**
CRPT	1329	Introduction to Carpentry	3
CNBT	1307	Commercial & Industrial Blueprint Reading	3
CRPT	1325	Forms and Foundations I	3
CRPT	1323	Floor Systems	3
CRPT	1315	Conventional Wall Systems	3
CRPT	1311	Conventional Roof Systems	3
Total			**18**
Second Semester			
Plumbing Specialization			**Credit hours**
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
Total			**16**
Second Semester			
Electrical Specialization			**Credit hours**
ELPT	1321	Introduction to Electrical Safety & Tools	3

ELPT	1349	Electrical Blueprint Reading	3
ELPT	1311	Basic Electrical Theory	3
ELPT	1325	National Electrical Code I	3
ELPT	1329	Residential Wiring	3
Total			**15**

Summer Session

Carpentry Specialization			**Credit hours**
CRPT	1345	Conventional Interior Finish Systems	3
CRPT	1341	Conventional Exterior Finish Systems	3
WDWK	1313	Cabinet Making or	3
CNBT	1366	Practicum	
Total			**9**

Summer Session

Plumbing Specialization			**Credit hours**
PFPB	1345	Commercial Construction & Fixture Setting	3
PFPB	2301	Piping Fabrication & Installation I or	3
CNBT	1366	Practicum	3
Total			**6**

Summer Session

Electrical Specialization			**Credit hours**
ELPT	1345	Commercial Wiring	3
ELTN	1342	Electrical Troubleshooting or	3
ELPT	1364	Practicum	
Total			**6**

Credit Hour Summary

Carpentry Specialization	42 hours
Plumbing Specialization	36 hours
Electrical Specialization	36 hours

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

PROGRAM OF STUDY

Occupational Training Certificate – Diesel Mechanics

The one-year diesel mechanics program offers students the opportunity to enter the fields of general or specialized diesel-powered vehicle service and repair. Classroom and laboratory work with state of the art equipment provides students the opportunity to acquire the technical knowledge and skills and the work attitude needed for employment maintaining, diagnosing, servicing and repairing Diesel-powered vehicles and equipment.

Total number of hours required Credit hours – 37
Contact hours 1088

Freshman Year

First Semester			**Credit hours**
DEMR	1506	Diesel Engine I	5
DEMR	1510	Diesel Engine Testing/Repair I	5
DEMR	1413	Fuel Systems	4
Total			**14**

Second Semester			**Credit hours**
DEMR	1521	Power Train I	5
DEMR	1505	Basic Electrical Systems	5
DEMR	1423	HVAC Troubleshooting & Repair	4
Total			**14**

Summer Sessions			**Credit hours**
DEMR	1516	Basic Hydraulics	5
DEMR	1491	Special Topic: Service Area	4
Total			9

Credit Hour Summary

Total number of hours required	**37 hours**

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

Drafting Technology

The two-year curriculum in Drafting Technology prepares students for employment as drafting technicians in two areas: Architectural/ Civil/ Structuralor Mechanical/ Electrical, and Manufacturing.

Drafters produce detailed drawings with exact dimensions and specifications. Drafters must translate ideas into drawings and are an integral link between an idea and the finished product. Most drafters now use CAD (Computer-Aided Drafting) to make layouts, working plans, assembly drawings, and maps from notes and sketches. They put in written form the plans and designs of architects, engineers, or designers. To show the use or purpose of an object, drafters draw several views of each part in detail. These views enable workers to see the object's application in an assembly and where it fits in the overall design.

Drafters work in construction, petroleum, transportation, automobile, manufacturing, machinery, utilities, consulting engineering, architecture, and in electronics, and missile programs. Almost every product needs detailed working drawings. To supply these plans, drafters work in industries that make everything from toys to rockets.

Upon completion of the Associate in Applied Science Degree, the students should be able to:

- produce correct drawings either manually or with CAD
- assume drafting assignments with minimum supervision
- communicate effectively with employer and staff in order to work in drafting team assignments

PROGRAM OF STUDY

Certificate of Proficiency – Drafting

Freshman Year

First Semester			**Credit hours**
MATH	1314	College Algebra	3
DFTG	1409	Basic CAD	4
DFTG	1405	Technical Drafting	4
COSC	1310	Computer Literacy*	3
Total			**14 hours**

Second Semester			**Credit hours**
DFTG	1456	Descriptive Geometry	4
DFTG	1448	Topographical Drafting	4
DFTG	1417	Architectural-Residential	4
DFTG	2440	Solid Modeling/Design	4
Total			**16 hours**
Total number of hours required			**30 hours**

**MEET 1301 may be substituted*

Credit Hour Summary

Drafting	24 hours
Total	30 hours

'C' or better is required for all Certificate courses.
Students in the Certificate Program must pass a comprehensive Exit Exam. This exam will cover competencies from all Certificate DFTG courses.

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Drafting Technology

Freshman Year			
First Semester			**Credit hours**
MATH	1314	College Algebra	3
DFTG	1409	Basic CAD	4
DFTG	1405	Technical Drafting	4
@COSC	1310	Computer Literacy	3
Total			**14 hours**
Second Semester			**Credit hours**
DFTG	1456	Descriptive Geometry	4
DFTG	1448	Topographical Drafting	4
DFTG	1417	Architectural-Residential	4
DFTG	2440	Solid Modeling/Design	4
Total			**16 hours**
Summer Semester			**Credit hours**
ENGL	1301	Composition I	3
DFTG		Drafting Elective	4
Total			**7 hours**
Sophomore Year			
First Semester			**Credit hours**
DFTG	2432	Advanced CAD	4
#MATH	1412	Pre-Calculus	4
DFTG		Drafting Elective	4
SPCH	1315	Fundamentals of Speech	3
Total			**15 hours**
Second Semester			**Credit hours**
ARTS	1301	Art Appreciation	3
DFTG	2386	Internship with Exit Exam	3
DFTG		Drafting Elective	4
+		Social/Behavioral Science	3
Total			**13 hours**
Total number of hours required			**65 hours**

Credit Hour Summary

Drafting	31 Credit hours
Drafting Electives	12 Credit hours
*General Education	22 Credit hours
Total	65 Credit hours

'C' or better is required for all courses except ARTS, SPCH, and Social/Behavioral Science.
@MEET 1301 may be substituted
 # or ENGT 1204 and ENGT 1205
***MATH 1316, MATH 1348, or MATH 1412 may be substituted*
+ECON 2301, GEOG 1301, PSYC 2301 or SOCI 1301
For DFTG electives contact department office.

PROGRAM OF STUDY

Occupational Training Certificate – Machine Shop

The Occupational Technical Certificate in Machine Shop prepares students for entry level jobs in machining operations in Manufacturing and for entry into apprentice programs for tool and die professions.

Graduates from this program should be able to operate all the common basic manual and computer controlled machine tools including lathes, milling machines, grinders and boring machines. They will be capable of holding commercial tolerances for semi-precision products, perform basic measurement operations and follow blue prints and standard operations sheets to produce parts and components.

Total number of credit hours required	42 hours
Contact hours	1,328

Freshman Year			
First Semester			**Credit hours**
MCHN	1332	Bench Work & Layout	3
MCHN	1300	Machinist I	3
MCHN	1317	Machine Shop Blueprint Reading	3
MCHN	1320	Precision Tools & Measurement	3
MCHN	1338	Basic Machine Shop I	3
Total hours			**15**
Second Semester			
MCHN	1302	Machinist II	3
MCHN	1305	Metal & Heat Treatment	3
MCHN	1341	Basic Machine Shop II	3
MCHN	1343	Machine Shop Mathematics	3
MCHN	1352	Intermediate Machine Shop	3
Total hours			**15**
Summer Sessions			
MCHN	1253	Intermediate Machine Shop II	2
MCHN	2433	Advanced Lathe Operations	4
MCHN	1254	Intermediate Machine Shop	2
MCHN	2437	Advanced Milling Operations	4
Total hours			**12**
Total number of hours required			**42**

Note: Students in Level I Certificate programs are TASP-waived but will be assessed for basic academic skills competency and provided opportunities for remediation in the ASK lab of the Learning Assistance Center. (GIPWE, Chapter 3-THECB)

MATHEMATICS DEPARTMENT

The Department of Mathematics offers a major and a minor in Mathematics, which are designed to provide the student with the necessary background for continued study in mathematics or in a related area. The curriculum offered by the Mathematics Department will prepare students for graduate school, for careers in applied mathematics, or for a teaching career in mathematics.

The faculty of the Mathematics Department share a commitment to the advancement and dissemination of knowledge through excellence in teaching, scholarship, and dedication to creative activities. This commitment by the faculty assures that a graduate of this program is afforded the opportunity to be successful in whatever career is chosen.

Mathematics

The Bachelor of Science degree with a major in Mathematics requires 38-39 semester credit hours, 21 of which must be advanced. The requirements for this degree include 10 core courses and six hours of advanced math electives.

The first course in the core is MATH 2413 (Calculus I). Students who are not prepared to begin the mathematics sequence with Calculus I will have to use the three hours included in the General Education Core and/or some elective hours to bring their mathematics skills up to that level.

Programs of study leading to the Bachelor of Science degree with a major in Mathematics under teaching certification are also available. Students may select the Secondary Mathematics (grades 8-12) or the Middle School Level (grades 4-8) teacher certification plan.

PROGRAM OF STUDY

Bachelor of Science – Mathematics (Non-Teaching Degree with A Minor)

General Education Core Curriculum		48 hours
Mathematics Major		38-39 hours
Math Core 32-33 hours		
MATH	2413	Calculus I
MATH	2414	Calculus II
MATH	2318	Linear Algebra
MATH	2342	Elementary Statistics
MATH	3305	Euclidean and Transformational Geometry
MATH	3347	Calculus III
MATH	3373	Discrete Structures
MATH	4348	Advanced Linear Algebra
MATH	4351	Modern Algebra
COSC	1418	Programming Structures I (Preferred) or
COSC	1310	Computer Literacy
Mathematics Electives (3000 and 4000 level courses		6 hours
Minor (minimum 18 hours)		18-30 hours
Free Electives		7-20 hours
Total number of minimum hours required		**124 hours**

PROGRAM OF STUDY

Bachelor of Science – Mathematics Teacher Certification/Secondary Mathematics (Grades 8-12)

General Education Core		48 hours
Math Courses		48 hours
MATH	1412	Pre-Calculus
MATH	2413	Calculus I
MATH	2414	Calculus II
MATH	2318	Linear Algebra
MATH	2342	Elementary Statistics
MATH	3303	History of Mathematics
MATH	3304	Geometric Structures
MATH	3305	Euclidean and Transformational Geometry
MATH	3347	Calculus III
MATH	3364	Survey of Mathematics Concepts and Principles I
MATH	3365	Survey of Mathematics Concepts and Principles II
MATH	4302	Theory of Numbers
MATH	4339	Probability and Statistics
MATH	4351	Modern Algebra
MATH	4365	Problem Solving and Mathematical Modeling
Pedagogy and Professional Responsibility		26 hours
EDCI	4301	Foundations of Education in a Diverse Society
EDSC	4303	Understanding Learners in 8-12
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4375	Strategies for Delivering Instruction for Grades 8-12
EDSC	4376	Ethical Standards and Classroom Management for 8-12
EDSC	4378	Teaching Mathematics in 8-12 Classrooms
EDCI	4203	Technology in the School Curriculum
EDSC	4641	Student Teaching 8-12
Combination of Subjects		16 hours
SPCH	1318	Interpersonal Communication
EDCI	2101	School and Society
EDSC	4380	Teaching ESL 8-12
EDLI	4351	Reading in the Content Area
EDLI	4355	Developing Critical Reading Skills
SPED	4386	Modification in Inclusive Settings
Total Semester Credit hours		**138**

PROGRAM OF STUDY

Bachelor of Science – Mathematics Teacher Certification/Middle Grade Level (Grades 4-8)

General Education Core		48 hours
Math Courses		48 hours
MATH	1412	Pre-Calculus
MATH	2413	Calculus I
MATH	2414	Calculus II
MATH	2318	Linear Algebra
MATH	2342	Elementary Statistics
MATH	3303	History of Mathematics
MATH	3304	Geometric Structures
MATH	3305	Euclidean and Transformational Geometry
MATH	3335	Contemporary Math I
MATH	3336	Contemporary Math II
MATH	3364	Survey of Mathematics Concepts and Principles I
MATH	3365	Survey of Mathematics Concepts and Principles II
MATH	4302	Theory of Numbers
MATH	4339	Probability and Statistics
MATH	4365	Problem Solving and Mathematical Modeling
Pedagogy and Professional Responsibility		26 hours
EDCI	4301	Foundations of Education in a Diverse Society
EDCI	4203	Technology and the Classroom
EDMG	4341	Understanding Learners in the Middle Grades
EDMG	4342	Instructional Planning & Curriculum for the Middle Grades
EDMG	4343	Instructional Methods & Classroom Management in the Middle Grades
EDMG	4346	Teaching Science & Math
EDMG	4347	Teaching English Language Learners in the Middle Grades
EDMG	4648	Student Teaching in the Middle Grades
Support		16 hours
SPCH	1318	Interpersonal Communication

EDCI	2101	School and Society
KINE	3340	Principles of Wellness and Fitness
SPED	4370	Foundations of Special Education
SPED	4386	Modification in Inclusive Settings
EDLI	4367	Teaching Reading to the English Language Learner

Total Semester Credit hours **138**

Mathematics Minor

The bachelor's degree with a minor in Mathematics requires 26 semester credit hours of Mathematics, 15 of which must be advanced. The first course in the core is MATH 2413 (Calculus I). Students who are not prepared to begin the mathematics sequence with Calculus I will have to use the three hours included in the General Education Core and/or some elective hours to bring their mathematical skills up to that level.

The Mathematics minor is an option for students completing a degree in a non-teaching major or the teacher certification degree under Option II.

Mathematics Minor (For Non-Teaching Degrees or Teacher Certification – Option II Minors)

Mathematics Minor Core 20 hours

MATH	2413	Calculus I
MATH	2414	Calculus II
MATH	2342	Elementary Statistics
MATH	3305	Euclidean & Transformational Geometry
MATH	3347	Calculus III
MATH	3373	Discrete Structures

Math Electives (3000 and 4000 level courses) 6 hours

Total Number of hours required for minor **26 hours**

Physical Sciences Department

Bachelor of Arts – Chemistry, Chemistry Minor,
Bachelor of Arts – Physics, Physics Minor

The programs and minors offered by the Physical Sciences Department are designed to provide the student with the needed background for graduate studies, employment in industry, or, with the appropriate options, secondary teacher certification in Texas public education. Refer to the Education Department for teacher certification requirements.

Chemistry

Program of Study

Bachelor of Arts – Chemistry

The bachelor's degree with a major in chemistry requires a total of 125 hours with a minimum of 36 advanced hours, and 47 semester hours of chemistry, at least 31 of which must be advanced.

General Education Core Curriculum 48 hours

Students should use CHEM 1311/1111 and CHEM 1312/1112, the General Chemistry I and II series, to satisfy the science requirement and MATH 1412, Pre-Calculus to satisfy the mathematics requirement.

Chemistry Major 39 hours
Support Courses 20 hours
Restricted Electives 12 hours
Free Electives 6 hours
Total number of hours required 125 hours

Chemistry Major

Chemistry Core 31 hours

CHEM	2123	Organic Chemistry Laboratory I
CHEM	2323	Organic Chemistry I
CHEM	2125	Organic Chemistry Laboratory II
CHEM	2325	Organic Chemistry II
CHEM	3301	Inorganic Chemistry
CHEM	3105	Analytical Laboratory
CHEM	3305	Analytical Chemistry
CHEM	3110	Physical Chemistry Laboratory I
CHEM	3310	Physical Chemistry I
CHEM	3112	Physical Chemistry Laboratory II
CHEM	3312	Physical Chemistry II
CHEM	4320	Chemistry Problems
CHEM	4110	Chemical Seminar
CHEM	4105	Instrumental Methods Lab
CHEM	4305	Instrumental Methods of Analysis

Chemistry Electives 8 hours
Choose from:

CHEM	3303	Biochemistry I
CHEM	3103	Biochemistry Laboratory I
CHEM	3304	Biochemistry II
CHEM	3306	Chemical Literature
CHEM	4404	Selected Topics in Biochemistry
CHEM	4412	Selected Topics in Physical Chemistry
CHEM	4423	Selected Topics in Organic Chemistry

Support Courses 20 hours

PHYS	1101	General Physics Laboratory I
PHYS	1301	General Physics I
PHYS	1102	General Physics Laboratory II
PHYS	1302	General Physics II
MATH	2313	Calculus I
MATH	2314	Calculus II
MATH	3349	Differential Equations or MATH 3347 CALC III
COSC	1318	Programming Structures

Restricted Electives 12 hours

Students choose from Biology, Computer Science, Advanced Mathematics, Advanced Physics or Advanced Chemistry.

Free Electives 6 hours

The Chemistry Major does not require a minor. To include a minor in the degree plan, students should use the electives along with courses from the General Education Core to fulfill the requirements of a minor. Students who are not prepared to begin the mathematics sequence at Pre-Calculus, should use some electives to bring their skills up to that level.

Program of Study

**Bachelor of Arts – Chemistry Teacher Certification – Secondary Option I*

** Pending SBEC action; See advisor*

Chemistry Minor

The bachelor's degree with a Minor in Chemistry requires 24 semester hours of chemistry, at least 12 of which must be advanced.

The Chemistry minor can be used as a normal minor for a B.S. or B.A.

degree, or in a secondary teaching certification (Option I).

Required Courses: 12 hours

CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Laboratory	1
CHEM	1312	General Chemistry II	3
CHEM	1112	General Chemistry II Laboratory	1
CHEM	2323	Organic Chemistry I	3
CHEM	2123	Organic Chemistry I Laboratory	1

Advanced Chemistry Electives 12 hours

Choose from any advanced chemistry courses

Total **24 hours**

Physics

Program of Study

Bachelor of Arts – Physics

The Bachelor of Arts degree with a major in physics requires a minimum of 126 hours including a minimum of 36 advanced hours, and a minimum of 42 semester hours of physics, at least 30 of which must be advanced.

General Education Core Curriculum 48 hours

Mathematics – Students should use MATH 2313, Calculus I, to satisfy the mathematics requirement.

Science – Students should use PHYS 2425, University Physics I, and PHYS 2426, University Physics II, to satisfy the science requirement.

Physics Major 42 -44 hours

Minor (optional)*

Support Courses 23 hours

Restricted Electives *12 hours

Free Electives (12 SCH)* *12 hours

Total Number of hours required **129 hours**

Physics Major Requirements

Physics Major 42-44 hours

Physics Core 36 hours

PHYS	2425	University Physics I
PHYS	2426	University Physics II
PHYS	2427	University Physics III
PHYS	3400	Modern Physics
PHYS	3310	Classical Mechanics
PHYS	3201	Advanced Physics Lab I
PHYS	3320	Thermodynamics
PHYS	3390	Mathematical Methods
PHYS	4300	Undergraduate Research Project
PHYS	4320	Quantum Mechanics
PHYS	4330	Electromagnetic Theory

Physics Electives 6-8 hours

Choose from any advanced physics courses

Support Courses 23 hours

MATH	2313	Calculus I
MATH	2314	Calculus II
MATH	3347	Calculus III
MATH	3349	Differential Equations
CHEM	1111	General Chemistry Lab I
CHEM	1311	General Chemistry I
CHEM	1112	General Chemistry Lab II
CHEM	1312	General Chemistry II
COSC	1318	Programming Structures I

Electives 24 hours

Restricted Electives* 12 hours

Choose from:

Biology, Chemistry, Advanced Mathematics, Computer Science, or Advanced Physics.

Free Electives 12 hours

**The Physic Major does not require a minor. Students wishing to include a minor in their degree can use the restricted electives along with courses from the General Education Core to fulfill the requirements of a minor. Students who are not prepared to begin the mathematics sequence at Calculus I will have to use some of these electives hours to bring their mathematics skills up to that level.*

Program of Study

**Bachelor of Arts – Physics*
Teacher Certification – Secondary Option I

** Pending SBEC action; See advisor*

Physics Minor

The Physical Sciences Department offers two Physics Minors.

These minors can be used to fulfill the requirements of a minor in B.A. and B.S. degrees, or as a minor in B.A. and B.S. degree programs that include a secondary teaching certification – Option I.

Physics Minor (22 hours – 10 of which must be advanced)

Required Courses : 16 hours

PHYS	2425	University Physics I
PHYS	2426	University Physics II
PHYS	2427	University Physics III
PHYS	3400	Modern Physics

Advanced Physics Electives: 6 hours

Choose from any advanced Physics courses

Engineering Physics

Program of Study

Bachelor of Science in Engineering Physics - Bioengineering

ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315		
	or 1318	Speech	3
MATH	2313	Calculus I	3
PHYS	2425	University Physics I	4
PHYS	2426	University Physics II	4
ENGL	23XX	Literature	3

Music Appreciation/Music Literature or Art Appreciation/Art History 3

Social and Behavioral Sciences (15 hours)

HIST	1301	U.S. History to 1877	3
HIST	1302	U.S. History from 1877	3
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3

(3) hours from: ANTH 2351, ECON 2301, GEOG 1303, PSYC 2301, SOCI 1301, SOCI 2319 3

Modern Languages (6 hours)

X3XX 3

	X3XX		3
KINE	11___		1
Support Courses (10 sch)			
MATH	2314	Calculus II	3
MATH	3347	Calculus III	3
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Laboratory	1
Core Physics Courses (29 sch)			
PHYS	2427	University Physics III	4
PHYS	3310	Classical Mechanics	3
PHYS	3390	Mathematical Methods I	3
PHYS	3391	Mathematical Methods II	3
PHYS	3400	Modern Physics w/lab	4
PHYS	4300	Senior Research Project	3
PHYS	4320	Quantum Mechanics	3
PHYS	4330	Electromagnetic Theory	3
PHYS	4390	Computational Methods in the Physical Sciences	3
Bioengineering Track (42 sch)			
BIOL	1306	Biological Principles I	3
BIOL	1106	Biological Principles I Laboratory	1
BIOL	1307	Biological Principles II	3
BIOL	1107	Biological Principles II Laboratory	1
CHEM	1312	General Chemistry II	3
CHEM	1112	General Chemistry II Laboratory	1
CHEM	3310	Physical Chemistry	3
PHYS	3201	Advanced Physics Lab	2
PHYS	3315	Physics of Biological Systems	3
PHYS	3320	Thermodynamics	3
PHYS	4315	Analysis of Biomolecules by Physical Methods	3
* BENG	3310	Pathways of Cellular Signaling	3
* BENG	43XX	Structural and Functional Domains of Biopolymers	3
* BENG	44XX	Bioengineering w/lab	4
6 hours from electives (biology or chemistry)			6

* Pending Approval

Bachelor of Science in Engineering Physics - Computer Engineering

General Education Core Curriculum (48 sch)			
Communications (9 hours)			
ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315 or 1318	Speech	3
Mathematics (3 hours)			
MATH	2313	Calculus I	3
Natural Sciences (8 hours)			
PHYS	2425	University Physics I	4
PHYS	2426	University Physics II	4
Humanities & Visual and Performing Arts (6 hours)			
ENGL	23XX	Literature	3
Music Appreciation/Music Literature or Art Appreciation/ Art History			3
Social and Behavioral Sciences (15 hours)			
HIST	1301	U.S. History to 1877	3
HIST	1302	U.S. History from 1877	3
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
(3) hours from: ANTH 2351, ECON 2301, GEOG 1303, PSYC 2301, SOCI 1301, SOCI 2319			3
Modern Languages (6 hours)			
	X3XX		3
	X3XX		3
Kinesiology (1 hour)			
KINE	11___		1
Support Courses (10 sch)			
MATH	2314	Calculus II	3
MATH	3347	Calculus III	3
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Laboratory	1
Core Physics Courses (29 sch)			
PHYS	2427	University Physics III	4
PHYS	3310	Classical Mechanics	3
PHYS	3390	Mathematical Methods I	3
PHYS	3391	Mathematical Methods II	3
PHYS	3400	Modern Physics w/lab	4
PHYS	4300	Senior Research Project	3
PHYS	4320	Quantum Mechanics	3
PHYS	4330	Electromagnetic Theory	3
PHYS	4390	Computational Methods in the Physical Sciences	3
Computer Engineering Track (40 SCH)			
PHYS	4340	Solid State Physics	3
PHYS	4392	Computational Methods in the Physical Sciences II	3
PHYS	5394	Statistical Theory of Signal Detection	3
COSC	3355	Principles of Programming Languages	3
COSC	4300	Compiler Construction	3
COSC	4310	Operating Systems	3
COSC	4313	Computer Networking	3
ELET	2301	Introduction to Digital Circuits	3
ELET	3412	Introduction to Microprocessors	4
ELET	3314	Instrumental and Control	3
ENGT	3320	Engineering Economics	3
6 hours from electives (computer science, engineering technology)			6

Bachelor of Science in Engineering Physics - Electronic Engineering

ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315 or 1318	Speech	3
Mathematics (3 hours)			
MATH	2313	Calculus I	3
Natural Sciences (8 hours)			
PHYS	2425	University Physics I	4
PHYS	2426	University Physics II	4
Humanities & Visual and Performing Arts (6 hours)			
ENGL	23XX	Literature	3
Music Appreciation/Music Literature or Art Appreciation/Art History			3
Social and Behavioral Sciences (15 hours)			
HIST	1301	U.S. History to 1877	3
HIST	1302	U.S. History from 1877	3
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
(3) hours from: ANTH 2351, ECON 2301, GEOG 1303, PSYC 2301, SOCI 1301, SOCI 2319			3

Modern Languages (6 hours)			
	X3XX		3
	X3XX		3
Kinesiology (1 hour)			
KINE	11___		1
Support Courses (10 sch)			
MATH	2314	Calculus II	3
MATH	3347	Calculus III	3
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Laboratory	1
Core Physics Courses (29 sch)			
PHYS	2427	University Physics III	4
PHYS	3310	Classical Mechanics	3
PHYS	3390	Mathematical Methods I	3
PHYS	3391	Mathematical Methods II	3
PHYS	3400	Modern Physics w/lab	4
PHYS	4300	Senior Research Project	3
PHYS	4320	Quantum Mechanics	3
PHYS	4330	Electromagnetic Theory	3
PHYS	4390	Computational Methods in the Physical Sciences	3
Electronic Engineering Track (39 sch)			
PHYS	3201	Advanced Physics Lab	2
PHYS	4340	Solid State Physics	3
PHYS	5394	Statistical Theory of Signal Detection	3
ELET	2301	Introduction to Digital Circuits	3
ELET	2330	Electronic Systems Technology	3
ELET	3314	Instrumentation and Control	3
ELET	3412	Introduction to Microprocessors	4
ELET	3413	Microprocessor Interfacing	4
ELET	3431	Introduction to Telecommunications	4
ELET	4423	Control Systems	4
6 hours electives (engineering technology or physics)			6

Bachelor of Science in Engineering Physics - Industrial Engineering

Communications (9 hours)			
ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315 or		
	1318	Speech	3
Mathematics (3 hours)			
MATH	2313	Calculus I	3
Natural Sciences (8 hours)			
PHYS	2425	University Physics I	4
PHYS	2426	University Physics II	4
Humanities & Visual and Performing Arts (6 hours)			
ENGL	23XX	Literature	3
Music Appreciation/Music Literature or Art Appreciation/Art History			3
Social and Behavioral Sciences (15 hours)			
HIST	1301	U.S. History to 1877	3
HIST	1302	U.S. History from 1877	3
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
(3) hours from: ANTH 2351, ECON 2301, GEOG 1303, PSYC 2301, SOCI 1301, SOCI 2319			3
Modern Languages (6 hours)			
	X3XX		3
	X3XX		3
Kinesiology (1 hour)			
KINE	11___		1
Support Courses (10 sch)			
MATH	2314	Calculus II	3
MATH	3347	Calculus III	3
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Laboratory	1
Core Physics Courses (29 sch)			
PHYS	2427	University Physics III	4
PHYS	3310	Classical Mechanics	3
PHYS	3390	Mathematical Methods I	3
PHYS	3391	Mathematical Methods II	3
PHYS	3400	Modern Physics w/lab	4
PHYS	4300	Senior Research Project	3
PHYS	4320	Quantum Mechanics	3
PHYS	4330	Electromagnetic Theory	3
PHYS	4390	Computational Methods in the Physical Sciences	3
Industrial Engineering Track (41 sch)			
CHEM	1312	General Chemistry II	3
CHEM	1112	General Chemistry II Laboratory	1
PHYS	3320	Thermodynamics	3
ELET	3314	Instrumentation and Control	3
ENGR	2332	Mechanics of Materials	3
ENGT	2303	Probability and Statistics	3
ENGT	3320	Engineering Economics	3
MFET	2420	Manufacturing Process Technologies	4
MFET	3310	International Quality Assurance Systems	3
MFET	3320	Product and process Design	3
MFET	3325	Manufacturing Process Planning	3
MFET	3341	Electronic Assembly Technology	3
MFET	3351	Plastic Manufacturing Technology	3
MFET	4321	Designed Experimentation	3

Bachelor of Science in Engineering Physics - Mechanical Engineering

Communications (9 hours)			
ENGL	1301	Composition I	3
ENGL	1302	Composition II	3
SPCH	1315 or		
	1318	Speech	3
Mathematics (3 hours)			
MATH	2313	Calculus I	3
Natural Sciences (8 hours)			
PHYS	2425	University Physics I	4
PHYS	2426	University Physics II	4
Humanities & Visual and Performing Arts (6 hours)			
ENGL	23XX	Literature	3
Music Appreciation/Music Literature or Art Appreciation/Art History			3
Social and Behavioral Sciences (15 hours)			
HIST	1301	U.S. History to 1877	3
HIST	1302	U.S. History from 1877	3
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
(3) hours from: ANTH 2351, ECON 2301, GEOG 1303, PSYC 2301, SOCI 1301, SOCI 2319			3
Modern Languages (6 hours)			
	X3XX		3
	X3XX		3

Kinesiology (1 hour)			
KINE	11___		1
Support Courses (10 sch)			
MATH	2314	Calculus II	3
MATH	3347	Calculus III	3
CHEM	1311	General Chemistry I	3
CHEM	1111	General Chemistry I Laboratory	1
Core Physics Courses (29 sch)			
PHYS	2427	University Physics III	4
PHYS	3310	Classical Mechanics	3
PHYS	3390	Mathematical Methods I	3
PHYS	3391	Mathematical Methods II	3
PHYS	3400	Modern Physics w/lab	4
PHYS	4300	Senior Research Project	3
PHYS	4320	Quantum Mechanics	3
PHYS	4330	Electromagnetic Theory	3
PHYS	4390	Computational Methods in the Physical Sciences	3
Mechanical Engineering Track (40 sch)			
CHEM	1312	General Chemistry II	3
CHEM	1112	General Chemistry II Laboratory	1
PHYS	3320	Thermodynamics	3
ENGR	1204	Engineering Graphics I	2
ENGR	1205	Engineering Graphics II	2
ENGT	2401	Engineering Materials	4
MFET	2320	Engineering Mechanics II	3
MFET	2422	Statics and Strength of Materials	4
MFET	3331	Transport Technologies II	3
MFET	3333	Mechanical Subsystem Design	3
MFET	3351	Mechanical Engineering Laboratory	3
MFET	4325	Mechanical Power Systems	3
6 hours electives (engineering technology or physics)			6

SCHOOL OF BUSINESS

Certificates & Degrees Offered

Accounting Department

Bachelor of Business Administration – Accounting

Business Administration Department

Business Administration

Associate in Arts – Business Administration
Business Administration Minor
Bachelor of Applied Arts and Sciences – Applied Business Technology
Bachelor of Business Administration – General Business

Finance

Bachelor of Business Administration – Finance

Management

Bachelor of Business Administration – Management

Marketing

Bachelor of Business Administration – Marketing
Master of Business Administration

Business Technology Department

Accounting Technology

Certificate of Proficiency – Accounting Technology
Associate in Applied Science – Accounting Technology

International Business

Certificate of Proficiency – International Business
Associate in Applied Science – International Business

Legal Studies

Certificate of Proficiency – Legal Assisting Specialist
Associate in Applied Science – Legal Secretarial

Office Technology

Certificate of Proficiency – Office Specialist
Associate in Applied Science – Office Specialist
Associate in Applied Science – Word Processing Specialist

B.B.A. – Bachelor of Business Administration

The Bachelor of Business Administration provides a balanced combination of the arts and sciences and professional business education. The objectives of the B.B.A. degree are to:

- provide a general understanding of the principles of modern business and organizational practices;
- develop understanding of the economic, political, and social context within which modern business is conducted;
- train students in the use of analytical tools and techniques for business decision-making;
- develop the capacity for critical thought, leadership and the ability to work with others;
- foster bicultural understanding and bilingual skills relevant to work with the region's dynamic binational environment; and
- enhance students' appreciation for the ethical dimension of individual and organizational actions within the business setting.

Requirements for the various B.B.A. programs differ in the area of con-

centration. Students may choose from five majors: Accounting, Finance, General Business, Management and Marketing.

The curricula for B.B.A. plans requires 126 semester credit hours, except for Accounting which requires 129 hours. No minor is required because of the broad nature of the degree programs.

- The general education core and lower division core are included in the first two years of study. These educational requirements must be met before entering the upper division curricular program.
- Students seeking the B.B.A. degree should take the following courses in satisfying the general education core curriculum requirement: ENGL 1302, SPCH 1315 and either MATH 1324 or MATH 1314.
- The Business Administration core is common to all students seeking the B.B.A. degree. This core is made up of 10 courses, which are taken during the junior and senior year.
- Students choose a major in the field of Business. The major requires 18 to 21 hours of upper division courses in one of the following fields: Finance, General Business, Management or Marketing. Students pursuing an accounting major must complete eight courses (24 semester hours) in upper division Accounting and BUSI 1301 Introduction to Business beyond the Business Administration core.
- Students who enroll in business courses without having satisfactorily completed the required prerequisite(s) are subject to administrative withdrawal from the course.

PROGRAM OF STUDY (GENERAL)

(for Bachelor of Business Administration degrees)

General Education Core Curriculum – B.B.A: 48 hours

ENGL	1302	Composition II	3
SPCH	1315	Fundamentals of Speech	3
MATH	1324	Business Algebra (or MATH 1314)	3
Remaining Core Courses:			39

Business Administration Lower Division Core: 27 hours

ACCT	2401	Principles of Accounting I	4
ACCT	2402	Principles of Accounting II	4
BMIS		Any three one-hour BMIS course	3
ECON	2301	Macroeconomics	3
ECON	2302	Microeconomics	3
ENGL	2311	Technical and Business Writing	3
MATH	1325	Business Calculus	3
BUSI	2441	Statistics	4

Business Administration Upper Division Core: 27 hours

ACCT/BMIS 3351 Information Systems			3
BLAW	3337	Business Law I	3
BUSI	3335	Organizational Communications	3
MANA	3361	Principles of Management	3
FINA	3380	Managerial Finance	3
MANA	3363	Production Management *	3
MARK	3371	Principles of Marketing *	3
BUSI	4330	International Business *	3
BUSI	4369	Business Policy *	3

Majors:

Accounting	24 hours
Finance	21 hours
General Business	18 hours
Management	18 hours
Marketing	18 hours

Electives/Other:

Accounting	3 hours
Finance	3 hours
General Business	6 hours
Management	6 hours
Marketing	6 hours

** Must be admitted to Upper Division*

Business Bilingual Professional Proficiency Certificate

The Business Biliteracy Certificate certifies B.B.A. graduates with a foundation of business in two languages. English-language course requirements are complemented by Spanish-language courses, contributing to fluency and capability to do business across English and Spanish speaking cultures. This enhances student preparation for global business opportunities, particularly our cross-border region.

All students pursuing a B.B.A. degree are encouraged to apply for the certification program upon declaration of major. In some cases, the certificate requirements may be achieved in the time frame of the regular degree plan without additional hours by using lower- and upper-level electives appropriately.

Students must maintain an overall minimum grade point average of 2.5 requirements.

Business Curriculum

Parallel to three junior- and senior-level business courses, students enroll in a one credit hour Spanish-language business readings and experience lab. This two-hour lab provides a multi-dimensional and rigorous experience in speaking, reading and writing about business in the Spanish language. Each semester's readings will include current business topics in the news, while permitting students the flexibility to study Spanish-language readings in the subject matter of the business courses enrolled in during that semester. BUSI 3117 must be successfully completed three times.

Spanish Speakers (U.S. Educated)

SPAN	1373	Basic Spanish for Bilinguals I	3
SPAN	2317	Business Spanish	3
SPAN	3/4000	Upper-level elective	3

Fluent Spanish Speakers (Mexico Educated)

SPAN	2317	Business Spanish	3
SPAN	3/4000	Upper-level Elective	3

Monolingual English Speakers (Initial course placement determined by Modern Languages Department testing and/or faculty interviews)

SPAN	1313	Elementary Spanish I	3
SPAN	1314	Elementary Spanish II	3
SPAN	2311	Intermediate I	3
SPAN	2312	Intermediate II	3
SPAN	2317	Business Spanish	3
SPAN	3/4000	Upper-level Elective	3

Bilingual Proficiency Examinations

During the final semester of the senior year (or after completion of the required courses) students take an exam validating their linguistic skills.

Spanish Certification:

Certificates from Madrid Chamber of Commerce: Basico or Superior or U.S. State Department Exam or Equivalent exam approved by appropriate Dean.

English Certification: Graduate Management Admission Test or Graduate Record Exam or Equivalent exam approved by appropriate Dean.

Business Biliteracy Portfolio

A portfolio will be maintained by each student to provide a summary of the student's business biliteracy. This portfolio will include, at a minimum:

- Three sole-authored papers written in Spanish (in the biliteracy courses)
- Three papers written in English for other business courses
- Certification exam results
- Special assignments or projects exhibiting a student's business biliteracy

ACCOUNTING DEPARTMENT

Bachelor of Business Administration – Accounting

PROGRAM OF STUDY

Bachelor of Business Administration (B.B.A.) In Accounting

The Bachelor of Business Administration (B.B.A.) in Accounting offers students the opportunity to prepare for careers in public and private accounting. This preparation can be accomplished by completing the requirements for either of the following tracks dependent upon professional goals.

Corporate or Governmental Track

The Corporate or Governmental Track is recommended for accounting students whose career goals are to work in a corporate, governmental or not-for-profit setting and do not plan to take the CPA exam. This track allows students to major in accounting and receive a BBA degree in 129 hours (4-year program), which is comparable to the total hours required for other business majors. These students will be well prepared for a variety of accounting careers and will not be required to complete the 150 hours required to take the CPA exam.

General Education Core Curriculum – B.B.A:			48 hours

Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement

Business Administration Lower Division Core:			27
Business Administration Upper Division Core:			27
BUSI 1301		Introduction to Business	3
Major: Accounting		24 hours	
ACCT		Upper Division Elective	3
ACCT	3321	Intermediate Accounting I	3
ACCT	3322	Intermediate Accounting II	3
ACCT	3323	Income Tax Procedure	3
ACCT	3324	Cost Management	3
ACCT	4324	Auditing	3
ACCT	4327	Advanced Managerial Accounting	3
ACCT	4331	Accounting Report Writing	3
Total B.B.A.-Accounting – Corporate / Governmental			**129 hours**

Note: A student preparing for licensure as a Certified Public Accountant (CPA) in the State of Texas must complete at least 150 hours (Including 30 semester credit hours beyond ACCT 2401 and ACCT 2402.) of College/University credit in order to be eligible to take the CPA examination after 1997. An additional 6 hours in accounting is required beyond the 129-hour degree. The student is also advised that the additional hours may be taken towards an MBA degree. The suggested accounting hours may be included within the MBA by selecting:

ACCT	5323	Contemporary Accounting Theory
ACCT	5325	Tax Treatment of Capital Assets
ACCT	5329	Corporate and Partnership Tax
ACCT	5331	Gift and Estate Taxation
ACCT	6315	Accounting and Financial Analysis
ACCT	6321	Strategic Cost Management
ACCT	6323	Seminar in Accounting
ACCT	6330	Seminar in Auditing

The student is advised to consult with an Accounting Advisor and/or the MBA Director in selecting the additional hours to meet the 150 hours requirement.

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
		Modern Language	3
Music Apprec./ Literature or Art Apprec./History			3
BMIS		Computer Skills	1
BUSI	1301	Introduction to Business	3
KINE		Activity Course	1
Total			**17**
Second Semester			**Credit hours**
ENGL	1302	Composition II	3
HIST	1302	United States Since 1877	3
MATH		Algebra or College Algebra	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
BMIS		Computer Skills	2
Total			**17**

Sophomore Year

First Semester			**Credit hours**
		Natural Science	4
ACCT	2401	Principles of Accounting I	4
MATH	1325	Business Calculus	3
ENGL	2311	Technical and Business Writing	3
GOVT	2301	American Government I	3
Total			**17**
Second Semester			**Credit hours**
		Literature	3
		Natural Science	4
ACCT	2402	Principles of Accounting II	4
ECON	2301	Macroeconomics	3
GOVT	2302	American Government II	3
Total			**17**

Junior Year

First Semester			**Credit hours**
ACCT	3321	Intermediate Accounting I	3
ACCT	3324	Cost Management	3
BUSI	3335	Organizational Communications	3
ECON	2302	Microeconomics	3
FINA	3380	Managerial Finance	3
Total			**15**
Second Semester			**Credit hours**
ACCT	3322	Intermediate Accounting II	3

ACCT	3351	Information Systems in Organizations	3
BLAW	3337	Business Law I	3
BUSI	2441	Elem. Business & Econ. Statistics	4
MANA	3361	Principles of Management	3
Total			**16**
Senior Year			
First Semester			**Credit hours**
ACCT	3323	Income Tax Procedure	3
ACCT	4324	Auditing I	3
ACCT	4331	Accounting Report Writing	3
MANA	3363	Production Management	3
MARK	3371	Principles of Marketing	3
Total			**15**
Second Semester			**Credit hours**
ACCT	4327	Advanced Managerial Accounting	3
		Behavioral Science	3
BUSI	4330	International Business	3
BUSI	4369	Business Policy	3
ELCT		Free Elective	3
Total			**15**
Total number of hours required			**129 hours**
Accounting Electives:			
ACCT	4323	Contemporary Theory Fall	3
ACCT	3325	Governmental & Not-for-Profit Acct. Sp.	3
ACCT	4321	Advanced Accounting II Spring	3
ACCT	4329		3
		Corporate and Partnership Tax	
ACCT	4328	Auditing Seminar Spring	3
BLAW	3338	Business Law II Spring	3

Auditing & Financial Reporting Track

The Auditing & Financial Reporting Track is recommended for accounting students whose career goals are to work in public accounting, to qualify them to take the CPA exam. The State of Texas now requires CPA candidates to have successfully completed 150 hours of approved college coursework. On average this accounting track requires an additional year of full-time coursework (5 years) to accumulate the hours required for the CPA exam.

General Education Core Curriculum – B.B.A:			48 hours
Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement			
Business Administration Lower Division Core:			27 hours
Business Administration Upper Division Core:			27 hours
BUSI	1301	Introduction to Business	3 hours
BLAW	3338	Business Law II	3 hours
		Non-Business Electives	9 hours
		Major: Accounting: 36 hours	
ACCT	3321	Intermediate Accounting I	3
ACCT	3322	Intermediate Accounting II	3
ACCT	3323	Income Tax Procedure	3
ACCT	3324	Cost Management	3
ACCT	3325	Governmental & Not-for-Profit Acct.	3
ACCT	4321	Advanced Accounting II	3
ACCT	4324	Auditing	3
ACCT	4327	Advanced Managerial Accounting	3
ACCT	4328	Auditing Seminar	3
ACCT	4323	Contemporary Acct. Theory	3
ACCT	4329	Advanced Income Tax	3
ACCT	4331	Accounting Report Writing	3
Total B.B.A.-Accounting – Auditing & Fin. Rept.			**153 hours**
Freshman Year			
First Semester			**Credit hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
		Modern Language	3
BMIS –		Computer Skills	1
BUSI	1301	Introduction to Business	3
Music Appreciation/Literature or Art Appreciation/History			3
KINE		Activity Course	1
Total			**17**
Second Semester			**Credit hours**
ENGL	1302	Composition II	3
HIST	1302	United States Since 1877	3
MATH	1324	Business Algebra or	
MATH	1314	College Algebra	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
BMIS		Computer Skills	2
Total			**17**
Sophomore Year			
First Semester			**Credit hours**
		Natural Science	4
ACCT	2401	Principles of Accounting I	4
ENGL	2311	Technical and Business Writing	3
GOVT	2301	American Governmental I	3
MATH	1325	Business Calculus	3
Total			**17**
Second Semester			**Credit hours**
		Literature	3
		Natural Science	4
ACCT	2402	Principles of Accounting II	4
ECON	2301	Macroeconomics	3
GOVT	2302	American Government II	3
Total			**17**
Junior Year			
First Semester			**Credit hours**
ACCT	3321	Intermediate Accounting I	3
ACCT	3324	Cost Accounting I	3
BUSI	3335	Organizational Communications	3
ECON	2302	Microeconomics	3
FINA	3380	Managerial Finance	3
Total			**15**
Second Semester			**Credit hours**
ACCT	3322	Intermediate Accounting II	3
ACCT	3351	Information Systems in Organizations	3
BUSI	2441	Elementary Business & Econ. Statistics	4
BLAW	3337	Business Law I	3
MANA	3361	Principles of Management	3
Total			**16**
Senior Year			
First Semester			**Credit hours**
ACCT	3323	Income Tax Procedure	3
ACCT	4324	Auditing I	3
ACCT	4331	Accounting Report Writing	3
MANA	3363	Production Management	3

MARK	3371	Principles of Marketing	3
Total			**15**
Second Semester			**Credit hours**
BUSI	4369	Business Policy	3
BUSI	4330	International Business	3
ACCT	3325	Governmental & Not-for-Profit	3
ACCT	4321	Advanced Accounting II	3
		Behavioral Science	3
Total			**15**
Fifth Year			
First Semester			**Credit hours**
ACCT	4328	Auditing Seminar	3
ACCT	4323	Contemporary Theory	3
		Elective: Non-Business	3
		Elective Non-Business	3
Total			**12**
Second Semester			**Credit hours**
ACCT	4329	Advanced Income Tax Procedure	3
ACCT	4327	Advanced Managerial Accounting	3
BLAW	3338	Business Law II	3
		Elective: Non-Business	3
Total			**12**
Total number of hours required			**153 hours**

BUSINESS ADMINISTRATION DEPARTMENT

Associate in Arts-Business Administration
Bachelor of Applied Arts and Sciences-Applied Business Technology
Business Administration Minor
Bachelor of Business-General Business, Finance, Management, Marketing

PROGRAM OF STUDY

Associate in Arts – Business Administration

After completing the Associate in Arts-Business Administration (A.A.B.A.) program, students may complete the last two years of their bachelor's degree. Students should verify with an advisor the transferability of courses.

General Education Core 48 hours

Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement

Business Administration Lower Division Courses			20 hours
ENGL	2311	Technical and Business Writing	3
ACCT	2401	Principles of Accounting I	4
ACCT	2402	Principles of Accounting II	4
ECON	2301	Macroeconomics	3
ECON	2302	Microeconomics	3
BMIS		Any three one-hour BMIS	3
Total A.A. – Business Administration			**68 hours**
Freshman Year			
First Semester			**hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
MATH	1324	Business Algebra (or MATH 1314)	3
		Modern Language	3
BMIS		Business Management Information Systems	1
BMIS		Business Management Information Systems	1
KINE		Activity Course	1
Total			**15**
Second Semester			**hours**
ENGL	1302	Composition II	3
HIST	1302	United States since 1877	3
		Behavioral Science	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
		Music Appreciation/Literature or Art Appreciation/History	3
Total			**18**
Sophomore Year			
First Semester			**hours**
ENGL	2311	Technical and Business Writing	3
		Natural Science	4
GOVT	2301	American Government I	3
ACCT	2401	Principals of Accounting I	4
ECON	2301	Macroeconomics	3
BMIS		Business Management Information Systems	1
Total			**18**
Second Semester			**hours**
		Literature	3
		Natural Science	4
GOVT	2302	American Government II	3
ACCT	2402	Principals of Accounting II	4
ECON	2302	Microeconomics	3
Total			**21**
Total Number of hours required			**68 hours**

PROGRAM OF STUDY

Bachelor of Applied Arts and Sciences (B.A.A.S.) Applied Business Technology

The goal of the Applied Business Technology Major prepares students for careers in business, industry, or services which require skills in business and technology.

General Education Core Curriculum 48 hours

Note: B.A.A.S. majors should take ENGL 1302, SPCH 1315, and MATH 1324 or MATH 1325 to satisfy the general education core requirement.

A.A. or A.A.S. or Minimum Equivalent hours 24 hours

Lower Division Development sequence: 17 hours

ACCT	2401	Principles of Accounting I or TACC 1401	4
ECON	2301	Macroeconomics	3
ENGL	2311	Technical and Business Writing	3
BMIS		Any three one-hour BMIS software courses	3
BUSI	2441	Statistics	4

Professional Development Sequence: 9 hours			
BMIS	3351	Information Systems in Organizations	3
BUSI	3335	Organizational Communications	3
BLAW	3337	Business Law I	3
Blocks (one of the following): 9 hours			
Block A (Note: this block has prerequisites stated in parentheses)			
ACCT	3321	Intermediate Accounting I	3
		(Prerequisite: ACCT 2402 with "C" or better)	
ACCT	3322	Intermediate Accounting II	3
		(Prerequisite: ACCT 3321 with "C" or better)	
ACCT		Advanced Course (3000 or 4000 level course)	3
Block B			
MANA	3361	Principles of Management	3
MANA	3362	Human Resource Management	3
MANA		Advanced Course (3000 or 4000 level course)	3
Block C			
MARK	3371	Principles of Marketing	3
MARK	3372	Consumer Behavior (MARK 3371)	3
MARK		Advanced Course (3000 or 4000 level course)	3
Block D (Note: this block has prerequisites)			
FINA	3380	Managerial Finance	3
		(Prerequisite: ACCT 2401 & 2402, ECON 2301 & 2302)	
FINA	3381	Money and Banking	3
FINA		Advanced Course (3000 or 4000 level course)	3
Upper-division Electives			18 hours
(with at least 12 hours in the same field)			
Total number of hours required for B.A.A.S. degree			**125 hours**
Freshman Year			
First Semester			**hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
MATH	1324	Business Algebra (or MATH 1314)	3
		Modern Language	3
BMIS		Business Management Information Systems	1
BMIS		Business Management Information Systems	1
KINE		Activity Course	1
Total			**15**
Second Semester			**hours**
ENGL	1302	Composition II	3
HIST	1302	United States Since 1877	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
Music Appreciation/Literature or Art Appreciation/History			3
Total			**15**
Sophomore Year			
First Semester			**hours**
ENGL	2311	Technical and Business Writing	3
		Natural Science	4
GOVT	2301	American Government I	3
ACCT	2401	Principals of Accounting I or	
ACNT	1403	Introduction to Accounting I	4
ECON	2301	Macroeconomics	3
Total			**17**
Second Semester			**hours**
		Literature	3
		Natural Science	4
GOVT	2302	American Government II	3
		Behavioral Science	3
BMIS		Business Management Information Systems	1
BUSI	2441	Statistics	4
		A.A. Equivalent	3
Total			**21**
Junior Year			
First Semester			**hours**
BUSI	3312	Administrative Office Management	3
		A.A. Equivalent	3
		A.A. Equivalent	3
		A.A. Equivalent	3
Total			**12**
Second Semester			**hours**
		Block Course	3
BLAW	3337	Business Law I	3
BUSI	3335	Organizational Communications	3
		A.A. Equivalent	3
		A.A. Equivalent	3
Total			**15**
Senior Year			
First Semester			**hours**
		A.A. Equivalent	3
		Block Course	3
		Upper Division Elective	3
		Upper Division Elective	3
		Upper Division Elective	3
Total			**15**
Second Semester			**hours**
		A.A. Equivalent	3
		Block Course	3
		Upper Division Elective	3
		Upper Division Elective	3
		Upper Division Elective	3
Total			**15**
*Must be admitted to upper division			
Total for the B.A.A.S. Degree			125

Business Administration Minor

Business Administration Minor Requirement			
BUSI	1301	Introduction to Business	3
ACCT	2401	Principles of Accounting I	4
ECON	2301	Macroeconomics or	
ECON	2302	Microeconomics	3
Upper Division Business courses			9
BUSI	3335	Organizational Communications	3
BLAW	3337	Business Law	3
MANA	3361	Principles of Management	3
Total			**19**

PROGRAM OF STUDY

Bachelor of Applied Technology-Workforce Leadership/Supervision Track

General Education Core Corriculum	**48 hours**
Associate in Applied Science Technical Field	**35 hours**
Select from:	
Computer Information Systems/Science Technology	
Drafting/Computer Drafting and Design	
Digital Imaging Technology	
Engineering Technology - Manufacturing/Electronics/ Mechanical	
Network Information Management Technology	
Nursing	
Diagnostic Imaging	
Respiratory Therapy	
Workforce Leadership and Supervision Track	**37 hours**

BMGT	1301	Supervision or BUSI 1301 Intro to Business	3
BUSI	3312	Administrative Office Management	3
BUSI	3335	Organizational Communications	3
BMIS	3351	Information Systems in Organizations	3
ACNT	1403	Introduction to Accounting I	4
PSYC	4306	Conflict Resolution	3
MANA	3361	Principles of Management	3
MANA	3362	Human Resource Management	3
MARK	3371	Principles of Marketing	3
Advanced Electives			9

Total minimum number of hours required	**120 hours**
Minimum advanced credit hours for graduation	**30 hours**

PROGRAM OF STUDY

Bachelor of Business Administration (B.B.A.) – General Business Major

The General Business Major is designed to allow a student, with the aid of a faculty academic advisor, to tailor a program to support the student's career goals.

General Education Core Curriculum – B.B.A 48 hours

Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement and must be admitted to upper division to enroll in upper division core and Business major courses.

Business Administration Lower Division Core	27 hours
Business Administration Upper Division Core	27 hours
General Business Major	21 hours

The student will select, with approval of the faculty academic advisor, 15 semester hours from at least two of the business administration fields: Accounting, Finance, Management, and Marketing.

Total Number of hours required B.B.A.-General Business 126 hours

Recommended Course Sequence for General Business Majors

Freshman Year

First Semester			**hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
MATH	1324	or MATH 1314	3
		Modern Language	3
BMIS			1
BMIS			1
KINE		KINE Activity Course	1
Total			**15**
Second Semester			**hours**
ENGL	1302	Composition II	3
HIST	1302	United States since 1877	3
MATH	1325	Business Calculus	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
Music Appreciation/Literature OR Art Appreciation/History			3
Total			**18**

Sophomore Year

First Semester			**hours**
ENGL	2311	Technical and Business Writing	3
		Natural Science	4
GOVT	2301	America Government I	3
ACCT	2401	Principles of Accounting I	4
ECON	2301	Macroeconomics	3
BMIS			1
Total			**18**
Second Semester			**hours**
		Literature	3
		Natural Science	4
GOVT	2302	American Government II	3
ACCT	2402	Principles of Accounting II	4
ECON	2302	Microeconomics	3
BUSI	2441	Statistics	4
Total			**21**

Junior Year

First Semester			**hours**
MARK	3371*	Principles of Marketing	3
BUSI	3335	Organizational Communications	3
MANA	3361	Principles of Management	3
FINA	3380*	Managerial Finance	3
Total			**12**
Second Semester			**hours**
BMIS/ACCT 3351*		Information Systems	3
BLAW	3337	Business Law I	3
		Class from Selected Field	3
		Behavioral Science	3
MANA	3363*	Production Management	3
Total			**15**

Senior Year

First Semester			**hours**
BUSI	4330*	International Business	3
	Selected field*		3
	Selected field*		3
	Selected field*		3
	Elective		3
Total			**15**
Second Semester			**hours**
BUSI	4369*	Business Policy	3
	Selected field*		3
	Selected field*		3
	Selected field*		3
Total			**12**

**Must be admitted to upper division*

PROGRAM OF STUDY

Bachelor of Business Administration (B.B.A.) – Finance

A Bachelor of Business Administration degree with a major in Finance may lead to or improve careers in banking, corporate finance, insurance, and real estate.

General Education Core Curriculum – B.B.A 48 hours

Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement and be admitted to upper division to enroll in an upper division core and finance major courses.

Business Administration Lower Division Core 27 hours
Business Administration Upper Division Core 27 hours
Finance Major 21 hours

ACCT	3324*	Cost Accounting I	3
FINA	3381*	Money and Banking	3
FINA	3382*	Investment Principles	3
FINA	4382*	Portfolio Management	3
FINA	4385*	Financial Institutions and Markets	3
FINA	4387*	Topics in Finance	3
FINA	4389*	Commercial Banking	3

Electives 3 hours
Total Number of hours required B.B.A.-Finance 126 hours

Recommended Course Sequence for Finance Majors

Freshman Year

First Semester			**hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
MATH	1324	or 1314	3
		Modern Language	3
BMIS		Business Management Information System	1
BMIS		Business Management Information System	1
KINE		KINE Activity course	1
Total			**15**
Second Semester			**hours**
ENGL	1302	Composition II	3
HIST	1302	United States Since 1877	3
MATH	1325	Business Calculus	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
Music Appreciation/Literature or Art Appreciation/History			3
Total			**18**

Sophomore Year

First Semester			**hours**
ENGL	2311	Technical and Business Writing	3
		Natural Science	4
GOVT	2301	American Government I	3
ACCT	2401	Principals of Accounting I	4
ECON	2301	Macroeconomics	3
BMIS	Business Management Information System		1
Total			**18**
Second Semester			**hours**
		Literature	3
		Natural Science	4
GOVT	2302	American Government II	3
ACCT	2402	Principals of Accounting II	4
ECON	2302	Microeconomics	3
BUSI	2441	Statistics	4
Total			**21**

Junior Year

First Semester			**hours**
MARK	3371*	Principals of Marketing	3
MANA	3361	Principals of Management	3
FINA	3380*	Managerial Finance	3
FINA	3381*	Money and Banking	3
Total			**12**
Second Semester			**hours**
BLAW	3337	Business Law I	3
		Behavioral Science	3
BMIS/ACCT	3351*	Information Systems in Organizations	3
MANA	3363*	Production Management	3
FINA	4389*	Commercial Banking	3
Total			**15**

Senior Year

First Semester			**hours**
BUSI	4330*	International Business	3
ACCT	3324*	Cost Accounting I	3
BUSI	3335	Organizational Communications	3
FINA	3382*	Investment Principals	3
		Elective	3
Total			**15**
Second Semester			**hours**
BUSI	4369*	Business Policy	3
BUSI	3335	Organizational Communications	3
FINA	4382*	Portfolio Management	3
FINA	4385*	Financial Institutions and Markets	3
FINA	4387*	Topics and Finance	3
Total			**12**

**Must be admitted to upper division*

PROGRAM OF STUDY

Bachelor of Business Administration (B.B.A.) – Management

The Program of Study leading to a Bachelor of Business Administration degree with a Management Major offers students the opportunity to prepare to supervise personnel and administer production.

General Education Core Curriculum – B.B.A 48 hours

Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement and must be admitted to upper division to enroll in upper division core and management major courses.

Business Administration Lower Division Core 27 hours
Business Administration Upper Division Core 27 hours
Management Major 18 hours

MANA	3362*	Human Resource Management	3
MANA	3365*	Organizational Behavior	3
MANA	4362*	Organization Theory and Design	3
MANA	4366*	Small Business Management	3
MANA	4367*	Topics in Management	3
MANA	4368*	Industrial Relations	3
		Electives	6

Total Number of hours Required B.B.A.-Management 126 hours

Recommended Course Sequence for Management Majors

Freshman Year

First Semester			**hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
MATH	1324	Business Algebra or	
MATH	1314	College Algebra	3
		Modern Language	3
BMIS		Business Management Information System	1
BMIS		Business Management Information System	1
Kinesiology			1
Total			**15**

Second Semester			**hours**
ENGL	1302	Composition II	3
HIST	1302	United States Since 1877	3
MATH	1325	Business Calculus	3
		Modern Language	3
SPCH	1315	Fundamentals of Speech	3
Music Appreciation/Literature or Art Appreciation/History			3
Total			**15**

Sophomore Year

First Semester			**hours**
ENGL	2311	Technical and Business Writing	3
		Natural Science	4
GOVT	2301	American Government I	3
ACCT	2401	Principals of Accounting I	4
ECON	2301	Macroeconomics	3
BMIS		Business Management Information System	1
Total			**18**

Second Semester			**hours**
		Literature	3
		Natural Science	4
GOVT	2302	American Government II	3
ACCT	2402	Principles of Accounting II	4
ECON	2302	Microeconomics	3
BUSI	2441	Statistics	4
Total			**21**

Junior Year

First Semester			**hours**
MARK	3371*	Principles of Marketing	3
BUSI	3335	Organizational Communications	3
MANA	3361	Principles of Management	3
FINA	3380*	Managerial Finance	3
Total			**12**

Second Semester			**hours**
BLAW	3337	Business Law I	3
		Behavioral Science	3
BMIS/ACCT 3351* Information Systems in Organizations			3
MANA	3362*	Human Resource Management	3
MANA	3363*	Production Management	3
Total			**15**

Senior Year

First Semester			**hours**
BUSI	4330*	International Business	3
MANA	3365	Organizational Behavior	3
MANA	4362*	Organizational Theory and Design	3
MANA	4366*	Small Business Management	3
		Elective	3
Total			**15**

Second Semester			**hours**
BUSI	4369*	Business Policy	3
MANA	4368*	Industrial Relations	3
MANA	4367*	Topics in Management	3
Business Elective			3
Total			**12**

**Must be admitted to upper division.*

PROGRAM OF STUDY

Bachelor of Business Administration (B.B.A.) – Marketing

The program leading to a Bachelor of Business Administration with a Marketing Major offers students the opportunity to acquire skills for careers in sales, or in sales management, retailing and advertising.

General Education Core Curriculum – B.B.A 48 hours

Note: B.B.A. majors should take ENGL 1302, SPCH 1315 and MATH 1324 or MATH 1314 to satisfy the general education core curriculum requirement and must be admitted to upper division to enroll in upper division core and marketing courses.

Business Administration Lower Division Core 27 hours

Business Administration Upper Division Core 27 hours

Major: Marketing: 18 hours

MARK	3372*	Consumer Behavior	3
MARK	4371*	Sales Management	3
MARK	4372*	Promotion Management	3
MARK	4376*	Marketing Strategy	3
MARK	4377*	Topics in Marketing	3
MARK	4378*	Marketing Research	3

Electives 6 hours

Total Number of hours required B.B.A. – Marketing 126 hours

Recommended Course Sequence for Marketing Majors

Freshman Year

First Semester			**hours**
ENGL	1301	Composition I	3
HIST	1301	United States to 1877	3
MATH	1324	Business Algebra or	
MATH	1314	College Algebra	3
		Modern Language	3
BMIS		Business Management Information System	1
BMIS		Business Management Information System	1
KINE		Kinesiology Activity course	1
Total			**15**

Second Semester			**hours**
ENGL	1302	Composition II	3
HIST	1302	United States Since 1877	3
MATH	1325	Business Calculus	3
		Modern Language	3

Music Appreciation/Literature OR Art Appreciation/History			3
SPCH	1315	Fundamentals of Speech	3
Total			**18**
Sophomore Year			
First Semester			**hours**
ENGL	2311	Technical and Business Writing	3
		Natural Science	4
GOVT	2301	American Government I	3
ACCT	2401	Principles of Accounting I	4
ECON	2301	Macroeconomics	3
BMIS		Business Management Information System	1
Total			**18**
Second Semester			**hours**
		Literature	3
		Natural Science	4
GOVT	2302	American Government II	3
ACCT	2402	Principles of Accounting II	4
ECON	2302	Microeconomics	3
BUSI	2441	Statistics	4
Total			**21**
Junior Year			
First Semester			**hours**
MARK	3371*	Principles of Marketing	3
BUSI	3335	Organizational Communications	3
MANA	3361	Principles of Management	3
FINA	3380*	Managerial Finance	3
Total			**12**
Second Semester			**hours**
BLAW	3337	Business Law I	3
		Behavioral Science	3
MANA	3363*	Production Management	3
MARK	4378*	Marketing Research	3
BMIS/ACCT	3351*	Information Systems in Organizations	3
Total			**15**
Senior Year			
First Semester			**hours**
BUSI	4330*	International Business	3
MARK	3372*	Consumer Behavior	3
MARK	4376*	Marketing Strategy	3
MARK	4371*	Sales Management and Personal Selling	3
		Elective	3
Total			**15**
Second Semester			**hours**
BUSI	4369*	Business Policy	3
MARK	4372*	Promotion Management	3
MARK	4377*	Topics in Marketing	3
		Business Elective	3
Total			**12**

**Must be admitted to upper division.*

Business Technology Department

Mission

The mission of the Business Technology Department is to serve the binational, bicultural, bilingual community of the lower Rio Grande Valley with quality technical education and work experience in cooperation with area business, industry and government. The Business Technology Department seeks to prepare students to enter the workforce after one or two years of specialized training in accounting, international business, legal studies and office technology.

Business Technology Programs

UTB/TSC offers a variety of programs in Office Technology, Accounting and International Business. These technical programs offer students the opportunity to prepare for professional business careers. Additionally, a cooperative education combines classroom training with on-the-job work experience. Students may earn money, gain work experience, and earn college credit under this cooperative education class.

Graduates are employed in diverse positions in entities such as educational, governmental and service agencies; banking, legal, retailing, manufacturing, custom brokers and maquiladoras.

Cooperative Education

A cooperative work program is available for students who want to combine classroom training with on-the-job work experience. Students may earn money, obtain work experience, and earn college credit hours under this cooperative Business Technology Program.

Student Portfolios

A Student Portfolio is required for all A.A.S. office technology degrees as well as the Legal Assisting Certificate. The portfolio must be submitted and approved by department faculty prior to graduation.

A Student Portfolio is a systematic, organized collection that documents the knowledge, skills and specialized training students acquired in their business technology program.

This portfolio assists the student in evaluating his/her skills and abilities and gives the student an edge in today's job market. A *Student Portfolio Guide* is distributed during advising and orientation sessions. The guide is also available in the department office. A special topics class, POFT 1192, is offered to assist students in preparing the portfolio. This class should be taken during the final semester.

Accounting

Certificate of Proficiency
- Accounting Technology (three semesters)

Associate in Applied Science
- Accounting Technology

International Business

Certificate of Proficiency
- International Business (two semesters)

Associate in Applied Science
- International Business

Legal Careers

Certificate of Proficiency
- Legal Assisting/Paralegal (three semesters)

Associate in Applied Science
- Legal Secretarial

– Paralegal Studies

Office Careers

Certificate of Proficiency

– Office Specialist (two semesters)

Associate in Applied Science

– Office Specialist

– Administrative Software Profession

Tech-Prep Business Technology

For high school course articulation information, please contact the Business Technology Department Office.

PROGRAM OF STUDY

Certificate of Proficiency – Accounting Technology

Freshman Year

First Semester			**Credit hours**
ACNT	1403	Introduction to Accounting I	4
BMGT	1301	Supervision	3
BMIS	11XX	Select 1 one-hour BMIS course*	1
BUSI	1301	Introduction to Business	3
COSC	1310	Computer Systems	3
Total			**14 hours**
Second Semester			**Credit hours**
ACNT	1413	Computerized Accounting Applications	4
ACNT	1229	Payroll & Business Tax Accounting	2
ACNT	1404	Introduction to Accounting II	4
MRKG	1311	Principles of Marketing	3
BMIS	11XX	Select 1 one-hour BMIS course*	1
BMIS	11XX	Select 1 one-hour BMIS course*	1
Total			**15 hours**
Third Semester			**Credit hours**
ACNT	1411	Introduction to Computerized Accounting	4
ACNT	2366	Practicum-Accounting**	3
Total			**7 hours**
Total number of hours required			**36 hours**

* Recommended BMIS 10-Key by Touch, PowerPoint, Excel, Netscape, or any BMIS course that would enhance the student's computer or accounting skills.

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

PROGRAM OF STUDY

Certificate of Proficiency – International Business

First Semester			**Credit hours**
BMIS	1XXX	Select 3 one-hour BMIS course*	1
BMIS	1XXX	Select 3 one-hour BMIS course*	1
BMIS	1XXX	Select 3 one-hour BMIS course* 1	
BUSI	1301	Introduction to Business	3
ACNT	1403	Introduction to Accounting I	4
BMGT	1301	Supervision	3
IBUS	2331	International Human Resource Management or	
IBUS	1301	Principles of Imports-Exports I	3
Total			**16 hours**
Second Semester			**Credit hours**
ACNT	1404	Introduction to Accounting II	4
MRKG	1311	Principles of Marketing	3
IBUS	2341	International Comparative Management or	
IBUS	2345	Import Customs Regulations	3
IBUS	2339	International Banking & Finance	3
IBUS	2366	Practicum/Field Experience-International Business	3
Total			**16 hours**
Total number of hours required			**32 hours**

* Recommended BMIS 10-Key by Touch, PowerPoint, Excel, Netscape, or any BMIS course that would enhance the student's computer or accounting skills.

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

PROGRAM OF STUDY

*Certificate of Proficiency – Legal Assisting Specialist (*Tech-Prep)*

A certificate program to prepare students for a challenging career in the legal field as a paralegal or legal assistant.

Fall Semester			**Credit hours**
LGLA	1307	Introduction to Law and the Legal Professions	3
POFT	1313	Professional Development for Office Personnel	3
LGLA	1355	Family Law	3
POFL	1305	Legal Terminology	3
BUSG	2317	Business Law/Commercial	3
Total			**15 hours**
Spring Semester			**Credit hours**
POFT	2301	Document Formatting and Skillbuilding	3
LGLA	2303	Torts and Personal Injury Law	3
LGLA	2309	Real Property	3
LGLA	1345	Civil Litigation	3
Total			**12 hours**
Third Semester			**Credit hours**
LGLA	1353	Wills, Trusts & Probate Administration	3
LGLA	2307	Law Office Management	3
LGLA	2333	Advanced Legal Document Preparation	3
LGLA	2380	Cooperative Education-Paralegal/Legal Assistant	3
POFT	1192	Special Topics (Portfolio)	1
Total			**13 hours**
Total number of hours required			**43 hours**

Credit Hour Summary

Business Technology	43 Credit hours
Total	**43 Credit hours**

All A.A.S. degree students and three-semester certificate students must present portfolios for approval to the Business Technology faculty prior to graduation.

PROGRAM OF STUDY

Certificate of Proficiency – Office Specialist

Provides students with the basic technical skills needed as an office specialist in today's modern office. A department exit exam must be passed before certificate is awarded.

First Semester			**Credit hours**
ITSW	1301	Introduction to Word Processing	3
POFT	1329	Keyboarding and Document Formatting or	3
POFT	2303	Speed and Accuracy Building	3
POFT	1302	Business Communications I	3
POFT	1313	Professional Development for Office Personnel	3
POFT	1331	Business Machine Applications	3
Total			**15 hours**

Second Semester			**Credit hours**
ITSW	2331	Advanced Word Processing	3
POFT	1309	Administrative Office Procedures I	3
POFT	1319	Records & Information Management I	3
POFT	2303	Speed and Accuracy Building or	
POFT	2301	Document Formatting & Skillbuilding	3
POFT	2312	Business Communications II	3
Exit Exam		P=Passed Blank=Pending	
Total			**15 hours**
Total number of hours required			**30 hours**

Credit Hour Summary

Technical	**30 Credit hours**
Total	**30 Credit hours**

PROGRAM OF STUDY

*Associate in Applied Science – Accounting Technology (*Tech-Prep)*

Designed for students anticipating employment after two years of college work. Includes fundamental principles and practices of accounting. Individuals in this Program of Study should acquire the skills necessary to enter beginning clerical positions in payroll, accounts payable/receivable, or general accounting.

Freshman Year

First Semester			**Credit hours**
ENGL	1301*	Composition I	3
COSC	1310	Computer Literacy	3
BUSI	1301	Introduction to Business	3
ACNT	1403	Introduction to Accounting I	4
BMGT	1301	Supervision	3
Total			**16 hours**
Second Semester			**Credit hours**
ENGL	1302	Composition II	3
ACNT	1229	Payroll & Business Tax Accounting	2
ACNT	1404	Introduction to Accounting II	4
MRKG	1311	Principles of Marketing	3
PSYC	2301	Introduction to Psychology	3
Total			**15 hours**

Sophomore Year

First Semester			**Credit hours**
MATH	1314	College Algebra	3
ACCT	2401	Principles of Accounting I	4
ACNT	1411	Introduction to Computerized Accounting	4
ECON	2301	Macroeconomics	3
BUSG	2317	Business Law/Commercial	3
Total			**17 hours**
Second Semester			**Credit hours**
ACNT	1413	Computerized Accounting Applications	4
SPCH	1315	Fundamentals of Speech	3
BMIS	11XX	Select 3 BMIS one-hour courses	3
ACNT	2366	Practicum – Accounting	3
		Elective	3
Total			**16 hours**
Total number of hours required			**64 hours**

Credit Hour Summary

Accounting/Business Technology	43
General Education	18
Electives	3
Total Semester Credit hours	**64**

PROGRAM OF STUDY

*Associate in Applied Science – International Business (*Tech-Prep)*

Freshman Year

First Semester			**Credit hours**
BMIS	11XX	Select 1 BMIS one-hour course	1
BMIS	11XX	Select 1 BMIS one-hour course	1
BMIS	11XX	Select 1 BMIS one-hour course	1
BUSI	1301	Introduction to Business	3
ACNT	1403	Introduction to Accounting I	4
BMGT	1301	Supervision	3
IBUS	1301	Principles of Import-Exports I or	
IBUS	2331	International Human Resource Management	3
Total			**16**
Second Semester			**Credit hours**
ENGL	1301	Composition I	3
ACCT	2401	Principles of Accounting I	3
MRKG	1311	Principles of Marketing	3
IBUS	2341	International Comparative Management or	
IBUS	2345	Import Customs Regulations	3
GEOG	1303	General World Geography	3
Total			**16**

Sophomore Year

First Semester			**Credit hours**
ENGL	1302	Composition II	3
MATH	1314	College Algebra	3
ACCT	2402	Principles of Accounting II	4
ECON	2301	Macroeconomics	3
SPAN	1373	Basic Spanish for Bilinguals I or	
SPAN	1313	Elementary Spanish I	3
Total			**16**
Second Semester			**Credit hours**
SPCH	1315	Fundamentals of Speech	3
BUSG	2317	Business Law/Commercial	3
IBUS	2339	International Banking & Finance	3
SPAN	2317	Business Spanish	3
IBUS	2366	Practicum/Field Experience – International Business**	3
Total			**15**
Total number of hours required			**63 hours**

Credit Hour Summary

International Business/Business Technology	42
General Education	21
Total Semester Credit hours	**63**

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

PROGRAM OF STUDY

*Associate in Applied Science (A.A.S.) – Legal Secretarial (*Tech-Prep)*

Provides the legal studies student the technical office skills for a career as a legal secretary.

Freshman Year

First Semester			**Credit hours**
ENGL	1301	Composition I	3

ITSW	1301	Introduction to Word Processing	3
POFT	1302	Business Communications I	3
POFT	1305	Legal Terminology	3
POFT	1313	Professional Development for Office Personnel	3
POFT	2301	Document Formatting & Skillbuilding	3
Total			**18 hours**
Second Semester			**Credit hours**
ITSW	2331	Advanced Word Processing	3
BUSG	2317	Business Law/Commercial	3
POFT	1309	Administrative Office Procedures I	3
POFT	2301	Document Formatting and Skillbuilding	3
		**Elective (Business Technology)	3
Total			**15 hours**
Sophomore Year			
First Semester			**Credit hours**
PSYC	2301	Introduction to Psychology	3
LGLA	1353	Wills, Trusts & Probate Administration	3
POFT	2380+	Cooperative Education	3
SPCH	1315	Fundamentals of Speech or	3
SPCH	1318	Interpersonal Communication	
LGLA	2307	Law Office Management	3
LGLA	2333	Advanced Legal Document Preparation	3
Total			**18 hours**
Second Semester			**Credit hours**
GOVT	2301	American Government I	3
POFT	1319	Records and Information Management I	3
MATH	1314	College Algebra or	
MATH	1332	Math for Liberal Arts	3
POFT	1192	Special Topics (Portfolio)	1
POFT	2381+	Cooperative Education	3
		**Elective	3
Portfolio		A=Acceptable U=Unacceptable	
Total		**16 hours**	
Total number of hours required			**70 hours**

Credit Hour Summary

Business Technology	49 Credit hours
*General Education	15 Credit hours
**Electives	6 Credit hours
Total	70 Credit hours

*** Electives may be any nondevelopmental course; one must be outside the major field.*

+ Prerequisite: Consent of the Co-op Coordinator.

All A.A.S degree students and three-semester certificate students must present portfolios for approval by the Business Technology Faculty prior to graduation.

PROGRAM OF STUDY

*Associate in Applied Science (A.A.S.) – Office Specialist (*Tech-Prep)*

A two-year degree offered for students seeking a career as a general office specialist with a biliterate emphasis added to the technical skills.

Freshman Year

First Semester			**Credit hours**
POFT	2303	Speed and Accuracy Building	3
POFT	1302	Business Communications I	3
POFT	1313	Professional Development for Office Personnel	3
POFT	1331	Business Machines Applications	3
ITSW	1301	Introduction to Word Processing	3
Total			**15 hours**
Second Semester			**Credit hours**
POFT	1309	Administrative Office Procedures I	3
POFT	1319	Records & Information Management I	3
POFT	2301	Document Formatting & Skillbuilding	3
POFT	2312	Business Communications II	3
ITSW	2331	Advanced Word Processing	3
Total			**15 hours**
Sophomore Year			
First Semester			**Credit hours**
ENGL	1301*	Composition I	3
PSYC	2301*	Introduction to Psychology	3
ITSW	1304	Introduction to Spreadsheets	3
SPAN	1313*	Elementary Spanish I or	
SPAN	1373*	Basic Spanish for Bilinguals I	3
POFT	2380+	Cooperative Education	3
Total			**15 hours**
Second Semester			**Credit hours**
ACNT	1391	Special Topics (Acct. for Office Professionals)	3
MATH	1314*	College Algebra, or	
MATH	1332*	Math for Liberal Arts	3
SPAN	2317	Business Spanish	3
SPCH	1315*	Fundamentals of Speech or	
SPCH	1318*	Interpersonal Communication	3
POFT	2381+	Cooperative Education	3
POFT	1192	Special Topics (Portfolio)	1
		**Elective(s)	3
Portfolio		A=Acceptable U=Unacceptable	
Total			**16 hours**

Credit Hour Summary

Business Technology	46 Credit hours
*General Education	15 Credit hours
Total	61 Credit hours

*** Electives may be any nondevelopmental courses; one must be outside of major field.*

+ Prerequisite: Consent of the Co-op Coordinator.

All A.A.S degree students and three-semester certificate students must present portfolios for approval by the Business Technology Faculty prior to graduation.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Paralegal Studies

Freshman Year

First Semester			**Credit hours**
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	Fundamentals of Speech or	
SPCH	1318	Interpersonal Communication	3
POFL	1305	Legal Terminology	3
Total			**18 hours**
Second Semester			**Credit hours**
LGLA	2309	Real Property	3
LGLA	1345	Civil Litigation	3
POFT	2301	Document Formatting and Skillbuilding	3
LGLA	2303	Torts and Personal Injury Law	3

ENGL	1301	Composition I	3
Total			**15 hours**
Sophomore Year			
First Semester			**Credit hours**
LGLA	2307	Law Office Management	3
LGLA	1353	Willis, Trusts, and Probate Administration	3
LGLA	1303	Legal Research	3
LGLA	2333	Advanced Legal Document Preparation	3
GOVT	2301	American Government I	3
PSYC	2301	Introduction to Psychology or	
SOCI	1301	Sociology	3
Total			**18 hours**
Second Semester			**Credit hours**
MATH	1314	College Algebra or	
MATH	1332	Math for Liberal Arts	3
LGLA	1305	Legal Writing	3
ITSW	1304	Introduction to Spreadsheets or	
ITSW	1310	Presentation Media Software	3
		LGLA Elective**	3
LGLA	2380	Cooperative Education-Paralegal/Legal Assistant	3
POFT	1192	Special Topics (Portfolio)***	1
		A=Acceptable U=Unacceptable	
Total			**16 hours**
Total number of hours required			**67 hours**

Credit Hour Summary	
Business Technology	49 Credit hours
*General Education	15 Credit hours
**Electives	3 Credit hours
Total	67 Credit hours

*** Electives may be any nondevelopmental course; one must be outside the major field.*

+ Prerequisite: Consent of the Co-op Coordinator.

All A.A.S degree students and three-semester certificate students must present portfolios for approval by the Business Technology Faculty prior to graduation.

**** This course should be taken in the last semester.*

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Administrative Software Professional

Provides students with the communication and word processing skills necessary for a position as a software application specialist in today's high technology offices.

Freshman Year			
First Semester			**Credit hours**
ITSW	1301	Introduction to Word Processing	3
POFT	1302	Business Communications I	3
POFT	1313	Professional Development for Office Personnel	3
PSYC	2301*	Introduction to Psychology	3
POFT	2303	Speed and Accuracy Building	3
Total			**15 hours**
Second Semester			**Credit hours**
ITSW	2331	Advanced Word Processing	3
POFT	1309	Administrative Office Procedures I	3
POFT	1319	Records & Information Management	3
POFT	2301	Document Formatting & Skillbuilding	3
POFT	2312	Business Communications II	3
ACNT	1391	Accounting for Office Professionals	3
Total			**18 hours**
Sophomore Year			
First Semester			**Credit hours**
ENGL	1301*	Composition I	3
ITSW	1304	Introduction to Spreadsheets	3
ITSW	1310	Presentation Media Software	3
ITSW	1307	Introduction to Database (Microsoft Access)	3
POFT	2380+	Cooperative Education	3
Total			**15 hours**
Second Semester			**Credit hours**
MATH	1314*	College Algebra, or	
MATH	1332*	Math for Liberal Arts	3
POFI	2331	Desktop Publishing for the Office	3
SPCH	1315*	Fundamentals of Speech or	
SPCH	1318*	Interpersonal Communication	3
POFT	2381+	Cooperative Education	3
POFT	1192	Special Topics (Portfolio)	1
	**Approved Elective		3
Portfolio		A=Acceptable U=Unacceptable	
Total			**16 hours**
Total number of hours required			**64 hours**

Credit Hour Summary	
Business Technology	49 hours
*General Education	12 hours
**Electives	3 hours
Total	**64 hours**

** Approved General Education/Liberal Arts courses: SPAN 1373, GOVT 2301, 1301, SOCI 1301 or other approved elective.*

*** Electives may be any non-developmental courses; one must be outside of major field.*

+ Prerequisite: Consent of the Co-op Coordinator.

All A.A.S degree students and three-semester certificate students must present a portfolio for approval by the Business Technology Faculty prior to graduation.

SCHOOL OF EDUCATION

Certificates & Degrees Offered

Certificate of Proficiency in Child Care and Development
Associate in Applied Science in Child Care and Development
Bachelor of Arts in Liberal Arts and Sciences
Bachelor of Science in Kinesiology
Certificate Programs in Teacher Education
Master of Education Degrees

The programs in the School of Education and related courses are coordinated by the following departments:

Curriculum & Instruction Department

Elementary Education
Secondary Education
Alternative Certification Program
Bilingual Education and ESL Programs
Early Childhood Education
Teaching Endorsements
*Curriculum and Instruction
*Educational Technology
*Reading Specialist
*Graduate Programs

Kinesiology Department

Kinesiology

School Specialties Department

Generic Special Education
Child Care and Development (Associate of Applied Science)
Child Care and Development (Certificate of Proficiency)
Guidance & Counseling
*Generic Special Education/Educational Diagnostician
*Educational Administration
(Superintendency Certificate Available)
*Graduate Courses

Overview of Teacher Education Programs

The School of Education offers teacher education programs required for certification at the elementary, middle school, secondary, all-level and graduate levels. The teacher education program for standard teacher certification includes Academic areas of studies and certification fields in subjects approved to be taught in the public schools of Texas as authorized by the State Board for Educator Certification. Students may elect to pursue elementary certification (EC-4 Generalist, EC-4 Bilingual Generalist) Middle School (Grades 4-8), English/Language Arts, Mathematics, Secondary (Grades 8-12) Includes: English/Language Arts, History, Math, Spanish, Science and All Level (Pre K-12), in Kinesiology, Art, and Music. Students interested in Grades 4-8, Grades 8-12, and All Level (Music, Art) teacher certification should contact the College of Liberal Arts, or the College of Science, Mathematics and Technology, for advisement toward a degree in the appropriate teaching area. Prospective students should also contact the Teacher Education office for advisement relating to teacher certification. Students pursuing teacher certification EC-4 Generalist/EC-4 Bilingual Generalist, All Level Kinesiology and Non-Certification Kinesiology should contact the School of Education Advising Office - ED 10.

The School of Education offers an Associate in Applied Science degree and a Certificate of Proficiency program in Child Care and Development. In addition the School of Education offers two baccalaureate degrees: Bachelor of Arts in Liberal Arts and Sciences and the Bachelor of Science in Kinesiology.

UTB/TSC provides, within the curriculum sequence degree instructional components that meet academic program requirements identified by the Commission on Standards for the Teaching Profession and approved by the State Board for Educator Certification.

The Standard Teacher Certification program within a baccalaureate program includes the following three areas:

1. General Education Curriculum (i.e., General Requirements or University College);
2. Teaching Specialty Curriculum (i.e., Secondary Academic Specialization or Elementary Interdisciplinary Studies) designed for Texas public school instruction.
3. Pedagogy and Professional Responsibility Sequence designed for specific roles in public school teaching (i.e., elementary generalist EC-4 and elementary bilingual generalist, middle, secondary and all-level, including field-based experience and a full semester of student teaching.

Certification Requirements

Teacher certification in Texas is provided through the State Board for Educator Certification upon completion of an approved teacher education program from a Texas institution of higher education or through an approved alternative teacher certification program. There are also provisions for certification of individuals educated out of state. A State Board for Educator Certification rule requires an individual to meet the following qualifications to receive certification:

- Be at least 18 years of age.
- Be recommended by a Texas senior college
- Be of good moral character, and be clear of a felony or misdemeanor conviction for a crime which is directly related to the duties and responsibilities of the teaching profession.
- Be willing to support and defend the constitutions of the United States and Texas.
- Have college credit or examination credit demonstrating knowledge of the Texas and federal constitutions and United States history.
- Be able to speak and understand the English language sufficiently to use it easily and readily in conversation and teaching.
- Pass the appropriate Examination for the Certification of Educators in Texas (ExCET). This requirement applies to all certificates and those applicants holding a valid out-of-state certificate. In addition student eligibility status to register for the various ExCET/TeXESS tests is dependent upon completing all state/departmental requirements, including grade point average and benchmark examinations. Additional information about benchmark requirements may be obtained by contacting each of the different academic departments.
- A passing score on the Texas Oral Proficiency Test (TOPT) in Spanish is required for certification in bilingual education, elementary and secondary Spanish.

- Completion of a minimum of 6 credit hours of field-based education courses, 3-hour lab (required weekly) per course.

The certification programs at UTB/TSC are approved by the State Board for Educator Certification and are under the "Center Rule" and Texas Education Code, Sections 13.036-13.039.

For information on certification refer to Title 19, Part II, Texas Administrative Code and the Texas Education Code or contact the Assistant Dean/ Certification Officer, Education Building, Room #9.

Teacher Certification Application Procedures

Students should satisfactorily complete the prescribed certificate program and achieve a satisfactory score on the ExCET/TeXESS examinations prescribed by the State Board of Education, and submit scores to the Assistant Dean/Certification Officer at the School of Eduction building, room # 9. Students should fill out the required certificate application and pay the prescribed fee.

Emergency Teacher Certification Fee - A student seeking teacher certification via emergency teacher certification is required to pay a fee of $40.00.

Note: In accordance with Article 6252.13c, Texas Civil Statutes, the Commissioner of Education may suspend or revoke a teaching certificate or refuse to issue a teaching certificate for a person who has been convicted of a felony or misdemeanor for a crime which directly relates to the duties of the teaching profession.

Procedures for Admission to Teacher Education

Students wishing to pursue a standard undergraduate teaching certificate must apply and complete admission to the teacher education program during the sophomore year. Admission to teacher education is required of all students seeking standard certification and is a separate procedure from admission to UTB/TSC. A fee of $50.00 assessed in the initial semester (EDCI 4301) of enrollment of professional development education is required. A student may petition to substitute experience and/or professional training directly related to the certificate being sought for part of the preparation program requirements. Upon request, a committee will be appointed by the Dean of the School of Education to review and make a recommendation concerning the petition.

Undergraduate Level

Students must submit an official Application for Admission to Teacher Education and meet the following requirements:

- Completion of 48 semester credit hours of the Core curriculum with a minimum 2.5 grade point average with and overall grade point average of 2.5.
- Passed all parts of the Texas Academic Skills Program (TASP) exam: 260 in reading; 230 in writing; 230 in math.
- Students who pass the TASP but score lower than a 260 in reading may retake the test or elect to substitute an appropriate reading score on a departmentally approved test;
- Students who are TASP exempt must submit a composite score on the TAAS, ACT, or SAT at or above the level set by the Texas Higher Education Coordinating Board:

  TAAS: a minimum scale score of 1770 on the writing test, a Texas Learning Index (TLI) of 86 on the mathematics test and 89 on the reading test, or

  ACT: composite score of 23 with a minimum of 19 on both the English and the mathematics test, or

  SAT: combined verbal and mathematics score of 1070 with a minimum of 500 on both the verbal and the mathematics tests (recentered scale for tests taken on or after April 1995)

  Note: A TAAS score is valid for three years and an ACT or SAT score is valid for five years.
- Completion of three semester credit hours of speech with a minimum grade of B or better
- Completion of the Watson-Glasser Test of Critical Thinking with a minimum score of 50.
- A minimum score of 500 on the written or 173 on the computerized version of the Test of English as a Foreign Language (TOEFL) is required for foreign students.
- Criminal History Check: Applications are available at the Field Experience office

Students who do not meet the criteria for admission into Teacher Education may apply for provisional enrollment which:

- provides a student who does not have clear admission into the Teacher Education program the opportunity to enroll for up to six semester credit hours of pedagogy and professional responsibility courses if deficiency present in only one area.
- requires that the student apply and be admitted into the teacher education program in order to be registered for additional pedagogy and professional responsibility classes.

Applications are available at the School of Education reception desk.

Graduate Level

Students applying for admission to the Teacher Education program at the graduate level must hold a bachelor's degree in a related field. In addition to applying to the university for admission as a graduate student, an official application for admission to teacher education must be submitted to the teacher education program. Admission requirements include:

- A minimum grade point average of 2.5 is required for both overall and content teaching areas.
- Completion of three semester credit hours of speech with a minimum grade of B or better.
- Foreign students must submit a minimum score of 550 on the written version or 213 on the computerized version of the Test of English as a Foreign Language (TOEFL).
- Meet university requirements for admission into the graduate school.
- Criminal History Check: Application forms are available at the Field Experience office.

Unconditional Admission

Requirements for Unconditional Admission to the M.Ed. program are:

- an undergraduate GPA of 3.0 or higher on a 4.0 scale,
- a GPA of 3.0 or higher on any previous graduate work,
- A completed application consisting of items 1-6 found in the "Admissions Application" section,
- A combined score of 800 or better on the verbal and either the quantitative or the analytical portions of the Graduate Record Examination.

Conditional Admission

An applicant with a verbal and quantitative score totaling 600-799 and/or less than a 3.0 GPA may be granted Conditional Admission upon approval of the Dean of Graduate Studies and Sponsored Programs. Special course requirements or other conditions may be imposed by the academic department. Conditions may require that additional undergraduate or graduate semester hours be taken, that a specific grade point average be maintained or some other condition be met by the student. If conditions are not met, the student may be barred from subsequent registration in the graduate program. Normally students must satisfy conditions of their probation within the first twelve hours of graduate study. A student in Conditional Admission may not hold an assistantship.

Provisional Admission

Applicants seeking an admission as a graduate student, who are unable to complete the admission file, may be granted provisional admission, upon the recommendation of the Dean of Graduate Studies and Sponsored Programs,. Provisional admission allows a student to register for up to six graduate hours without the required GRE or TOEFL scores. A complete and satisfactory admissions application file must be received by the Admissions and Registrar's Office before the end of the semester. Students with provisional admission will not be permitted to enroll in graduate coursework for more than one semester. A student with provisional admission status may not hold an assistantship.

Non-degree or Transient Student

Students who wish to enroll in courses but do not plan to pursue a program leading to a graduate degree or certificate may enroll by completing an application for admission form, providing transcripts, paying the required application fee, registering for the course, and paying tuition/fees. These students are classified as non-degree seeking or transient and may receive academic credit. A transient student who registers for academic credit and later decides to become a candidate for a degree must meet all admissions criteria and may petition the graduate program for admission as a degree-seeking student. A student who decides to become a degree-seeking student may apply up to 12 semester hours of graduate credit received as a transient student if grades are a "B" or above and if the courses are relevant to the degree sought. Decisions on course relevance will be made by the student's major department.

Post-Baccalaureate (PB) Level:

Students applying for admission to Teacher Education at the post-baccalaureate level must hold a bachelor's degree in a related field. In addition to applying to the university for admission, the student must submit an official application for admission to teacher education. Admission requirements include:

- a minimum grade point average of 2.5 is required for both overall and content teaching areas.
- completion of three semester credit hours of speech with a minimum grade of B or better.
- for foreign students, a minimum score of 550 on the written version or 213 on the computerized version of the Test of English as a Foreign Language (TOEFL).
- TASP reading score of 260; TASP writing score of 220; TASP math score of 230, or
- minimum 2.67 GPA on the last 60 semester credit hours, or
- meet university requirements for unconditional or non-degree admission into the graduate school.
- Criminal History Check: Application forms are available at the Field Experience office

Alternative Certification Program (ACP):

Students applying for admission to ACP must apply for admission to the university at either the graduate or post-baccalaureate level and meet the requirements for the respective level. Without a GRE score the student may apply for admission as a post-baccalaureate student and complete the application process for the graduate program within the first semester. All students must submit a current criminal history check. Application forms are available at the Alternative Certification Office

Admission to the Teacher Education Program must be completed by Alternative Certification Program applicants before registering for pedagogy and professional responsibility courses, or any of the academic courses offered in the School of Education.

Field Experiences

The teacher preparation program requires students to enroll in education courses that require a variety of training activities scheduled in area schools. These experiences include such things as classroom observations, working with mentor teachers, tutoring students, small group work and lesson presentations. Prior to initiating any field experiences students must meet the following prerequisites:

- Clear admittance to the Teacher Education Program.
- Criminal History Check. Each semester students must have a current check.
- TB test. Submit a current report (TB test forms are available in the Teacher Education Field Experience Office, Education Building Office # 3.) The UTB/TSC Health Services Office is available for administration of TB tests every day from 8:00 a.m. to 1:00 p.m. except on Thursdays.
- Clear demonstration of commitment to professional standards and ethics.

All Criminal History Checks and TB tests are to be submitted to the course instructor during the first week of class and all financial charges associated with these are the responsibility of the student. Students that are clear will receive a letter of introduction to take to the school indicating their approved assignment.

Student Teaching

Student teaching is required in partial fulfillment of the requirements for a provisional certificate in Texas. Senior level student teachers are assigned regular classroom instruction with mentor teachers for one full semester. Students should be aware that no more than three hours of other coursework may be taken concurrently with student teaching. Before applying for student teaching, a student must meet the following prerequisites:

- Senior classification.
- Minimum overall GPA of 2.50
- Completion of required professional education courses as specified by the individual degree plan with a 2.50 GPA and no grade lower than C.
- Be within six semester hours of completing required coursework in each teaching field, discipline, and/or delivery system as specified by the degree plan, with a minimum 2.50 grade point average in each area.

- Satisfactory TB test results on file.
- Completion of all course practicums.
- Completion of all Reading/Literacy courses as required by the individual degree plan.
- Criminal history search. Students must have a current check conducted through the Department of Public Safety Office.
- Clear demonstration of commitment to professional standards and ethics.

Application Procedure: For student teaching the following application procedure must be completed before approval for student teaching. Students need to be aware that the application process for Student Teaching is separate from the application for admission to Teacher Education.

- File an official student teaching application form which is available in the Teacher Education Field Experience Office. (Education Building, Room # 3)
- Attach an up-to-date UTB/TSC transcript.
- Attach a copy of the official degree plan.
- Submit an application to the Teacher Education Field Experience Office (Education Building, Room 3) by March 19 for the fall semester or by October 15 for the spring semester.

Assignments to student teaching are based on the following:

Elementary Education

- Students seeking an Early Childhood-4th grade generalist certificate will be given a one half semester, all-day assignment in Early Childhood and one half semester all day assignment in grades 1-4.
- Students seeking Early Childhood-4th grade bilingual generalist will be given a one half semester all day placement in a bilingual early childhood Pre K or K classroom and a one half semester all day placement in an elementary bilingual classroom (grades 1-4)
- Students seeking an elementary certificate with a delivery system in Generic Special Education will be assigned an all-day, one-half semester placement in an elementary classroom and an additional all-day, one-half semester placement (elementary-secondary) in the delivery system.

Secondary Education

- Secondary students seeking a certificate in a single Academic major will receive an all-day one-semester placement in the specified major.
- Students seeking certification in two 24-hour fields will be assigned an all-day, one-half semester placement for each of the two fields. Each additional field will require an all day placement in each field.

All-Level

- All-level majors will receive an all-day, half semester placement at both the elementary and secondary levels. Each additional teaching field will require an all-day placement.

CURRICULUM AND INSTRUCTION DEPARTMENT

Elementary Education – Bachelor of Arts in Liberal Arts & Sciences (B.A.L.A.S.)

Elementary Interdisciplinary Degree Program

The Bachelor of Arts in Liberal Arts and Sciences (B.A.L.A.S.) is offered to support the elementary teacher certification program.

The degree requires students choosing elementary certification, Early Childhood-Grade 4 Generalist or Early Childhood-Grade 4 Bilingual Generalist to complete an interdisciplinary degree plan consisting of academic coursework relating to the curriculum areas taught in the elementary school (math, science, language arts/fine arts, kinesiology, reading). The pedagogy and professional responsibility professional development sequence of courses listed is required to complete elementary certification for the Bachelor of Arts in Liberal Arts and Sciences (BALAS) degree.

PROGRAM OF STUDY

Bachelor of Arts in Liberal Arts and Sciences (B.A.L.A.S.) – Elementary Teacher Certification: Early Childhood-4th Grade Generalist)

General Education Core Curriculum			48 hours
Pedagogy and Professional Responsibilities			26 hours
EDCI	4203	Technology and the School Curriculum	
EDCI	4301	Foundations of Education in a Diverse Society	
EDCI	4302	Understanding Learners in EC-4	
EDCI	4304	Instructional Planning and Curriculum Development	
EDCI	4305	Instructional Methodology and Classroom Management	
EDSL	4306	Content Area Methods in the ESL Classroom	
SPED	4370	Foundations of Special Education	
EDCI	4608	Student Teaching EC–4	
Reading: 15 hours			
EDLI	3310	Emergent Literacy Early Childhood-Kindergarten	
EDLI	3323	Beginning Literacy 1st-2nd Grades	
EDLI	3324	Fluent Literacy 3rd-4th Grades	
EDLI	3329	Literacy and Assessment	
EDLI	3341	Children's Literature	
English: 12 hours			
ENGL	3319	Introduction to Descriptive Linguistics	
ENGL	3330	English Grammar	
ENGL	4325	Composition Techniques	
ENGL	4328	Introduction to English as a Second Language	
Social Studies: 6 hours			
GEOG	3320	Cultural Geography for Educators	
HIST	3334	Mexico and the Borderlands through Independence or	
HIST	3336	Mexican American Heritage or	
INDS	3304	Frontier Studies: the U.S.-Mexico Border	
MATH: 6 hours			
MATH	3335	Contemporary Mathematics I	
MATH	3336	Contemporary Mathematics II	

Science 6 hours

PSCI	4310	Physical Science for Teachers I
PSCI	4320	Physical Science for Teachers II

Combination of Subjects: 20 hours

EDCI	2101	School and Society
KINE	3255	Health and Motor Development EC-4
MUSI	3299	Teaching Fine Arts for EC-4
EDSL	4307	Teaching ESL in the Pre K-1st Classrooms
EDSL	4308	Teaching ESL in the 2nd-4th Classrooms
EDEC	4385	Growth and Development of the Young Child
EDEC	4389	The Environment and Early Childhood
SPED	4386	Modifications in Inclusive Settings

Total number of hours required **Minimum 124 hours**
Maximum 139 hours

PROGRAM OF STUDY

Bachelor of Arts in Liberal Arts and Sciences (B.A.L.A.S.) – Elementary Teaching Certification: Early Childhood-4th Grade Bilingual Generalist)

General Education Core Curriculum 48 hours
Pedagogy and Professional Responsibilities 26 hours

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in a Diverse Society
EDCI	4302	Understanding Learners EC-4
EDCI	4304	Instructional Planning and Curriculum Development
EDCI	4305	Instructional Methodology and Classroom Management
EDBI	4306	MATH & Science in the Bilingual Classroom (Spanish)
SPED	4370	Foundations of Special Education
EDBI	4608	Student Teaching EC-4 Bilingual Generalist

Reading: 12 hours

BILS	3310	Emergent Literacy in the Bilingual Classroom (Spanish)
BILS	3312	Teaching Reading in the Bilingual Classroom (Spanish)
BILS	3314	Language Arts and Social Studies (Spanish)
BILS	3316	Assessment in the Bilingual Classroom (Spanish/ English)

English/Spanish 18 hours

ENGL	3319	Introduction to Descriptive Linguistics
ENGL	3330	English Grammar
ENGL	4328	Introduction to English as a Second Language
SPAN	3330	Spanish Grammar
SPAN	4310	Spanish Phonology and Phonetics
SPAN	4368	Children's Literature in Spanish

Social Studies 6 hours

GEOG	3320	Cultural Geography for Educators
HIST	2380	Mexican American History

Science/MATH 12 hours

MATH	3335	Contemporary Mathematics I
MATH	3336	Contemporary Mathematics II
PSCI	4310	Physical Science for Teachers I
PSCI	4320	Physical Science for Teachers II

Combination of Subjects: 17 hours

EDCI	2101	School and Society
KINE	3255	Health and Motor Development for EC–4
MUSI	3299	Teaching Fine Arts for EC–4
EDSL	4307	Teaching ESL Pre K-1st Classrooms
EDSL	4308	Teaching ESL 2nd-4th Grade Classrooms
EDEC	4385	Growth and Development of the Young Child
SPED	4386	Modifications in Inclusive Settings

Total number of hours required 139 hours

Middle School Teacher Certification

Middle School certification is available in Math, Science and English/Language Arts. The pedagogy and professional responsibility sequence of courses listed is required to complete middle school certification for the Bachelor of Arts and Bachelor of Sciences degree for academic majors in the College of Liberal Arts and the College of Science, Math and Technology. For additional information about the specific course requirements, contact the appropriate academic departments.

PROGRAM OF STUDY

Bachelor of Arts or Bachelor of Science – Middle School Teacher Certification (Grades 4-8)

General Education Core Curriculum 48 hours
Major Requirement Minimum 45-48 hours
Support Courses 16 hours
Pedagogy and Professional Responsibility Grades 4-8 26 hours
English/Language Arts

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in A Diverse Society
EDMG	4341	Understanding Learners in the Middle Grades
EDMG	4342	Instructional Planning & Curriculum for the Middle Grades
EDMG	4343	Methods and Classroom Management in the Middle Grades
EDMG	4345	Teaching ELA in the Middle Grades
EDMG	4347	Teaching English Language Learners in the Middle Grades
EDMG	4648	Student Teaching in the Middle Grades

Pedagogy and Professional Responsibility Grades 4-8 26 hours
Mathematics

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in A Diverse Society
EDMG	4341	Understanding Learners in the Middle Grades
EDMG	4342	Instructional Planning & Curriculum for the Middle Grades
EDMG	4343	Methods and Classroom Management in the Middle Grades
EDMG	4346	Teaching Science and Mathematics in the Middle Grades
EDMG	4347	Teaching English Language Learners in the Middle Grades
EDMG	4648	Student Teaching in the Middle Grades

Minimum total hours **124**
Maximum total hours **139**

Secondary Education (Grades 8-12)

Pedagogy and Professional Responsibility for Secondary Education

The pedagogy and professional responsibility sequence of courses listed is required to complete secondary certification for the Bachelor of Arts and Bachelor of Science degrees. A single academic area for secondary teacher certification requires a minimum of 36 semester credit hours.

Secondary (Grades 8-12) prepares the student to seek certification in a single academic area (major). Major academic areas include: Science, English/Language Arts, , History, , Mathematics, , and Spanish. Programs of Study for secondary certification which include these majors lead to a Bachelor of Arts degree or a Bachelor of Science degree. These programs of study are designed with a non-teaching minor or without a minor. General Program of Study requirements are listed for secondary teaching certification using Refer to academic departments of the major for specific requirements. [The student must meet university and state guidelines for certification (see advisors)]

Secondary Teaching Certification

PROGRAM OF STUDY

Bachelor of Arts or Bachelor of Science (Secondary Teacher Certification –(Grades 8-12)

General Education Core Curriculum 48 hours
Major Requirement 47-48 hours
Support Courses/Minor/Combination of Subjects 10-18 hours
Select One:

English/Language Arts
History

Mathematics
Science
Spanish

Pedagogy and Professional Responsibility Grades 8-12
26 semester credit hours

English/Language Arts//Spanish/History

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in A Diverse Society
EDSC	4303	Understanding Learners in 8-12
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12
EDSC	4376	Ethical Standards and Classroom Management for 8-12
EDSC	4380	Teaching ESL 8-12
EDSC	4641	Student Teaching 8-12

Pedagogy and Professional Responsibility Grades 8-12
26 semester credit hours

Mathematics

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in A Diverse Society
EDSC	4303	Understanding Learners in 8-12
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12
EDSC	4376	Ethical Standards and Classroom Management for 8-12
EDSC	4378	Teaching Mathematics in 8-12 Classrooms
EDSC	4641	Student Teaching 8-12

Pedagogy and Professional Responsibility Grades 8-12
26 semester credit hours

Science

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in A Diverse Society
EDSC	4303	Understanding Learners in 8-12
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12
EDSC	4376	Ethical Standards and Classroom Management for 8-12
EDSC	4379	Teaching Science in 8-12 Classrooms
EDSC	4641	Student Teaching 8-12

Total number of hours required **Minimum 124**
Maximum 139 hours

Note: See your Academic Advisor for assistance with selection of majors and minors and for specific course requirements. The number of required hours for the major and minor vary depending on the departmental requirements. Contact the appropriate Academic Department for additional information.

All Level Certification

- All Level – : One academic area (Art, Music) Note: See the Fine Arts Department for Program of Study and course selections information.

Bachelor of Arts in All-Level Art

Major Requirements 1
Pedagogy and Professional Responsibility Sequence
26 semester credit hours

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in a Diverse Society
EDCI	4302	Understanding Learners EC-4 or
EDSC	4303	Understanding Learners 8-12
EDCI	4304	Instructional Planning and Curriculum Development
EDCI	4305	Instructional Methodology and Classroom Management
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4377	Methods & Techniques of Teaching Art in the Secondary School
EDSC	4376	Ethical Standards and Classroom Management for 8-12
EDCI	4311	Student Teaching – Elementary
EDSC	4398	Student Teaching – Secondary

Bachelor of Arts in All-Level Music

Major requirements 1
Professional Development Sequence: 26 semester credit hours

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in a Diverse Society
EDCI	4302	Understanding Learners EC-4 or
EDSC	4303	Understanding Learners in 8-12
EDCI	4305	Instructional Planning and Curriculum Development
EDSC	4374	Designing Instruction for Grades 8-12
EDCI	4328	Methods & Techniques of Teaching Music in the Elementary School
EDSC	4329	Methods & Techniques of Teaching Music in the Secondary School
EDCI	4311	Student Teaching – Elementary

EDSC	4398	Student Teaching – Secondary

Bachelor of Science in All-Level Kinesiology

Major requirements 1

Pedagogy and Professional Responsibility 26 hours

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in a Diverse Society
EDCI	4302	Understanding Learners in EC-4 or
EDSC	4303	Understanding Learners in 8-12
EDCI	4304	Instructional Planning and Curriculum Development
EDCI	4305	Instructional Methodology and Classroom Management
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4376	Ethical Standards and Classroom Management for Grades 8-12
EDCI	4311	Student Teaching – Elementary
EDSC	4398	Student Teaching – Secondary

Note: A second teaching field requires a minimum of 24 hours in the minor and an additional three hours student teaching. The second teaching field certification is for grades 8-12 only.

Alternative Certification Program

The Alternative Certification Program (ACP) isa cooperative endeavor with area public schools designed for prospective public school teachers with degrees from accredited colleges or universities in disciplines other than education.

Certification is offered in:

- Elementary Education with areas of concentration in
  - Early Childhood - 4th Grade, Generalist
  - Early Childhood - 4th Grade, Bilingual Generalist

These certification programs require a minimum 2.50 academic GPA in 24 semester credit hours in combination of subjects: English, Math, Science, History.

- Middle Grades 4-8
  - English Language Arts
  - Mathematics
  - Life Science
- Secondary Grades 8-12
  - English Language Arts
  - Mathematics
  - Science
  - History

These certification programs require a minimum 2.50 academic GPA. Details on the specific course requirements for the Middle Grades 4-8 and Secondary Grades 8-12 certification fields are available from the Alternative Certification Program office in the Education Department.

Program Prerequisites

- Baccalaureate degree from an accredited institution.
- 2.50 cumulative GPA;
- Texas Academic Skills Program (TASP)
- Application for admission to UTB/TSC if not a former student.

If International student include:

- Copies of TOEFL scores
- Evaluation/translation of transfer credits
- Letter of Equivalency

Students who with to enroll in the Alternative Certification Program (ACP) must submit the following:

- Completed Application for the Alternative Certification Program
- Receipt of $50.00 evaluation fee
- Official transcripts with degree notations from all institutions attended
- 3 letters of recommendations
- Resume (under work experience, please include name(s) of immediate supervisor(s) and telephone numbers)
- Police Record Check

Qualified applicants are required to go through an interview process and complete a writing sample. Details about these requirements are available from the Alternative Certification Program office.

Upon Completion of all entry requirements and admission to the program students will follow two phases of the program.

Phase I

- Complete 12 semester credit hours in pedagogy courses, with a B or better.
- During the summer, students should begin the application process for teaching positions with the area school districts.

Phase II

- Pass internship courses
- Complete 12 semester credit hours in pedagogy courses, with a B or better.
- Pass required ExCET exams.
- Pass required TOPT exam, if required
- Attendance ACP workshop, session, seminars
- Meet all other departmental requirements and benchmark activities. Additional information about benchmark requirements may be obtained by contacting the ACP office.
- Completion of required school district and ACP office paperwork and settlement of all financial obligations.

Early Childhood – 4th Grade, Generalist

Phase I

EDCI	4304	Instructional Planning and Curriculum Development
EDCI	4305	Instructional Methodology and Classroom Management
EDEC	4385	Growth and Development of the Young Child
EDLI	3310	Energent Literacy Early Childhood-Kindergarten

Phase II

EDLI	3323	Beginning Literacy 1st-2nd Grades
EDLI	3324	Gluent Literacy 3rd-4th
EDSL	4306	Content Area Methods in the ESL Classroom
SPED	4370	Foundations of Special Education

Early Childhood – 4th Grade, Bilingual Generalist

Phase I

EDCI	4304	Instructional Planning and Curriculum Development
EDCI	4305	Instrucional Methodology and Classroom Management
EDEC	4385	Growth and Development of the Young Child
BILS	3310	Energent Literacy Early Chilhood-Kindergarten

Phase II

BILS	3312	Teaching Reading in Bilingual Classroom (Spanish)
BILS	3314	Language Arts & Social Studies (Spanish)
EDBI	4306	Math & Science in the Bilingual Classroom (Spanish)
SPED	4370	Foundations of Special Education

English Language Arts (Middle Grades 4th-8th)

Phase I

EDMG	4341	Understanding Learners in the Middle Grades
EDMG	4342	Instructional Planning & Curriculum, Middle Grades
EDMG	4343	Methods & Classroom Management, Middle Grades
EDMG	4345	Teaching English Language Arts in Middle Grades

Phase II

EDLI	4351	Reading in the Content Areas
EDLI	4367	Teaching Reading to the English Language Learner
EDMG	4347	Teaching English Language Learners in the Middle Grades
SPED	4370	Foundations of Special Education

*** Prerequisite Courses**

ENGL	1301	Composition I
ENGL	1302	Composition II
ENGL	2332	World Lit I or ENGL 2333 World Lit II
ENGL	3302	Literature Analysis
ENGL	3312	Survey of Am Lit I or ENGL 3313 Survey of Am Lit II
ENGL	3319	Intro to Descriptive Linguistics
ENGL	3330	English Grammar
ENGL	3331	History of the English Language
ENGL	4301	Shakespeare
ENGL	4325	Composition Techniques
ENGL	4328	Introduction to ESL

Mathematics (Middle Grades 4th-8th)

Phase I

EDMG	4341	Understanding Learners in the Middle Grades
EDMG	4342	Instructional Planning & Curriculum, Middle Grades
EDMG	4343	Methods & Classroom Management, Middle Grades
EDMG	4346	Teaching Science in the Middle Grades

Phase II

EDLI	4351	Reading in the Content Areas
EDLI	4367	Teaching Reading to English Language Learner
EDMG	4347	Teaching English Language Learners, Middle Grades
SPED	4370	Foundations of Special Education

English Language Arts (Secondary 8th-12th Grade)

Phase I

EDSC	4303	Understanding Learners in 8-12
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12
EDSC	4376	Ethical Standards & Classroom Management
EDSC	4380	Teaching ESL 8-12

Phase II

EDLI	4351	Reading in the Content Areas
EDLI	4355	Developing Critical Reading Skills
EDLI	4350	Adolescent Literature
SPED	4370	Foundations of Special Education

*** Prerequisite Courses**

ENGL	1301	Composition I
ENGL	1302	Composition II
ENGL	2332	World Lit I or ENGL 2333 World Lit II
ENGL	3302	Literature Analysis
ENGL	3309	Major British Authors or ENGL 3306 Eng Novel to 1900
ENGL	3312	Survey of Am Lit I or ENGL 3313 Survey of Am Lit II
ENGL	3319	Intro to Descriptive Linguistics
ENGL	3330	English Grammar
ENGL	4301	Shakespeare
ENGL	4325	Composition Techniques
ENGL	4328	Introduction to ESL

Mathematics (Secondary 8th-12th Grade)

Phase I

EDSC	4303	Understanding Learners in 8-12
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12
EDSC	4380	Teaching ESL 8-12

Phase II

EDSC	4376	Ethical Standards & Classroom Management
EDLI	4351	Reading in the Content Areas
SPED	4370	Foundations of Special Education

History (Secondary 8th-12th Grade)

Phase I

EDSC	4303	Understanding Learners in 8-12
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12
EDSC	4376	Ethical Standards & Classroom Management
EDSC	4380	Teaching ESL 8-12

Phase II

EDLI	4351	Reading in the Content Areas
EDLI	4355	Developing Critical Reading Skills
EDLI	4350	Adolescent Literature
SPED	4370	Foundations of Special Education

KINESIOLOGY DEPARTMENT

PROGRAM OF STUDY

Bachelor of Science in Kinesiology

(Teacher Certification – Secondary : Grades 8-12 with a Non-Teaching Minor)

General Education Core Curriculum			48 hours
Kinesiology Major Requirements			36 hours
KINE	1301	Introduction to Sport and Exercise Science	
KINE	1306	First Aid	
KINE	3309	Modified Team and Individual Sports	
KINE	3314	Dance for Children and Adolescence	
KINE	3330	Coaching Sports	
KINE	3340	Principles of Wellness and Fitness	
KINE	3353	Physiology of Exercise and Human Performance	
KINE	3370	Biomechanics	
KINE	4310	Measurement Techniques in Physical and Exercise Sports	
KINE	4351	The Adapted Kinesiology Program	
KINE	1111	Folk and Square Dancing	
KINE	1114	Gymnastics	
KINE	1124	Swimming	
KINE	11xx	(Team Sport)	
KINE	11xx	(Individual/Dual Sport)	
Minor (Non-Teaching – minimum 18 hours)			18 hours
Pedagogy and Professional Responsibility Courses			26 hours
EDCI	4203	Technology and the School Curriculum	
EDCI	4301	Foundations of Education in a Diverse Society	
EDSC	4303	Understanding Learners in 8-12	
EDSC	4374	Designing Instruction for Grades 8-12	
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12	
EDSC	4376	Ethical Standards and Classroom Management for 8-12	
EDSC	4641	Student Teaching	
Additional Requirements			3 hours
EDLI	4351	Reading in the Content Area	
Electives			
Total number of hours required			**136 hours**

PROGRAM OF STUDY

Bachelor of Science in Kinesiology (Teacher Certification – Secondary: Grades 8-12 with a Teaching Minor)

General Education Core Curriculum			48 hours
Kinesiology Major Requirements			36 hours
KINE	1301	Introduction to Sport and Exercise Science	
KINE	1306	First Aid	
KINE	3309	Modified Team and Individual Sports	
KINE	3314	Dance for Children and Adolescence	
KINE	3330	Coaching Sports	
KINE	3340	Principles of Wellness and Fitness	
KINE	3353	Physiology of Exercise and Human Performance	
KINE	3370	Biomechanics	
KINE	4310	Measurement Techniques in Physical and Exercise Sports	
KINE	4351	The Adapted Kinesiology Program	
KINE	1111	Folk and Square Dancing	
KINE	1114	Gymnastics	
KINE	1124	Swimming	
KINE	11xx	(Team Sport)	
KINE	11xx	(Individual/Dual Sport)	
KINE	11xx	(Activity Elective)	
Minor (Second Teaching Area; Minimum 24 hours)			24 hours
Pedagogy and Professional Responsibility Courses			26 hours
EDCI	4203	Technology and the School Curriculum	
EDCI	4301	Foundations of Education in a Diverse Society	
EDSC	4303	Understanding Learners in 8-12	
EDSC	4374	Designing Instruction for Grades 8-12	
EDSC	4375	Strategies for Delivering Instruction in Grades 8-12	
EDSC	4376	Ethical Standards and Classroom Management for 8-12	
EDSC	4641	Student Teaching	
Additional Requirements			3 hours
EDLI	4351	Reading in the Content Area	
Electives			
Total number of hours required			**135 hours**

Kinesiology Minor – Secondary Teacher Certification

Option II: Grades 8-12

24 hours; minimum of 12 hours of which must be advanced

Sports Activity Element			5 hours
Kinesiology Core			
KINE	1301	Introduction to Sport and Exercise Science	
KINE	3309	Modified Team and Individual Sports	
KINE	3330	Coaching of Sports	
KINE	3340	Principles of Wellness & Fitness	
KINE	3353	Physiology of Exercise & Human Performance	
KINE	3370	Biomechanics	
KINE	4310	Measurement Techniques in Physical Exercise & Sports	
KINE	4351	The Adapted Kinesiology Program	

PROGRAM OF STUDY

Bachelor of Science in Kinesiology (Teaching Certification – All Level Option II: Grades Pre-K – 12)

General Education Core Curriculum			48 hours
Kinesiology Major Requirements			39 hours
KINE	1301	Introduction to Sports and Exercise Science	
KINE	1306	First Aid	
KINE	3302	Foundations of Sports and Exercises for Pre-Adolescence	
KINE	3309	Modified Team and Individual Sports	
KINE	3314	Dance for Children and Adolescence	
KINE	3320	History and Principles of Sport and Movement Science	
KINE	3330	Coaching of Sports	

KINE	3340	Principles of Wellness and Fitness
KINE	3353	Physiology of Exercise and Human Performance
KINE	3356	Aesthetics (Harmony) of Movement
KINE	3370	Biomechanics
KINE	4310	Measurement Techniques in Physical Exercise and Sports
KINE	4351	The Adapted Kinesiology Program

Minor (minimum 18 hours) 18 hours

Pedagogy and Professional Responsibility Courses 26 hours

EDCI	4203	Technology and the School Curriculum
EDCI	4301	Foundations of Education in a Diverse Society
EDCI	4302	Understanding Learners EC-4 or
EDSC	4303	Understanding Learners in 8-12
EDSC	4374	Designing Instruction for Grades 8-12
EDSC	4375	Strategies for Delivering Instruction for Grades 8-12
EDSC	4376	Ethical Standards and Classroom Management for 8-12
EDCI	4311	Student Teaching – Elementary
EDCI	4398	Student Teaching – Secondary

Additional Requirements 7 hours

EDLI	4351	Reading in the Content Area
KINE	1111	Folk and Square Dancing
KINE	1114	Gymnastics
KINE	1124	Swimming
KINE	xxxx	(Team Sport Elective)

Total number of hours required 136 hours

PROGRAM OF STUDY

Bachelor of Science in Kinesiology/Exercise Science (Non-Certification Degree)

Exercise Science

The program emphasizes the study of exercise from an integrated biochemical, neurological, physiological, and biomechanical perspective. The program is offered to undergraduate students who wish to prepare for work in such diverse fields as medical and allied health professions, industry, private business, hospitals, state and private institutions, and amateur and professional sport teams that require expertise dealing with multidimensional aspects of exercise and fitness.

Kinesiology

The program is offered to undergraduate students who intend to prepare for non-teaching careers in the subject field of Kinesiology. Work opportunities include city recreation departments, YWCAs, YMCAs, Boys and Girls Clubs, and Adult Care Centers.

Tracks for the Kinesiology/Exercise Science consist of the Core, Concentration, and Sport Activity courses.

General Education Core Curriculum 48 hours

Kinesiology Major Requirements 35-39 hours

Kinesiology Core: 15 hours

KINE	1301	Introduction to Sport and Exercise Science
KINE	1306	First Aid
KINE	3353	Physiology of Exercise and Human Performance
KINE	3370	Biomechanics
KINE	4310	Measurement Techniques in Physical and Exercise Sports

For Exercise Science Select: 24 hours

KINE	3302	Foundations of Sports and Exercises for Pre-Adolescences
KINE	3309	Modified Team and Individual Sports
KINE	3311	Psychological Behavior in Sports
KINE	3312	The Intramural Program
KINE	3320	History and Principles of Sports and Movement Sciences
KINE	3340	Principles of Wellness and Fitness
KINE	3352	Care, Treatment and Prevention of Athletic Injuries
KINE	4320	Management of Sports in Recreational Programs
KINE	4351	The Adapted Kinesiology Program
KINE	4356	Motor Learning and Human Performance
KINE	4663	Exercise Science Internship

For Kinesiology Select: 20 hours

Kinesiology Activities (5 hours)

KINE	1111	Folk and Square Dance
KINE	1114	Gymnastics
KINE	1124	Swimming
KINE	11xx	Team Sports (Elective)
KINE	11xx	Individual/Dual Sports (Elective)

Minor (minimum 18 hours) 18 hours

Electives

*Total number of hours required 124 hours

**36 hours must be advanced (3000, 4000 Level)*

School Specialties Department

Elementary Education: Generic Special Education (Pre-K through 12th)
Generic Special Education: 18 hours (Pre K through 12th)
Generic Special Education Requirement

Students must complete each block of courses before enrolling in the next block:

Block 1

SPED	3370	Introduction to Exceptional Children

Block 2

SPED	4301	Language Development and Communication Disorders
SPED	4302	Cognitive Development Associated with Exceptionalities

Block 3

SPED	4375	Testing and Assessment of Exceptional Individuals
SPED	4385	Classroom Approaches and Modifications for Students with Special Needs

Block 4

SPED	4395	Practicum in Generic Special Education

Teacher Certification Secondary Option II Minor

Generic Special Education 27 hours

Students must complete each block of courses before enrolling in the next block

Block 1

SPED	3370	Introduction to Exceptional Children

Block 2

SPED	4301	Language Development and Communication Disorders
SPED	4302	Cognitive Development Associated with Exceptionalities
SPED	4372	Special Education in Inclusive Settings

KINE	4351	The Adapted Kinesiology Program

Block 3

SPED	4307	Field Experience in Generic Special Education
SPED	4375	Testing and Assessing of Exceptional Individuals
SPED	4385	Classroom Approaches and Modifications for Students with Special Needs

Block 4

SPED	4395	Practicum in Generic Special Education

Blocks designate sequence of courses for student to complete

Child Care and Development Program

The Child Care and Development program is designed to provide instruction and field experiences necessary for successful care and guidance of young children from birth to five years of age. Emphasis is on the importance and need for early childhood education and quality care of children. Field work can be completed at the student's place of employment (child care facility) or at the Raul J. Guerra Early Childhood Center.

Program Competencies

Upon completion of the program, the graduate will:

- apply child care development theories and principles in providing appropriate developmental care and guidance,
- demonstrate a clear understanding of quality child care and development,
- communicate effectively with children, their families and child care providers,
- collaborate with other child development professionals in a structured child care setting,
- assume responsibility, adhering to legal and ethical standards, as well as achieving professional and personal growth.

Program of Study

Certificate of Proficiency – Child Care and Development

Child Care and Development Courses	36 hours
General Education	3 hours
Total number of hours required	**39 hours**

Program of Study Requirements

First Semester

CDEC	1318	Nutrition, Health, and Safety
CDEC	1319	Child Guidance
CDEC	1354	Child Growth & Development
CDEC	1359	Children with Special Needs

Second Semester

CDEC	1313	Curriculum Resources for Early Childhood Programs
CDEC	1396	Special Topics in Administration of Programs for Children
CDEC	1367	Practicum in Child Development
CDEC	2321	The Infant and Toddler
PSYC	2308	Child Psychology

First Summer Session

CDEC	1357	Math & Science for Early Childhood
CDEC	2326	Administration of Programs for Children I

Second Summer Session

CDEC	1358	Creative Arts for Early Childhood
CDEC	2328	Administration of Program for Children II

Program of Study

Associate in Applied Science – Child Care and Development

Child Care and Development	47 hours
General Education	18 hours
Total number of hours required	**65 hours**

Program of Study Requirements

Freshman Year

First Semester

CDEC	1318	Nutrition, Health and Safety
CDEC	1319	Child Guidance
CDEC	1354	Child Growth & Development
CDEC	1356	Emergent Literacy for Early Childhood
COSC	1310	Computer Literacy

Second Semester

CDEC	1313	Curriculum Resources for Early Childhood Programs
CDEC	1367	Practicum in Child Development
CDEC	2321	The Infant and Toddler
PSYC	2308	Child Psychology

First Summer Session

CDEC	1357	Math & Science for Early Childhood
CDEC	2326	Administration of Program for Children I

Second Summer Session

CDEC	1358	Creative Arts for Early Childhood
CDEC	2328	Administration of Program for Children II

Sophomore Year

First Semester

CDEC	1359	Children with Special Needs
CDEC	2587	Internship-Early Childhood Provider/Assistance
SPCH	1315	Fundamentals of Speech
GOVT	2301	American Government I

Second Semester

CDEC	1396	Special Topics in Administration of Programs for Children
CDEC	2341	The School Age Child
ENGL	1301	Composition I
MATH	13xx	1314 College Algebra or MATH 1332, Math for Liberal Arts, or MATH 1324 Business Algebra

Those who desire to transfer to a senior institution should see academic advisor to ensure transfer of credit.

Endorsements

The School of Education also offers endorsements in Bilingual Education, Early Childhood Education and English as a Second Language. A teaching certificate is required for enrollment in these programs. Students interested should contact the Curriculum & Instruction Department for information and advisement. (Students may substitute graduate courses for endorsement course requirements – see advisor).

Bilingual Education

12 semester credit hours

BILC	3316	First and Second Language Acquisition
BILC	3317	Bilingual Curriculum in Content Areas or

EDCI	6327	ESL Techniques in the Content Area
BILC	4320	English as a Second Language or
EDCI	6324	Second Language Teaching: Theory & Methodology
BILS	4325	Teaching Reading in the Bilingual Classroom or
EDCI	6328	Problems in Teaching English as a Second Language

Certification requires The bilingual endorsement requires, in addition to coursework, passing scores on state required ExCET examinations.

Early Childhood Education

15 semester credit hours

BILC	3305	Foundations of Multicultural Education or
EDCI	6388	Socio-Cultural Foundations of Education
EDEC	4385	Growth and Development in Young Children
EDEC	4387	Language, Creativity and Self-Expression in Early Childhood
EDEC	4389	The Environment and Early Childhood
EDEC	4395	Seminar and Practicum in Early Childhood Education

Certification requires passing scores on state required ExCET examinations is required for the Early Childhood Endorsement. The Early Childhood Education endorsement may be added to valid elementary, special education, or vocational home economics certificates.

English as a Second Language

12 semester credit hours

BILC	3305	Foundations of Multicultural Education or
EDCI	6388	Socio-Cultural Foundations of Education
BILC	4320	English as a Second Language or
EDCI	6324	Second Language Teaching: Theory & Methodology
BILC	3316	First and Second Language Acquisition
ENGL	3319	Introduction to Descriptive Linguistics

Certification requires passing scores on state required ExCET examinations is required for the Early Childhood Endorsement. The Early Childhood Education endorsement may be added to valid elementary, special education, or vocational home economics certificates.

School of Health Sciences

Certificates & Degrees Offered

Allied Health Department

Diagnostic Medical Sonography

Associate in Applied Science – Diagnostic Medical Sonography

Emergency Medical Technology

Application for State Certification: EMT-Basic, EMT-Intermediate, EMT-Paramedic

Certificate of Proficiency – Emergency Medical Technology

Associate in Applied Science – Emergency Medical Technology

Medical Laboratory Technology

Associate in Applied Science – Medical Laboratory Technology

Radiologic Technology

Associate in Applied Science – Radiologic Technology

Respiratory Therapy

Associate in Applied Science – Respiratory Therapy

Nursing Department

Certification of Proficiency – Vocational Nursing

Associate in Applied Science – Associate Degree Nursing

Bachelor of Science in Nursing – Degree Completion Program for Registered Nurses

Master of Science in Nursing – Cooperative Degree Program with The University of Texas Health Science Center in San Antonio

Program of Study

Bachelor of Applied Technology-Health Services Technology

General Education Core Curriculum			**48 hours**
Associate in Applied Science Technical Field			**36 hours**
	Select from:		
	Nursing		
	Diagnostic Imaging		
	Respiratory Therapy		
Health Services Training Track			**36 hours**
HPRS	3301	The Evolving Health Care System	3
HPRS	3302	Ethics & Law for Health Care Specialists	3
HPRS	3309	Leading and Managing the Health Care Team	3
HPRS	4301	Introduction to Health Data Utilization	3
HPRS	4302	Continuous Quality Improvement	3
HPRS	4309	Research. Methods. in Evidenced-based Health Care	3
HPRS	4360	Practicum in Health Services	3
Advanced Electives			15
	Select from:		
	Respiratory Care Sequence, or		

Diagnostic Imaging Sequence, or	
Vascular Sonography, or	
Critical Care Sequence	
Total minimum number of hours required	**120 hours**
Minimum advanced credit hours for graduation	**30 hours**

ALLIED HEALTH DEPARTMENT

The following statement applies to these programs:

- Diagnostic Medical Sonography
- Emergency Medical Technology
- Medical Laboratory Technology
- Radiologic Technology
- Respiratory Therapy

Articulation: Each Allied Health Program articulates with high school Health Science programs through the Health Science Core Curriculum, which consists of HPRS 1101 Introduction to Health Sciences, HPRS 1106 Medical Terminology, HPRS 1204 Basic Skills for the Health Professional.

Satisfactory Progress and Applicable Degree Plan

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. A student who leaves the program prior to completion must apply for readmission. A student readmitted must follow the degree plan in effect on the date of readmission. Because of rapidly changing technology in health care, technical courses in Allied Health programs will not count toward graduation requirements if they are more than three years old.

Diagnostic Medical Sonography

Diagnostic Medical Sonography, sometimes called ultrasound, is one of the fastest growing Diagnostic Imaging fields. This program prepares students for practice as Registered Diagnostic Medical Sonographers. Application is being made for appropriate accreditation and upon graduation, students will be eligible to take the examinations of General Physics and Instrumentation, Abdomen, Obstetrics and Gynecology. This is a selective admission program and applicants are generally expected to have a prior certification in an allied health care field.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Diagnostic Medical Sonography

Pre-Program Courses

Class		Credits	Lec+Lab=Credit
PHYS	1301	General Physics I	3+0=3
PHYS	1101	General Physics I lab	0+3=1
BIOL	2301	Anatomy and Physiology I and	3+0=3
BIOL	2101	Anatomy and Physiology I – Lab	0+3=1
BIOL	2302	Anatomy and Physiology II – and	3+0=0
BIOL	2102	Anatomy and Physiology II – Lab	0+3=1
MATH	1314	College Algebra	3+0=3
Totals			**12+11=16**
Freshman Year			
Fall			
SPCH	1315	Fundamental of Speech	3+0=3
HPRS	1106	Medical Terminology	1+0=1
DMSO	1441	Ultrasound I	3+4=4
DMSO	1355	Pathophysiology	3+0=3
HPRS	1101	Introduction to Health Professions	1+0=1
Totals			**11+0=12**
Spring			
HPRS	1204	Basic Health Professional Skills	1+4=2
DMSO	2441	Ultrasound II	3+4=4
DMSO	1342	Intermediate Acoustical Physics	3+0=3
DMSO	1266	Practicum	0+16=2
Totals			**7+32=11**
Summer I			
DMSO	1166	Practicum	0+7=1
PSYC	2301	Introduction to Psychology	3+0=3
Total			**3+7=4**
Summer II			
DMSO	1167	Practicum	0+7=1
		Electives-Humanities	3+0=3
Total			**3+7=4**
Sophomore Year			
Fall			
ENGL	1301	Composition	3+0=3
DMSO	2342	Ultrasound III	2+4=3
DMSO	2343	Advanced Acoustical Physics	3+0=3
DMSO	1267	Practicum	0+16=2
Total			**8+20=11**
Spring			
		Computer Elective TCIS or COSC	3+0=3
DMSO	2253	Sonography III	2+0=2
DMSO	2266	Practicum	0+16=2
Total			**5+0=7**
Summer I			
DMSO	2166	Practicum	0+7=1
Total			**0+0=1**
Summer II			
DMSO	2167	Practicum	0+7=1
DMSO	2245	Advanced Sonography Practices	2+0=2
Total			**2+7=3**

Credit Hour Summary

Diagnostic Medical Sonography	34 Credit hours
General Education	28 Credit hours
Electives	6 Credit hours
Total	68 Credit hours

Emergency Medical Technology

This program prepares Emergency Medical Technicians with formal instruction and clinical practice in the job competencies delineated for EMTs by the Texas Department of Health, and The United States Department of Transportation.

This laddered program has exit points as follows:

- The Emergency Medical Technician-Intermediate program which consists of all of the basic skills competencies plus the Intermediate skills competencies.
- The Emergency Medical Technician-Paramedic program which consist of the Basic, Intermediate and Paramedic skills competencies.

All of these skills and competencies will be formally instructed by theory, laboratory and clinical experience.

Program Competencies

- Recognize factors that affect the roles and responsibilities of the Emergency Medical Technician
- Describe the EMS Systems to include the Medical control responsibility, ambulance standards and protocols
- Identify the significance of medical/legal considerations
- Recognize the importance of the ever-changing EMS communication system with emphasis on the 911 system
- Describe the contrast between anatomy and medical technology
- Identify the importance of general and critical patient assessment with emphasis on the pathophysiology of shock
- Recognize factors that involve airway management
- Differentiate and implement invasive pharmacological agents appropriate to every emergency situation
- Provide rescue with emphasis on traumatic vehicular disentanglement
- Recognize and treat various types and degrees of burns
- Recognize the types of cardiovascular emergencies to include the recognition of Electrocardiograms
- Identify the various complex anatomical systems, which make it possible for the body to remain in harmonious function
- Identify and treat environmental and infectious emergencies
- Identify and treat pediatric and geriatric emergencies
- Recognize and treat obstetrical labor and delivery emergencies
- Provide treatment for behavioral emergencies to include the transport process

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Emergency Medical Technology

Course Title			**Lec+Lab=Credit**
EMSP	1019	CPR Basic Life Support	0+2=0
HPRS	2300	Pharmacology for Health Professions	3+0=3
HPRS	1101	Introduction to Health Care Professions	1+0=1
Total Hours			**4+2=4**
Freshman Year			
Fall			
HPRS	1204	Basic Health Professions Skills	1+4=2
HPRS	1106	Medical Terminology	1+0=1
EMSP	1401	Emergency Medical Technician – Basic	3+4=4
EMSP	1266	Practicum/Field Experience-Emergency Medical Technology/Technician I	0+0=2
HPRS	1205	Medical Law/Ethics for Health Professions	2+0=2
BIOL	2301	Human Anatomy and Physiology I	3+0=3
BIOL	2101	Human Anatomy and Physiology I – Lab	0+3=1
Total Hours			**10+11=15**
Spring			
ENGL	1301	Composition I	3+0=3
EMSP	1356	Patient Assessment and Airway Management	2+2=3
EMSP	1267	Practicum/Field Experience-Emergency Medical Technology/Technician II	0+0=2
EMSP	1209	Emergency Medical Dispatching	2+0=2
BIOL	2302	Human Anatomy and Physiology II	3+0=3
BIOL	2102	Human Anatomy and Physiology II – Lab	0+3=1
Total Hours			**10+5=14**
1st Summer			
EMSP	1208	Emergency Vehicle Operations	2+0=2
EMSP	1149	Pre-Hospital Trauma Life Support	0+3=1
SPCH	1315	Fundamentals of Speech	3+0=3
EMSP	2135	Advanced Cardiac Life Support	0+3=1
Total Hours			**5+6=7**
2nd Summer			
EMSP	2345	EMS Supervision/Management	2+2=3
COSC	1305	Computer Fundamentals	3+0=3
EMSP	1147	Pediatric Advanced Life Support	0+3=1
Total Hours			**5+5=7**
Sophomore Year			
Fall			
EMSP	2444	Cardiology	3+4=4
EMSP	2266	Practicum/Field Experience-Emergency Medical Technology/Technician III	0+0=2
MATH	1313	College Math	3+0=3
PSYC	2301	Introduction to Psychology	3+0=3
Total Hours			**9+4=12**
Spring			
EMSP	2243	Assessment Based Management	1+2=2
EMSP	2434	Medical Emergencies	3+2=4
EMSP	2267	Practicum/Field Experience-Emergency Medical Technology/Technician IV	0+0=2
Elective – Humanities (literature, art, music, philosophy)			3+0=3
Total Hours			**7+4=11**
Grand Total			**50+37=70**

Credit Hour Summary	
Emergency Medical Technology	35 Credit hours
General Education	32 Credit hours
Electives	3 Credit hours
Total	**70 Credit hours**

Certificate – Emergency Medical Technology

Course Title			**Lec+Lab=Credit**
EMSP	1019	CPR Basic Life Support	0+2=0
HPRS	2300	Pharmacology for Health Professions	3+0=3
HPRS	1101	Introduction to Health Care Professions	1+0=1
Total Hours			**4+2=4**
Freshman Year			
HPRS	1204	Basic Health Profession Skills	1+4=2
HPRS	1106	Medical Terminology	1+0=1
EMSP	1401	Emergency Medical Technician – Basic	3+4=4
EMSP	1266	Practicum/Field Experience-Emergency Medical Technology/Technician I	0+0=2
HPRS	1205	Medical Law/Ethics for Health Professions	2+0=2
BIOL	2301	Human Anatomy and Physiology I	3+0=3
BIOL	2101	Human Anatomy and Physiology I – Lab	0+3=1

Total Hours			**10+11+15**
Spring			
EMSP	1356	Patient Assessment and Airway Management	3+0=3
EMSP	1267	Practicum/Field Experience-Emergency Medical Technology/Technician II	0+0=2
EMSP	1209	Emergency Medical Dispatching	2+0=2
BIOL	2302	Human Anatomy and Physiology II	3+0=3
BIOL	2102	Human Anatomy and Physiology II – Lab	0+3=1
Total Hours			**8+3=11**
1st Summer			
EMSP	1208	Emergency Vehicle Operations	2+0=2
EMSP	1149	Pre-Hospital Trauma Life Support	0+3=1
EMSP	2135	Advanced Cardiac Life Support	0+3=1
Total Hours			**2+6=4**
2nd Summer			
EMSP	2345	EMS Supervision/Management	2+2=3
EMSP	1147	Pediatric Advanced Life Support	0+3=1
Total Hours			**2+5=4**
Sophomore Year			
Fall			
EMSP	2444	Cardiology	3+4=4
EMSP	2266	Practicum/Field Experience-Emergency Medical Technology/Technician III	0+0=2
Total Hours			**3+4=6**
Spring			
EMSP	2243	Assessment Based Management	1+2=2
EMSP	2434	Medical Emergencies	3+2=4
EMSP	2267	Practicum/Field Experience-Emergency Medical Technology/Technician IV	0+0=2
Total Hours			**4+4=8**
Grand Total Hours			**33+35=52**

Credit Hour Summary	
Emergency Medical Technology	35 Credit hours
General Education	17 Credit hours
Total	**52 Credit hours**

Medical Laboratory Technology

Program accredited by National Accrediting Agency for

Clinical Laboratory Sciences Associate in Applied Science Degree

The two-year program prepares medical laboratory technicians by formal instruction and clinical learning experiences that teach and offer students the opportunity to acquire the knowledge and skills necessary to perform clinical laboratory procedures. Upon satisfactory completion of the program, the student is eligible to receive an Associate Degree in Applied Science and is eligible to sit for the MLT (ASCP) or CLT (NCA) national certification examinations.

Admission Requirement and Procedures: Applicants must complete several admission procedures before registration, including completing an application form, providing school records, and taking achievement tests. Interested students should contact the Program Director to request application information.

Program Competencies

After completing the program, students will have been given the opportunity to acquire the necessary skills for:

- collecting and processing biological specimens for analysis, performing analytical tests on body fluids, cells, and products.
- recognizing factors that affect procedures and results, and taking appropriate actions within predetermined limits when corrections are indicated.
- monitoring quality control within predetermined limits.
- performing preventive and corrective maintenance of equipment and instruments or referring to appropriate sources for repairs.
- demonstrating professional conduct and interpersonal communication skills with patients, laboratory personnel, other health care professionals, and the public.
- recognizing responsibilities of other laboratory and health care personnel and interacting with them with respect for their jobs and patient care.
- applying basic scientific principles to learn new techniques and procedures.
- relating laboratory findings to common disease processes.
- recognizing and acting upon the needs for continuing education to maintain and increase professional competence.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Medical Laboratory Technology

Pre-Program Courses			
Class			**Lec+Lab=Credits**
BIOL	2301	Anatomy and Physiology I and	3+0=3
BIOL	2101	Anatomy and Physiology I – Lab	0+3=1
BIOL	2302	Anatomy and Physiology II – and	3+0=3
BIOL	2102	Anatomy and Physiology II – Lab	0+3=1
HPRS	1204	Basic Health Profession Skills	1+4=2
HPRS	1101	Introduction to Health Professions	1+0=1
HPRS	1106	Medical Terminology	1+0=1
Total			**9+10=12**
Freshman Year			
First Semester			
ENGL	1301	Composition I	3+0=3
MATH	1313	College Algebra OR	3+0=3
MATH	1314	College Math	
MLAB	1201	Introduction to Clinical Lab	1+4=2
MLAB	1211	Urinalysis and Body Fluids	1+4=2
MLAB	1223	Phlebotomy	1+4=2
Total			**9+12=12**
Second Semester			
CHEM	1305	Introduction to Chemistry I and	3+0=3
CHEM	1105	Introduction to Chemistry I – Lab	0+1=1
or			
CHEM	1311	General Chemistry I and	3+0=3
CHEM	1111	General Chemistry I – Lab	0+1=1
MLAB	1335	Immunology/Serology	2+4=3
MLAB	2534	Clinical Microbiology	4+4=5
MLAB	1331	Parasitology and Mycology	2+4=3
Total			**11+13=18**
First Summer Session			
MLAB	1415	Hematology	3+4=4
MLAB	1227	Coagulation	1+2=2
Second Summer Session			
MLAB	1166	Practicum	0+10=1

	Humanities Course (choose from Art, Foreign Language or any 2000 English)		3+0=3
Total			**3+10=4**
Sophomore Year			
First Semester			
MLAB	2501	Clinical Chemistry	4+4=5
MLAB	2431	Immunohematology	3+4=4
MLAB	1167	Practicum	0+10=1
Total			**7+18=10**
Second Semester			
SPCH	1318	Interpersonal Communication	3+0=3
		Social/Behavioral Science Course	3+0=3
Choose from SOCI 1301, PSYC 2301, PSYC 2314, PSYC 3324			
		Computer Course	3+0=3
Choose from COSC 1305, COSC 1310			
MLAB	2166	Practicum	0+10=1
MLAB	2167	Practicum	0+10=1
MLAB	1191	Special Topics – Seminar	1+0=1
Total Credit Hours			53+91=71

Credit Hour Summary

Medical Laboratory Technology	37 Credit hours
General Education	22 Credit hours
Elective	12 Credit hours
Total	**71 Credit hours**

Radiologic Technology

Associate in Applied Science Degree

Accredited by The Joint Review Committee on Education in Radiologic Technology;

Approved by American Registry of Radiologic Technologists

This program offers students the opportunity to prepare to be competent, professional Radiologic technologists. The curriculum combines technical and academic courses to teach students to understand the technical skills as well as administrative duties in the Department of Radiology. After completing this program, the student receives an Associate in Applied Science Degree in Radiologic Technology and is then eligible to take the registry examination for certification as a registered Radiologic Technologist required by the American Registry of Radiologic Technologists. A grade of "C" or better is required for each course in this degree plan.

Admission Requirement and Procedures: Applicants must complete several admission procedures before registration including completing an application form, providing school records, and taking an Assessment test. Interested students should contact the Program Director to request application information and advice on possible courses to take before entering the Radiologic Technology Program.

Program Objectives

This program gives students the opportunity to acquire the skills necessary to:

- apply knowledge of anatomy, physiology, positioning and radiographic techniques to accurately show anatomical structures on a radiograph or other imaging receptor,
- determine exposure factors to achieve the best radiographic techniques with the least radiation exposure to the patient,
- evaluate radiographic images for positioning and image quality,
- provide patient care and comfort,
- evaluate the performance of Radiologic systems and know the safe limits of equipment operation, and
- exercise judgment and discretion in performing medical imaging procedures.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) –Radiologic Technology

Pre-Program Courses

Class			**Lec+Lab=Credits**
BIOL	2301	Anatomy and Physiology I *and*	*3+0*=3
BIOL	2101	Anatomy and Physiology I – Lab	0+3=1
BIOL	2302	Anatomy and Physiology II – *and*	3+0=0
BIOL	2102	Anatomy and Physiology II – Lab	0+3=1
HPRS	1204	Basic Health Profession Skills	1+5=2
HPRS	1101	Introduction to Health Professions	1+1=1
HPRS	1106	Medical Terminology	1+0=1
First Year			
Spring			
RADR	1411	Basic Radiographic Procedures	3+3=4
RADR	1201	Introduction to Radiography	2+0=2
RADR	1213	Prin. of Radiographic Imaging I	1+2=2
ENGL	1301	Composition I	3+0=3
MATH	1314	College Algebra	3+0=3
First Summer Session			
RADR	1166	Practicum I	0+0=1
Second Summer Session			
RADR	1167	Practicum II	0+0=1
Fall			
RADR	2305	Prin. of Radiographic Imaging II	2+3=3
RADR	2309	Radiographic Imaging Equipment	3+1=3
RADR	2217	Radiographic Pathology	2+0=2
RADR	1267	Practicum III	0+0=2
SPCH	1315	Fundamentals of Speech	3+0=3
Second Year			
Spring			
RADR	2331	Advanced Radiographic Procedures	3+0=3
RADR	2313	Radiation Biology and Protection	3+0=3
RADR	2266	Practicum IV	0+0=2
COSC	1305	Computer Fundamentals	3+0=3
		Elective – Humanities (Literature, Art, Music, Philosophy)	3+0=3
First Summer Session			
RADR	2166	Practicum V	0+0=1
Second Summer Session			
RADR	2167	Practicum VI	0+0=1
Fall			
RADR	2267	Practicum VII	0+0=2
RADR	2335	Radiologic Technology Seminar	3+0=3
RADR	2233	Advanced Medical Imaging	2+0=2
PSYC	2301	Introduction to Psychology	3+0=3
Total Credit Hours			**67**

Credit Hour Summary

Radiologic Technology	37 Credit hours
General Education	27 Credit hours
Electives	3 Credit hours
Total	**67 Credit hours**

Respiratory Therapy

Accredited by Committee on Accreditation for Respiratory Care

A member of the Commission on Accreditation of Allied Health Education Programs (CAAHEP)

Associate in Applied Science Degree

The program leading to an Associate in Applied Science Degree in respiratory therapy offers students the opportunity to prepare for entry-level respiratory care practice.

Graduates are eligible to write the national certification examination and to apply for Certification as Respiratory Care Practitioners with the Texas Department of Health. Program Objectives

This program gives students the opportunity to acquire the skills necessary to:

- review existing data, collect additional clinical data and recommend obtaining additional pertinent data; evaluate all data to determine the appropriateness of the prescribed respiratory care, and participate in developing the respiratory care plan,
- select, assemble and check all equipment used in providing respiratory care,
- initiate, conduct and modify prescribed therapeutic procedures to achieve one or more specific objectives, maintain patient records, and communicate relevant information to members of the health care team, and
- assume responsibility for their own professional practice by adhering to legal and ethical standards, and be responsible for their professional growth.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) – Respiratory Therapy

Core Prerequisites

Class			**Lec+Lab=Credits**
BIOL	2301	Human Anatomy and Physiology I *and*	3+0=3
BIOL	2101	Human Anatomy and Physiology I – Lab	0+4=1
BIOL	2302	Human Anatomy and Physiology II – *and*	3+0=3
BIOL	2102	Human Anatomy and Physiology II – Lab	0+4=1
HPRS	1204	Basic Health Professions Skills	1+4=2
HPRS	1101	Introduction to Health Professions	1+0=1
HPRS	1106	Medical Terminology	1+0=1
Total Semester hours			**9+12=12**
Fall			
RSPT	1315	Basic Respiratory Care Procedures I	2+4=3
RSPT	2201	Cardiopulmonary Assessment	1+2=2
HPRS	1205	Medical Law/Ethics for Health Prof.	2+0=2
CHEM	1305	*Introduction to Chemistry	3+0=3
CHEM	1105	*Introduction to Chemistry Lab	0+4=1
BIOL	2321	*Microbiology	
BIOL	2121	*Microbiology Lab	
ENGL	1301	Composition I	3+0=3

**Choose either Chem or Micro*

Total Semester hours			**14**
Spring			
RSPT	1316	Basic Respiratory Care Procedures II	2+4=3
HPRS	2300	Pharmacology for Health Professions	3+0=3
RSPT	1241	Respiratory Home Care/Rehabilitation	1+4=2
RSPT	1260	Clinical I	0+12=2
MATH	1314	College Algebra	3+0=3
	or	MATH 1324, 1332, 1335 or higher accepted	
Total Semester hours			**13**
Summer			
RSPT	2314	Mechanical Ventilation	2+4=3
RSPT	1161	Clinical II	0+6=1
Total Semester hours			**8**
Fall			
RSPT	2310	Cardiopulmonary Disease	3+0=3
RSPT	2353	Neonatal/Pediatric Cardiopulmonary	2+4=3
RSPT	2135	Pediatric Advanced Life Support	0+3=1
RSPT	2262	Clinical III	0+12=2
PHYS	1410	Introductory Physics	3+4=4
Total Semester hours			**14**
Spring			
RSPT	1137	Basic Dysrhythmia Interpretation	1+0=1
RSPT	2305	Pulmonary Diagnostics	2+4=3
RSPT	2139	Advanced Cardiac Life Support	0+3=1
RSPT	2363	Clinical IV	0+18=3
RSPT	2255	Critical Care Monitoring	2+0=2
PSYC	2301	Introduction to Psychology	3+0=3
		Humanities Elective	3+0=3
Total Semester hours			**16**
Total Semester Credit Hours			**72**

NURSING DEPARTMENT

Certificate of Completion – Vocational Nursing;
Associate in Applied Science Degree – Associate Degree Nursing;
Bachelor of Science Degree Completion Program for Registered Nurses;
Master of Science in Public Health Nursing

Four programs are offered by the Nursing Department, a one-year program leading to a Certificate of Completion in Vocational Nursing, a two-year program leading to an A.A.S. in Nursing, a BSN degree completion program for Registered Nurses and a Master of Science in Public Health Nursing.

Graduates are eligible to write their respective examinations for licensure as Registered Nurses (R.N.) or as Licensed Vocational Nurses (LVN).

The Vocational Nursing Program is approved by the Board of Vocational Nurse Examiners.

The Associate Degree Nursing Program has full accreditation by the Board of Nurse Examiners for the State of Texas and full accreditation by the National League for Nursing Accrediting Commission. The program is an Agency Member of the National League for Nursing Council of Associate Degree Nursing Programs.

The BSN Degree Completion Program has full accreditation by the Board of Nurse Examiners for the State of Texas and initial accreditation by the National League for Nursing Accrediting Commission.

The National League for Nursing Accrediting Commission (NLNAC) is the entity within the National League for Nursing that is responsible for the accreditation of nursing education school and programs.

National League for Nursing Accrediting Commission

61 Broadway

New York, New York 10006

Telephone (800) 669-1656 Extension 153 or (212) 363-5555 Ext. 153

Fax (212) 812-0390

Website: www.nlnac.org

Vocational Nursing

Approved by the Texas State Board of Vocational Nurse Examiners

After completing the Vocational Nursing Program, students will receive a Certificate of Proficiency and qualify to take the State Board Examination. The License in Vocational Nursing is issued by the Board of Vocational Nurse Examiners.

Students who want to enter the Vocational Nursing Program should contact the Program Director.

Admission Requirements

Students must take the following courses before entering the VN Program.

- HPRS 1101 – Introduction to Health Professions
- HPRS 1106 – Medical Terminology
- HPRS 1204 – Basic Health Professions

Students who wish to enroll in the V.N. program must submit the following to the V.N. Director:

- Completed Application for the VN Program
- Three letters of reference
- Official high school transcripts/GED score sheet and college transcripts
- Copies of TASP and NET scores
- One page narrative indicating why nursing has been chosen as a career and why the choice is to become an L.V.N. (should be handwritten by applicant)
- Chronological history of last three years (begin with this year) indicating employment, school and community activities, etc.
- Outline of any nursing or allied health volunteer work in related field indicating dates, job titles and duties.

Applicants must satisfy all pre-entrance requirements to be eligible for the program. Details about pre-entrance requirements are available from the Vocational Nursing Office in Rusteberg #167.

Students must pass every course they take in the program with at least a C, a score of 75 in the vocational nursing program.

The Vocational Nursing Department has two programs starting twice a year – one in August and one in January.

Upon acceptance into the program the applicant is responsible for obtaining CPR certification. Students must also obtain a Hepatitis B Vaccine as part of their physical examination prior to the first nursing class. Students must also carry their own health insurance.

Program Objectives

Upon completion of the program, the graduate Vocational Nurse will be able to:

– Collaborate effectively with clients, families, health care tam, and community resources to provide holistic care.

– Assist in the formulation of a systematic problem-solving approach to deliver basic nursing care to clients and implement approaches within ethical-legal limitations.

– Assist in the coordination of patient care as a member of the health care team within the organizational framework of a structured health care setting.

– Assume responsibility as a member of the nursing profession by demonstrating accountability for practice, promoting the practice of vocational nursing and participating in health promotion.

PROGRAM OF STUDY

Certificate of Proficiency – Vocational Nursing August to August Program

Prerequisite School of Health Science Core Courses

		Credit hours
HPRS 1101	Introduction to Health Professions	1
HPRS 1106	Medical Terminology	1
HPRS 1204	Basic Health Profession Skills	2
Totals		**4 hours**
Level I: Fall Semester		
VNSG 1304	Foundations of Nursing I	3
VNSG 1420	Anatomy & Physiology for Allied Health	4
VNSG 1226	Gerontology	2
VNSG 1502	Applied Nursing Skills I	5
VNSG 1227	Essentials of Medication Administration	2
VNSG 1460	Clinical I	4
Totals		**20 hours**
Level II: 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 1231	Pharmacology	2
VNSG 2461	Clinical IV	4
Totals		**20 hours**
Level III: Summer I		
VNSG 1432	Medical/Surgical Nursing II	4
VNSG 2362	Clinical V	3
Totals		**7 hours**
Level III: Summer II		
VNSG 1138	Mental Illness	1
VNSG 1219	Professional Development	2
VNSG 2363	Clinical VI	3
Totals	6 hours	
Total Number of hours Required – Vocational Nursing		**57 hours**
Total Theory Curriculum hours		**624**
Total Clinical		**864**
Total Curriculum		**1488**

Certificate of Proficiency – Vocational Nursing January to December Program

Prerequisite School of Health Science Core Courses

		Credit hours
HPRS 1101	Introduction to Health Professions	1
HPRS 1106	Medical Terminology	1
HPRS 1204	Basic Health Profession Skills	2
Totals		**4 hours**
Level I: Spring Semester		
VNSG 1304	Foundations of Nursing I	3
VNSG 1420	Anatomy & Physiology for Allied Health	4

VNSG 1226	Gerontology	2
VNSG 1502	Applied Nursing Skills I	5
VNSG 1227	Essentials of Medication Administration	2
VNSG 1460	Clinical I	4
Totals		**20 hours**
Level II: Summer I		
VNSG 1231	Pharmacology	2
VNSG 1330	Maternal-Neonatal Nursing	3
VNSG 1261	Clinical II	2
Totals		**7 hours**
Level II: Summer II		
VNSG 1429	Medical/Surgical Nursing I	4
VNSG 2461	Clinical IV	4
Totals		**8 hours**
Level III: Fall Semester		
VNSG 1334	Pediatrics	3
VNSG 1262	Clinical III	2
VNSG 1432	Medical/Surgical Nursing II	4
VNSG 2362	Clinical V	3
VNSG 1138	Mental Illness	1
VNSG 1219	Professional Development	2
VNSG 2363	Clinical VI	3
Totals		**18 hours**
Total Number of hours Required – Vocational Nursing		**57 hours**
Total Theory Curriculum hours		**624**
Total Clinical		**864**
Total Curriculum		**1488**

Associate Degree Nursing

In accordance with the statement of purpose and the philosophy of the Associate Degree Nursing program, the two-year curriculum aims to provide students with the background to be responsible beginning practitioners of nursing who can give direct nursing care to clients in a variety of health care settings. Students who want to enter the Associate Degree Nursing (A.D.N.) program should contact the Director for details at least nine months before the anticipated date of entry. In order to be accepted into the program, applicants must satisfy the specific requirements for admission. Satisfactory completion (90% or higher) of a capstone examination administered during the last semester of the program is required prior to completion of the program to be eligible for graduation from the Associate Degree Nursing Program. Upon graduation from the ADN Program, the graduate is eligible to take the National Council Licensure Examination (NCLEX-RN) to obtain licensure as a registered nurse.

The program may be completed within two years. A minimum grade of "C," which is a score of 74.5 in the A.D.N. program (as prescribed by the A.D.N. Student Guidelines), must be obtained in each course required in the degree plan for an Associate Degree in Nursing. To receive a satisfactory grade in any nursing course, students must show this ability to apply nursing theory to clinical performance.

The HESI Pre-Entrance Exam is a prerequisite to enter the ADN Program.

Upon acceptance into the program the applicant is responsible for obtaining CPR - Health Provider certification. Students must also obtain Hepatitis B Vaccine as part of their physical examination prior to the first nursing class. Students must also carry their own health insurance.

Eligibility to Take NCLEX-RN Examination

The Board of Nurse Examiners has identified certain circumstances that may render a potential candidate ineligible for licensure as a registered nurse in the State of Texas. The Board provides individuals with the opportunity to petition the Board for a Declaratory Order as to their eligibility in accordance with Article 301.257 of the Nursing Practice Act.

If you are required to answer "YES" to any of the following questions please request a Declaratory Order Petition in writing by contacting the Education/Examination Department, Board of Nurse Examiners for the State of Texas, P.O. Box 430, Austin, Texas 78767-0430. Processing your Petition may take 6 to 12 month, or longer, after you provide all required documentation and depending on you circumstance. Once all requested documents have been received, you will be notified that the Petition has been transferred to the Enforcement Department for review.

1. Have you ever been denied licensure by any licensing/certifying authority in any country, state, or province?

2. Have you ever had disciplinary action taken against you by any licensing/certifying authority in any country, state or province?

3. Have you ever been convicted of a crime other than a minor traffic violation?

4. Have you been diagnosed with or treated or hospitalized in the past five (5) years for antisocial personality disorder, or borderline personality disorder. (You may answer "no" if you have completed and/or are in compliance with TPAPN for mental illness.)

5. Have you been addicted or treated for the use of alcohol or any other drug within the past five (5) years? (You may answer "no" if you have completed and/or are in compliance with TPAPN for substance abuse.)

6. Has this Board ever issued you any order concerning your eligibility for examination or licensure or have you ever received a proposal of ineligibility?

Students that have obtained a Declaratory Order Petition must notify the Director and inform them of the outcome of their petition.

Essential Eligibility Requirements For Professional Nursing Students' Participation In Clinical Practice

The Associate Degree Nursing Applicant and/or student would be considered ineligible to participate in the Associate Degree Nursing Program when his/her physical, emotional, and/or intellectual disability and/or incapacitated state:

1. Hinders the student from being able to achieve the cognitive knowledge and/or dexterous skills required for the Associate Degree Nursing student nurse and expected of the Registered Nurse in the performance of the functions of which he/she is preparing to be employed.

2. Creates a potential health hazard to the student and/or recipient of health care services by the respective student.

It assumed that a student will independently be able to:

1. Functionally use the senses of vision, hearing, smell and touch with or without technical (mechanical) compensation. Observe a patient accurately at a distance and close at hand. Observation necessitates the functional use of the sense of vision and somatic sensation. It is enhanced by the functional use of the sense of smell.

2. Execute functional psychomotor activities to provide general nursing

care and emergency treatment. Such actions require coordination of both gross and fine muscular movements, equilibrium and functional use of the senses of touch and vision.

3. Hear, observe and speak to patients in order to elicit information, describe changes in mood, activity and posture, and perceive non-verbal communications. A student must be able to communicate with patients and others effectively and with sensitivity. Communication includes not only speech but also reading and writing.

4. Utilize intellectual abilities, exercise responsible judgment and complete task. Comprehend three-dimensional relationships and understand the spatial relationships of structures.

5. Demonstrate the emotional health required for full utilization of intellectual abilities and exercise of good judgment. The student must be able to promptly complete all responsibilities attendant to the care of the patients, families, and groups from a variety of social, emotion, cultural, and intellectual backgrounds and develop mature, sensitive and effective relationships with them. A student must be able to tolerate physically taxing workloads and function effectively under stress. The student must be able to adapt to changing environments, display flexibility and learn to function in the face of uncertainties inherent in the clinical problems of many patients. Compassion, integrity, concern, other interpersonal skills, interest and motivation are all personal qualities that will be assessed during admission and the educational process. A student who cannot function in any of the abilities mentioned above may receive individual consideration for admission or retention. For consideration, request must be submitted to the Director.

ADA Guidelines apply to all qualified disabled persons. A qualified disabled person is a person with a disability who, with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential eligibility requirements for the receipt of services, or the participation in programs or activities provide by a public entity and who can perform the "essential eligibility requirements" of the position. Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the Director as soon as possible to make necessary accommodations. Students should be prepared to present a disability verification form from their physician and update that information periodically.

Health Requirements

A current health assessment, physical examine, and up-to-date immunization record are required prior to entering the program. Immunizations include Measles/Mumps/Rubella (MMR – or confirmation of Immunity/protective titer), Tetanus/Diphtheria (TD – Immunization received within the last 10 years), Tuberculin Test (PPD – administered and read within the last 12 month) and Hepatitis B Series (or confirmation of Immunity/protective titer).

Prior to starting the program, the student must provide documentation of current C.P.R.-Health Provider level.

Students are required to carry health and professional liability insurance. Students needing health insurance may obtain information in the Student Health Services Office. Professional liability insurance coverage in at least a minimum amount of $1 million limit each claim and $3 million aggregate is required. Cost for the professional liability insurance in included in the fees paid during each fall semester. The professional liability insurance is only applicable to students in their student role, not in their employment role.

Associate Degree Nursing Program

Educational Objective

Upon completion of the program the graduate will:

Provider of Care:

1. Analyze scientific principles from the biological, psychological, and social sciences and caring concepts to provide personalized care to individuals or a group of clients and their families in meeting their basic human needs.
2. Analyze how basic human needs of individuals or a group of clients and their families throughout the life span are affected by alterations in homeostasis.
3. Develop a long-term plan of care for individuals or a group of clients and their families to assist them in meeting their needs for the promotion, maintenance and/or restoration of health along the wellness-illness continuum throughout the life span.
4. Organize the care of an individual or a group of clients and their families using information from current literature, critical thinking and the nursing process.
5. Use legal standards and ethical principles in caring for individuals or a group of clients and their families.
6. Implement nursing strategies specific to meeting the needs of culturally diverse clients and their families in a variety of health car settings.
7. Demonstrate competence in the performance of the functions and roles of the nurse in providing care for individuals or a group of clients and their families.
8. Evaluate the response to therapeutic interventions of an individual or a group of clients and their families throughout the life span.
9. Evaluate the effectiveness of therapeutic communication techniques used with individuals or a group of clients and their families.
10. Evaluate the effectiveness of health teaching of individuals or a group of clients and their families with complex health care needs to promote an optimal level of wellness.
11. Employ management concepts in delegating and supervising other nursing team members in the provision of care to an individual or a group of clients and their families.

Coordinator of Care:

1. Organize the collaboration with other health care team members in the provision of quality health care.
2. Develop a plan of care that includes referrals to appropriate institutional and/or community resources to meet the health needs of individuals or a group of clients and their families.
3. Evaluate and revise the management of human material and technical resources in the provision of quality health care for an individual or a group of clients and their families.
4. Evaluate the effectiveness of principles of leadership and management used within the organizational framework of a variety of health care settings.
5. Evaluate the effectiveness of communication in collaborating with other member of the health care team to coordinate care of an individual or a group of clients and their families.
6. Evaluate, in collaboration with other members of the health care team,

the effectiveness of teaching plans for an individual or a group of clients and their families.

Member of a Profession

1. Evaluate the effectiveness and revise the activities related to client advocacy used in the provision of quality health care for a group of clients and their families.
2. Evaluate own professional accountability during the transition process from student to graduate nurse.
3. Design a plan for continuing educational activities and contributions to the advancement of nursing practice after graduation.
4. Develop a continuing education plan for maintaining personal professional competency.
5. Maintain professional standards of practice by reporting any practice of nursing that violates the Nursing Practice Act and /or jeopardizes client safety.

Enclosed you will find other information for this program. The admission criteria listed in the brochure must be completed and received by May 15 of the year in which you desire to be considered for admission. Admission into the Associate Degree Nursing Program is the sole responsibility of the Department of Nursing through the selection and concurrence of its Admission Committee. Applications will be accepted after January 1 of the admission year and will continue to be accepted until the class is filled. It is the responsibility of the applicant to assure that the ADN Program has received ALL required and relevant information prior to student selection activities.

The Admissions Committee will send letters of notification following review of applications. The letter of notification will describe the applicant as: 1) offered admission, 2) denied admission (reason stated), or 3) assigned as an alternate (to be among those considered in the event openings develop in the entering class). In the event an applicant is not admitted, the applicant may visit with the Director of the program to determine how to improve their application status for admission into a future class.

Admission Requirements

Students who want to enroll in the A.D.N. program must submit the following to the A.D.N. Director:

1. Application to the Nursing Department
2. High school transcript or G.E.D. score.
3. ACT test scores – a score of 18 on the Composite, Reading and English sections is required or 30 hours of college credit -

that includes: Anatomy & Physiology I and II, Microbiology and lab, Composition I and College Math

plus: a college GPA of 2.5

4. All college transcripts.
5. Three letters of recommendation.
6. A college grade point average of 2.5 or high school average of 85 is required.

In order to be more competitive in the application process, you may find it helpful to have completed Math, English, Anatomy and Physiology I and II, and Microbiology and lab prior to application. Preference will be given to those applicants who have completed these courses, and who have 30 credit hours in college, and who have a 2.5 GPA.

PROGRAM OF STUDY

Associate in Applied Science (A.A.S.) –A ssociate Degree Nursing

			Credit hours
Nursing			40
General Education			30
Total number of hours required			70
Freshman Year			
First Summer Term			
BIOL	2301	Anatomy and Physiology I	3
BIOL	2101	Anatomy and Physiology Lab I	1
MATH	1314	College Algebra, or	3
MATH	1332	Math for Liberal Arts	
Total			**7**
Second Summer Term			
BIOL	2302	Anatomy and Physiology II	3
BIOL	2102	Anatomy and Physiology Lab II	1
PSYC	2301	Introduction to Psychology	3
Total			**7**
Fall Semester			
RNSG	1108	Dosage Calculation 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 Practices	2
Total:			**11**
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 of Decision Making	2
RNSG	2260	Clinical: Nursing RN: Principles and Concepts of Decision Making	2
PSYC	2314	Human Growth and Development	3
Total			**14**
Sophomore Year			
Summer Sessions			**Credit hours**
BIOL	2321	Microbiology	3
BIOL	2121	Microbiology Lab	1
RNSG	2213	Mental Health-Nursing	2
RNSG	2163	Clinical: Nursing RN: Mental Health Nursing	1
Total			**7**
Fall Semester			
SPCH	1318	Interpersonal Communications	3
ENGL	1301	Composition I	3
RNSG	2161	Clinical: Nursing RN: Care of the Childbearing Family	1
PRNR	2201	Care of Children and Families	2
RNSG	2162	Clinical: Nursing RN: Care of Children and Families	1
Total			**12**
Spring Semester			
RNSG	2404	Care of Client with Complex Health Care Needs	4
RNSG	2360	Clinical: Nursing RN: Care of the Client	

		with Complex Health Care Needs	3
RNSG	2131	Management of Client Care	1
RNSG	2166	Practicum	1
Humanities Elective (Art, Music, Philosophy)			3
Total			**12**

**All science courses more than 10 years old at time of acceptance into the program must be repeated*

Advanced Placement Track

This track offers Licensed Vocational Nurses advanced placement into the Associate Degree Nursing Program.

Admission Criteria

Licensed vocational nurses seeking advanced placement in the A.D.N. program must submit the following to the A.D.N. Director:

1. Application to the Nursing Department
2. High school transcript or G.E.D. score
3. A.C.T. test scores – a score of 18 on the Composite, Reading and English sections of the A.C.T. is required

   or 30 hours of college credit -

   that includes: Anatomy & Physiology I and II, Microbiology and lab, Composition I and College Math

   plus: a college GPA of 2.5
4. All college transcripts
5. Three letters of recommendation
6. Copy of LVN License

Complete application packets must be received before May 15 of each year to be considered by the Admissions Committee for the next class. A college G.P.A. of 2.5 or high school average of 85 is required.

Prerequisites:

- Applicants must pass BIOL 2301, 2101, 2302, 2102, 2321, 2121 and PSYC 2314, 2301, and MATH 1313 or 1332, and ENGL 1301. These courses should be taken before the transition course. SPCH 1318 should be taken concurrently with RNSG 2307.

LVN Students who are accepted into the program must validate their knowledge of medication math in the course RNSG 2307: Transition To Associate Degree Nursing offered during the fall semester. Students who do not pass the transition course or withdraw while failing may not repeat the course but will be eligible to apply to the basic program.

Progression

1. After successfully completing the transition course, students receive 22 semester hours credit. The transition course and associated clinical courses carry the value of six semester hours.
2. Students will articulate with the A.D.N. basic program students to begin Level III nursing courses in the spring.
3. The same progression policies for the generic A.D.N. student will apply to students receiving advanced placement.
4. Students must take and pass Level II HESI exam(s) during RNSG 2307 and make 85% or above. Remediation is mandatory if score is below 85%.

PROGRAM OF STUDY

Associate in Applied Science– LVN Advanced Placement Track (Leading to Associate Degree Nursing)

Science courses more than 10 years old at time of acceptance into the program must be repeated.

LVN-RN Advanced Placement Admission Prerequisites			
BIOL	2301	Anatomy and Physiology I	3
BIOL	2101	Anatomy and Physiology Lab I	1
MATH	1332	Math for Liberal Arts	3
BIOL	2302	Anatomy and Physiology II	3
BIOL	2102	Anatomy and Physiology Lab II	1
PSYC	2301	Introduction to Psychology	3
BIOL	2321	Microbiology	3
BIOL	2121	Microbiology Lab	1
ENGL	1301	Composition I	3
PSYC	2314	Human Growth and Development	3
Fall Semester			**Credit hours**
RNSG	1210	Community-Based Nursing	3
RNSG	2307	Transition to Associate Degree Nursing	3
RNSG	2361	Clinical: Nursing RN: Transition to Associate Degree Nursing	3
SPCH	1318	Interpersonal Communications	3
Spring Semester			**Credit hours**
RNSG	2414	Care of the Client with Complex Health Care Needs	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
Humanities Elective (Art, Music, Philosophy, Foreign Language, English-2000 Level or above.)			3
Total			**12**
Total number of hours required			**49 hours**

Science courses more than 10 years old at time of acceptance into the program must be repeated.

**Upon satisfactory completion of RNSG 2307 and RNSG 2461, the LVN Transition student will receive 22 semester credit hours for all the First and Second Level Nursing Courses.*

Credit Hour Summary

Nursing	18
General Education	30
Total	**48**

Bachelor's Degree Completion Program For Registered Nurses

Bachelor of Science in Nursing

The Bachelor of Science in Nursing Degree Completion Program for Registered Nurses curriculum is designed to utilize and build upon previous education, nursing and life experiences, abilities and special interests of the registered nurse student. The purpose of the program is to enhance the development of self-directed and innovative RN students and help build in them the courage, desire, and dedication to use knowledge for their own well-being and for the general welfare of society. The program will

also prepare graduates for entry into graduate nursing education.

The program offers full-time status that is to be completed in 1 1/2 years and part-time status that is to be completed in 2 1/2 years. The first four nursing courses are offered by written and clinical examination only. The courses are tested by the National League for Nursing Mobility Profile II Examinations. Graduates from a National League for Nursing accredited diploma or associate degree program who meet the criteria of the Texas Nursing Articulation Model will receive 23 semester credit hours Advanced Placement upon successful completion of eight hours of nursing credits.

The BSN Degree Completion Program has full accreditation by the Board of Nurse Examiners for the State of Texas and initial accreditation by the National League for Nursing Accrediting Commission. The BSN Degree Completion Program is a member of the National League for Nursing Council of Baccalaureate and Higher Degree Programs in Nursing. The National League for Nursing Accrediting Commission is the entity within the National League for Nursing that is responsible for the accrediting of nursing education schools and programs.

National League for Nursing Accrediting Commission

61 Broadway

New York, NY 10006

(800) 669-1656 Ext. 153

Educational Objectives

By the end of the program, the RN student will have been given the opportunity to:

- synthesize knowledge from the physical and behavioral sciences, as well as the humanities and fine arts, to be utilized as a source for making professional nursing practice decisions;
- utilize the research process as a basis for improving the quality of care related to beliefs, customs and health practices of various cultural groups
- promote and maintain optimum health of clients, their families, aggregates, communities and society;
- utilize the nursing process in a collaborative manner to perform therapeutic nursing interventions with clients, their families, aggregates, communities, and society in any multicultural setting within and outside the health care delivery system;
- utilize leadership and management principles in assessing, planning, providing, directing, controlling, and evaluating health care implemented by self and others;
- communicate effectively with emphasis on health promotion and teaching in the following areas: written, oral and non-verbal communication, group process and information technology;
- function effectively through self-motivation, self-direction, and self-evaluation as lifelong learners who reflect critical thinking skills;
- practice professional nursing within a framework of safe, ethical, legal, and professional nursing standards;
- accept a personal philosophy of professional nursing that incorporates professional responsibility and accountability to, and advocacy for, the consumer of nursing care.
- provide culturally competent care to individuals, families, aggregates, community and society.

Prerequisites

Students who wish to enroll in the BSN Degree Completion program must have completed the majority of the University's Core and Degree Base requirements with a grade of "C" or higher in each course. A 2.5 GPA in pre-nursing courses and 2.0 GPA in all university courses are required. The following are required:

Course	**Semester Credit hours**
Freshman English (Composition and Rhetoric)	6
Sophomore Literature	3
Modern Language (same, other than English)	6
Speech	3
College Algebra	3
Anatomy and Physiology I + II	8
American History	6
American and Texas Government	6
Kinesiology	1
Computer Literacy	3
Sociology (Any 3 hours)	3
Psychology (Any 3 hours)	3
Microbiology	4
Music/Art Appreciation, Art History, or Music Literature	3
Art, Music, or Philosophy	3
Statistics (Any 3 hours – see advisor)	3
Total	**64**

Admission Requirements

Students who want to enroll in the BSN Degree Completion program must submit the following to the Program Director:

1. Admission to UTB/TSC
2. Application for admission to B.S.N. Degree Completion Program
3. Official transcripts must be mailed directly from all colleges and/or universities to the Office of the Registrar for evaluation (with an unofficial copy sent to the B.S.N. Program Director)
4. Current Texas Registered Nurse License
5. Current CPR Certification
6. Current immunizations

Students who meet the above criteria will be reviewed by the BSN Degree Completion Program Admission Committee for admission. While enrolled in the program, the student is required to maintain profession liability insurance through UTB/TSC (fee is included as part of course tuition).

Academic Progression

- Successful completion of nursing courses in appropriate sequence.
- Maintain a minimum grade of "C" in all nursing courses.
- Maintain a minimum grade of "C" in all non-nursing courses.
- Satisfactorily complete all class and clinical objectives.
- Maintain professional liability insurance ($1 million and $3 million aggregate).
- Provide annual documentation of required immunizations.
- Provide annual documentation of current CPR certification.
- Provide proof of current Texas registered nurse license. Students will not be permitted to continue in clinical courses if a license to practice registered nursing has expired or been suspended, canceled or revoked.
- Provide documentation of completion of general educational courses.

- Provide annual documentation verifying absence of active pulmonary disease.

Approximate Cost for Tuition and Books Per Semester

- Full-time $1,200.00
- Part-time $800.00

Advanced Placement Criteria

- Graduates from a National League for Nursing accredited diploma or associate degree program who meet the criteria of the Texas Nursing Articulation Model will receive 23 semester credit hours Advanced Placement upon successful completion of eight hours of nursing credits.
- Graduates from an NLN Accredited Program more than two years after graduation will not be required to take the four credit-by-examinations if they provide evidence of nursing practice experience of six months full-time or one year part-time; or provide evidence of a refresher course or equivalent.
- Graduates from a non-NLN accredited diploma or associate degree program will be tested by the National League for Nursing Mobility II Examinations. Twenty-three semester credit hours Advanced Placement will be received.

Additional Information

Nursing courses are offered only in the semester sequence as outlined in the required curriculum. Enrollment in the professional nursing program is limited by the availability of resources. In the event that the number of applicants meeting the minimum requirements exceeds the enrollment limitation, the selection of the students to be admitted will be based on an individual evaluation. Transfer courses will be considered on an individual basis. The Board of Nurse Examiners approved the Distance Education Initiative in July 1999.

PROGRAM OF STUDY

Bachelor of Science in Nursing (B.S.N.) Degree Completion Program for Registered Nurses

Credit hours	
General Education Courses	Total 48 hours
Communications	
Composition I	3
Composition II	3
Speech	3
Mathematics	
College Algebra	3
Natural Science	
Anatomy and Physiology I	3
Anatomy and Physiology Lab I	1
Anatomy and Physiology II	3
Anatomy and Physiology Lab II	1
Humanities	
Sophomore Literature	3
Music/Art Appreciation, Art	
History, or Music Literature	3
American History	
United States to 1877	3
United States since 1877	3
Government	
Government I	3
Government II	3
Social/Behavioral Science	
PSYC 2301 or SOCI 1301	3
Kinesiology	
Activity or Wellness Class	1
Modern Language	
Modern Language I	3
Modern Language II	3
Degree Base for BSN	Total 13 hours
Social/Behavioral Sciences	
PSYC 2301 or SOCI 1301	3
Humanities	
Art, Music, or Philosophy	3
Computer Literacy	
COSC 1310	3
Microbiology	
Microbiology	3
Microbiology Lab	1
Statistics	3
Nursing Core Requirements	
(Credit By Exam/Escrow)	Total 23 hours
NURS 3701	7
NURS 3702	7
NURS 3303	3
NURS 3604	6
Nursing Class Base Core Courses	Total 36 hours
NURS 3405	4
NURS 3606	6
NURS 3407	4
NURS 4408	4
NURS 4309	3
NURS 4610	6
NURS 4311	3
NURS 4612	6
Nursing Electives: Total 6 hours	
NURS _____	3
NURS _____	3
Total number of hours required	**129 hours**

Full-Time Student

Fall Semester		Credit hours	
NURS	3701*	Nursing of the Client with Alterations in Homeostasis (by exam) (by escrow)	7
NURS	3702*	Nursing of the Childbearing and Childrearing Families (by exam) (by escrow)	7
NURS	3303*	Nursing of the Family in Psychosocial Crisis (by exam) (by escrow)	3
NURS	3604*	Clinical Nursing Skills in Nursing Practice (by exam) (by escrow)	6
Total			**23**
Spring Semester			**Credit hours**
NURS	3405	Health Assessment in Professional Nursing	4
NURS	3606	Health Promotion in Professional Nursing	6
NURS	3407	Cultural Diversity in the Workplace of the Health Professional	4
Total			**14**
First Summer Session			**Credit hours**
NURS		Nursing Elective	3

Total			**3**
Second Summer Session			**Credit hours**
No classes scheduled			
Fall Semester			**Credit hours**
NURS	4408	Family Centered Nursing	4
NURS	4309	Research in Professional Nursing	3
NURS	4610	Professional Nursing in the Community	6
Total			**13**
Spring Semester			**Credit hours**
Nursing		Elective	3
NURS	4311	Contemporary Issues in Professional Nursing	3
NURS	4612	Leadership in Professional Nursing	6
Total			**12**

Credit by Examination/Credit by Escrow

Part-Time Student

Fall Semester			**Credit hours**
NURS	3701*	Nursing of the Client with Alterations in Homeostasis (by exam) (by escrow)	7
NURS	3702*	Nursing of the Childbearing and Childrearing Families (by exam) (by escrow)	7
NURS	3303*	Nursing of the Family in Psychosocial Crisis (by exam) (by escrow)	3
NURS	3604*	Clinical Skills in Nursing Practice (by exam) (by escrow)	6
Total			**23**
Spring Semester			**Credit hours**
NURS	3405	Health Assessment in Professional Nursing	4
NURS	3407	Cultural Diversity in the Workplace for the Health Professional	4
Total			**8**
First Summer Session			**Credit hours**
NURS		Nursing Elective	3
Total			**3**
Second Summer Session			**Credit hours**
No classes scheduled			
Fall Semester			**Credit hours**
NURS	3606	Health Promotion in Professional Nursing	6
Total			**6**
Spring Semester			**Credit hours**
NURS	4408	Family Centered Nursing	4
NURS	4309	Research in Professional Nursing	3
Total			**7**
First Summer Session			**Credit hours**
NURS		Nursing Elective	3
Total			**3**
Second Summer Session			**Credit hours**
No classes scheduled			
Fall Semester			**Credit hours**
NURS	4610	Professional Nursing in the Community	6
Total			**6**
Spring Semester			**Credit hours**
NURS	4311	Contemporary Issues in Professional Nursing	3
NURS	4612	Leadership in Professional Nursing	6
Total			**9**

Credit by Examination/Credit by Escrow

Credit Hour Summary

Course	Credit hours
General Ed. Core Curriculum and Degree Base	64 hours
Nursing Validation Base	23 hours
Nursing Class Base Courses	36 hours
Nursing Electives	6 hours
Total	**129 hours**

Course prefixes, course numbers, and course titles that appear in italics are vocational-technical courses that can be used for appropriate certificate and associate degrees, andcan be used for the following bachelor degrees: (1) Bachelor of Applied Arts and Sciences (B.A.A.S.); and (2) Bachelor of Applied Technology (B.A.T.). These vocational-technical courses (indicated by italics) cannot be used for the following bachelor degrees: (1) Bachelor of Arts (B.A.); (2) Bachelor of Business Administration (B.B.A.); (3) Bachelor of Fine Arts (B.F.A.); (4) Bachelor of Science (B.S.); (5) Bachelor of Science in Criminal Justice (B.S.C.J.); and (6) Bachelor of Science in Nursing (B.S.N.).

Course prefixes, course numbers, and course titles that appear with an asterisk and in italics are vocational-technical courses that can be used for certificates and associate and bachelor degrees in Engineering Technology. These courses (indicated by an asterisk and italics) can also be used for the following bachelor degrees: (1) Bachelor of Applied Arts and Sciences (B.A.A.S.); and (2) Bachelor of Applied Technology (B.A.T.). These vocational-technical courses (indicated by italics) cannot be used for the following bachelor degrees: (1) Bachelor of Arts (B.A.); (2) Bachelor of Business Administration (B.B.A.); (3) Bachelor of Fine Arts (B.F.A.); (4) Bachelor of Science (B.S.); (5) Bachelor of Science in Criminal Justice (B.S.C.J.); and (6) Bachelor of Science in Nursing (B.S.N.).

Accounting (ACCT)

ACCT 2401 Principles of Accounting I
Financial accounting as it applies to sole proprietorships, partnerships, and corporations. Financial accounting systems and accounting for equity rights. Prerequisite: ACNT 1403 or prior bookkeeping/accounting courses recommended and sophomore standing. Lec 4, Cr 4

ACCT 2402 Principles of Accounting II
Fundamentals of the managerial accounting system, budgeting, financial analysis, quantitative technique, and accounting for departments and branches, price level changes and income tax as they affect decision-making. Prerequisite: ACCT 2401 with grade of "C" or better. Lec 4, Cr 4

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. Prerequisite: Admission to Upper Division, ACCT 2402 with grade of "C" or better. Lec 3, Cr 3

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 changes in financial position. Prerequisite: Admission to Upper Division, ACCT 3321 with grade of "C" or better. Lec 3, Cr 3

ACCT 3323 Income Tax Procedure
Analysis of federal tax laws, with emphasis on determining net taxable income and preparing income tax returns for individuals. Prerequisite: Admission to Upper Division, ACCT 2401 with grade of "C" or better. Lec 3, Cr 3

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. Prerequisite: Admission to Upper Division, ACCT 2402 with grade of "C" or better. Lec 3, Cr 3

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. Prerequisite: Admission to Upper Division, ACCT 2401 with grade of "C" or better. Lec 3, Cr 3

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. Prerequisite: Admission to Upper Division, ACCT 2402 with grade of "C" or better. Lec 3, Cr 3

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. Prerequisite: Admission to Upper Division, ACCT 3322 with grade of "C" or better. Lec 3, Cr 3

ACCT 4321 Advanced Accounting II
Theory and techniques of consolidated financial statements. Accounting for partnerships and branches and branch operations. Prerequisite: Admission to Upper Division, ACCT 3322 with grade of "C" or better. Lec 3, Cr 3

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. Prerequisites: Admission to Upper Division, ACCT 3322 with grade of "C" or better; credit for ACCT 4324 or concurrent enrollment with the permission of the instructor. Lec 3, Cr 3

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. Prerequisite: Admission to Upper Division, ACCT 3322 with grade of "C" or better. Lec 3, Cr 3

ACCT 4327 Advanced Managerial Accounting
Advanced managerial concepts, emphasis on developing critical thinking skills, and planning for the corporate finance function. Specific topics may include financial modeling, allocations, decision-making, customer profitability analysis, and performance measurement. Prerequisite: Admission to Upper Division, ACCT 3324 with grade of "C" or better. Lec 3, Cr 3

ACCT 4328 Seminar in Auditing
Examination of auditing philosophy and contemporary auditing issues. Study of auditing research including the behavioral aspects of auditing. Prerequisite: Admission to Upper Division, ACCT 4324 with grade of "C" or better. Lec 3, Cr 3

ACCT 4329 Advanced Income Tax Procedure
Analysis of tax laws applicable to partnerships and corporations. Federal gift, estate and inheritance taxes may also be covered. Prerequisite: Admission to Upper Division, ACCT 3323 with grade of "C" or better. Lec 3, Cr 3

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, interim reports, reports to the S.E.C., proper notes to financial statements, written communication with other professional accountants, and special reports. Prerequisite: Admission to Upper Division, ACCT 4324 with grade of "C" or better or concurrent enrollment. Lec 3, Cr 3

Graduate Courses:

ACCT 5323 Contemporary Accounting Theory

ACCT 5329 Advanced Income Tax Procedures

ACCT 6301 Accounting for Managers

ACCT 6321 Strategic Cost Management

ACCT 6323 Accounting Seminar

ACCT 6330 Seminar in Auditing

Air Conditioning and Refrigeration (HART, MAIR)

HART 1369 Practicum – Heating, Air Conditioning and Refrigeration

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 and learning outcomes vary. Lab 25, Cr 3

HART 1501 Electricity Principles

Principles of electricity as required by HVAC technicians including proper use of test equipment, A/C and D/C circuits, and components theory and operation. Lec 3, Lab 6, Cr 5

HART 1507 Refrigeration Principles

An introduction to the refrigeration cycle, basic thermodynamics, heat transfer, temperature/pressure relationship, safety, refrigeration containment, and refrigeration components. Lec 3, Lab 6, Cr 5

HART 1541 Residential Air Conditioning

Components, applications, and installation of mechanical air conditioning systems including operating conditions, troubleshooting, repair, and charging of air conditioning systems. Lec 3, Lab 6, Cr 5

HART 1545 Gas & Electric Heating

A study of the procedures and principles used in installing and servicing heating systems including gas fired and electric furnaces. Lec 3, Lab 6, Cr 5

HART 2536 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. Lec 3, Lab 6, Cr 5

HART 2538 Air Conditioning Installation/Service

A study of air conditioning system installation, refrigerant piping, condensate disposal, and air cleaning equipment with emphasis on service, troubleshooting, performance testing, and repair techniques. Lec 3, Lab 6, Cr 5

MAIR 1445 Dryers, Washers, and Dishwashers

Theory, sequence of operation, components and repair, electrical schematics, and troubleshooting electronic components in dryers, washers, and dishwashers. Emphasis on safety for the electrical and mechanical systems. Lec 2, Lab 6, Cr 4

MAIR 1449 Refrigerators, Freezers, Window Air Conditioners

Theory, sequence of operation, components and repair, electrical schematics, and troubleshooting electronic components in air conditioning and refrigeration. Emphasis on safety for the electrical, mechanical, and sealed systems. Lec 2, Lab 6, Cr 4

Anthropology (ANTH)

ANTH 2301 Physical Anthropology

Human evolution, race, heredity, the organic basis of culture history through the 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-Colombian societies of Meso-America. Lec 3, Cr 3

Art (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

A survey of painting, sculpture, architecture, and the minor arts from prehistoric times to the 14th century. Prerequisite: READ 0301. Lec 3, Cr 3

ARTS 1304 Art History Survey II

A survey of painting, sculpture, architecture, and the minor arts from the 14th century to the present. Prerequisite: READ 0301 or appropriate assessment. Lec 3, Cr 3

ARTS 1311 Two-Dimensional Design

Principles of design and development of design structures 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

Continuation of Drawing I with emphasis on forms of expression and stress on the human figure. Prerequisite: ARTS 1316. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2313 Computer Imaging I

An introduction to computer imaging and graphics with an emphasis on architectural and artistic mediums. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2316 Painting I

Exploration of ideas using painting media and techniques. Prerequisite: ARTS 1316. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2317 Painting II

Continuation of Painting I with emphasis on special problems determined by the student in cooperation with the instructor. Prerequisite: ARTS 2316. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2326 Sculpture I
This course investigates the use of materials such as clay, stone, wood and plaster to create three dimensional sculptures. Prerequisite: ARTS 1312. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2327 Sculpture II
A continuation of Sculpture I, but with a greater emphasis on aiding the student in solving individual problems. Prerequisite: ARTS 1312. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2333 Printmaking I
Critical evaluation of graphic media as well as creating works in serigraphy and other print media. Prerequisite: ARTS 1311. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2334 Printmaking II
A continuation of Printmaking I. Prerequisite: ARTS 2333. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2346 Ceramics I
This course investigates the basic ceramic processes of handbuilding, throwing, glazing, and the firing of clay. Prerequisite: ARTS 1312. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2347 Ceramics II
Continuation of Ceramics I with emphasis on glaze formulation. Prerequisite: ARTS 1312. Lec 2, Lab 4, Ind 3, Cr 3

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. Prerequisite: ARTS 1311. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 2357 Photography II
Continuation of ARTS 2356. Prerequisite: ARTS 2356. Lec 2, Lab 4, Ind 3, Cr 3

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. Prerequisite: ARTS 1303 and ARTS 1304. Lec 3, Cr 3

ARTS 3314 Individual Problems
This course will allow the student to work on advanced individual projects to be completed under faculty supervision on a one-to-one basis. This course may be repeated for a total of 12 HOURS credit. Lab 6, Cr 3

ARTS 3321 Advanced Painting
Advanced studio problems in painting. This course may be repeated four times for a total of 12 hours credit. Prerequisite: ARTS 2316. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 3323 Advanced Drawing
Advanced studio problems in drawing. This course may be repeated four times for a total of 12 hours credit. Prerequisite: ARTS 2233. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 3326 Advanced Sculpture
This course is a continuation of Sculpture II but with an even greater emphasis on aiding the student in solving individual sculpture problems. This course may be repeated four times for a total of 12 hours credit. Prerequisite: ARTS 1312. Lec 2, Lab 4, Cr 3

ARTS 3352 Contemporary Art
Art history from the 19th Century in Europe and America to the present. Development and growth of today's arts and aesthetics. Prerequisite: ARTS 1303 and ARTS 1304. Lec 3, Cr 3

ARTS 3371 Advanced Ceramics
This course investigates the advanced studio problems in the ceramics process. This course may be repeated four times for a total of 12 hours credit. Prerequisite: ARTS 2346. Lec 2, Lab 4, Cr 3

ARTS 3381 Perception and Expression in Art I
Strengthens visual perception and divergent thinking on studio activities for prospective teachers of elementary art. Emphasizes further studies of development in depth, and curriculum development for teachers of upper elementary and middle school art. Prerequisite: Permission of instructor. Lec 3, Cr 3

ARTS 3382 Nineteenth-Century European Art History (1789-1900)
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. Prerequisite: ARTS 1302 and ARTS 1304. Lec 3, Cr 3

ARTS 3383 Art in the Secondary School
Survey of visual education at the secondary level. Required for teaching art in the junior and senior high school. Lec 3, Cr 3

ARTS 3384 Perceptions and Expression in Art II
A continuation of Perceptions and Expressions in Art I, but with a greater emphasis on studio activities for teachers of elementary and middle school art. Prerequisite: ARTS 3381 or permission of instructor. Lec 3, Cr 3

ARTS 4301 Senior Experience in Art
This course provides a capstone experience for the art major. It is designed to make connections of the various elements of the art degree. This course also serves as a review for the ExCET exam. Prerequisite: Advanced standing in art. It is intended to be one of the very last classes that an art major would study. Lec 3, Cr 3

ARTS 4331 Advanced Computer Imaging
This course studies advanced techniques of using the computer as an artistic and graphic medium. This course may be repeated four times for a total of 12 hours credit. Prerequisite: ARTS 2313. Lec 2, Lab 4, Ind 3, Cr 3

ARTS 4337 Internship in Art Studio
Opportunities in applied learning related to visual art through local business, government, industry, or institutional organizations, working under faculty direction with periodic and final written reports and supporting portfolio. This course may be repeated four times for a total of 12 hours credit. Prerequisite: Junior standing. Lec 2, Lab 4, Cr 3

ARTS 4353 American Art
History of visual arts in the United States from the 17th century to the present, including the art of the Native Americans. Prerequisite: ARTS 1303 and ARTS 1304. Lec 3, Cr 3

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. Prerequisite: ARTS 1303 and ARTS 1304. Lec 3, Cr 3

ARTS 4387 Far Eastern Art History
This course explores the art and architecture of India, Japan, and China from 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. Prerequisite: ARTS 1303 and ARTS 1304. Lec 3, Lec 3

ARTS 4391 Studio Art General
Advanced problems in art of the students' choice and/or internship with an art professional in the field of interest. This course may be repeated four times for a total of 12 hours credit. Prerequisite: Upper division standing. Lec 2, Lab 4, Ind 3, Cr 3

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. Prerequisite: Permission of Department Chair. Lec 2, Lab 4, Cr 4

Associate Degree Nursing (TNSG)

See TNSG Associate Degree Nursing

Auto Body and Repair (ABDR)

ABDR 1411 Vehicle Measurement & 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, had tools, power tools, current refinishing products, shop safety, and equipment used in the automotive refinishing industry. Painting of trim and replacements 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 matte, 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 & 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 used 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

Automotive Mechanics (AUMT)

AUMT 1201 Introduction and Theory of Automotive Technology
An introduction to the automobile industry including automotive history, safety practices, shop equipment and tools, vehicle subsystems, service publications, fasteners, professional responsibilities, and automobile maintenance. Lec 1, Lab 3, Cr 2

AUMT 1410 Brakes
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 manufacturer specific. Lec 2, Lab 4, Cr 4

AUMT 1416 Suspension and Steering
Theory and operation of automotive suspension and steering systems including tire and wheel problem diagnosis, component repair, and alignment procedures. May be taught manufacturer specific. Lec 2, Lab 4, Cr 4

AUMT 1419 Automotive Engine Repair
Fundamentals of 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. Lec 3, Lab 4, Cr 4

AUMT 1445 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. Lec 2, Lab 6, Cr 4

AUMT 1407 Automotive Electrical Systems
An overview of automotive electrical systems including topics in operational theory, testing, diagnosis, and repair of batteries, charging and starting systems, and electrical accessories. Emphasis on electrical schematic diagrams and service manuals. May be taught manufacturer specific. Lec 3, Lab 4, Cr 4

AUMT 2305 Theory of Automotive Engines
Fundamentals of engine operation and diagnosis including lubrication and cooling systems. Emphasis on identification of components, measurements, inspections, and repair methods. Lec 2, Lab 2, Cr 3

AUMT 2417 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 manufacturer specific. Lec 2, Lab 6, Cr 4

AUMT 2434 Engine Performance Analysis II
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 manufacture specific. Lec 3, Lab 4, Cr 4

AUMT 2209 Manual Train and Axle Theory
A study of automotive clutches, clutch operation devices, standard transmissions/transaxle and drive line components. Lec 1, Lab 3, Cr 2

AUMT 2425 Automatic Transmission and Transaxle
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 specific tools and proper repair techniques. May be taught manufacturer specific. Lec 2, Lab 6, Cr 4

Bachelor of Science in Nursing (NURS)

See NURS Bachelor of Science in Nursing

Bilingual Education (BILC)

Note for Undergraduate Bilingual Courses: To be eligible to take any 3000 or higher level Bilingual course, students must be admitted into the Teacher Education Program.

BILC 3305 Foundations of Multicultural Education
Formerly EDCI 3305. An examination of the social and cultural forces that influence education in multi-cultural settings. Emphasis will be given to the pluralistic nature of American society, its culturally diverse student populations, and its educational institutions. Lec 3, Cr 3

BILC 3310 Foundations of Bilingual Education
Formerly EDCI 3322. The study of cultural, psychological, socio-economic, linguistic, cognitive and curriculum factors affecting the academic achievement of bilingual students is covered. Includes the philosophical, legal and sociological aspects of bilingual education in the American public school system. National, state, and local guidelines designed to meet the needs of multilingual, multicultural student populations are reviewed. Prerequisite: EDCI 4301 or concurrent enrollment. Lec 3, Cr 3

BILC 3316 First & Second Language Acquisition
Formerly BILC 4330. This course focuses on first and second language processes, functions of language, and the principles of language learning. Prerequisite: ENGL 3319 and BILC 3310

BILC 3317 Bilingual Curriculum in the Content Areas
Formerly EDCI 3315. Methods for teaching the content areas in the bilingual classroom. (Taught in Spanish). Prerequisite: BILC 3316. Lec 3, Cr 3

BILC 4320 English as a Second Language
Formerly BILC 3320. Principles and methods of teaching English as a second language. Includes language assessment, analysis of materials and culture. Prerequisite: BILC 3316, BILC 3317 or concurrent enrollment. Lec 3, Cr 3

BILC 4395 Practicum in Bilingual Education
This course is a field-based internship in a bilingual classroom setting. Students integrate and use the knowledge and skills gained from all previous courses including first language development and second language acquisition, assessment procedures, classroom management techniques, and teaching strategies for the bilingual curriculum under the supervision of a bilingual classroom teacher and a university instructor. Prerequisite: 15 semester hours of BILC courses. Lec 3, Cr 3

Biology (BIOL)

BIOL 1106 Biological Principles Laboratory I
Investigations related to BIOL 1306. First semester of a laboratory required for science majors and minors; also available to the general student: Corequisite: BIOL 1306 (or prior credit). Lab 3, Cr 1

BIOL 1107 Biological Principles Laboratory II
Investigation related to BIOL 1307. Second semester of a laboratory required for science majors and minors; also available to the general student. Prerequisite: BIOL 1106, 1306, Corequisite: BIOL 1307 (or prior credit) Lab 3, Cr 1

BIOL 1108 General Biology Laboratory I
For non-science majors. Laboratory investigations related to BIOL 1308. Applies appropriate technology, quantitative methods, inquiry, and analysis to understanding relationships in nature. Will not count as hours in BIOL for major or minors in the sciences. Lab 3, Cr 1.

BIOL 1109 General Biology Laboratory II
For non-science majors. Laboratory investigations related to BIOL 1309. Applies appropriate technology, quantitative methods, inquiry, and analysis to understanding relationships in nature. Will not count as hours in BIOL for major or minors in the sciences. Lab 3, Cr. 1.

BIOL 1306 Biological Principles 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. Corequisite: BIOL 1106 (or prior credit). Lec 3, Cr 3

BIOL 1307 Biological Principles II
Formerly BIOL 1407. A continuation of Biological Principles I with emphasis on fundamentals of organismal biology, ecology and biodiversity. Second semester of an integrated course for science majors and minors; also available to the general student. Prerequisite: BIOL 1106, 1306, Corequisite: BIOL 1107 (or prior credit). Lec 3, Cr 3

BIOL 1308 General Biology I
For non-science majors. Covers major biological concepts, scientific design, relationships, theories, scientific methods and inquiry, life chemistry, cells, organismic functions, with emphasis on human and social concerns. Evolution is a theme. Will not count as hours in BIOL for major or minors in the sciences. Lec 3, Cr 3

BIOL 1309 General Biology II
For non-science majors. Covers major biological concepts, scientific design, relationships, theories, scientific methods and inquiry, biodiversity, evolution and the environment, with emphasis on human and social concerns. Will not count as hours in BIOL for major or minors in the sciences. Lec 3, Cr 3

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, nervous systems. Includes dissections and instrumentation related to basic hands-on understanding of human anatomy and physiology. Prerequisite or concurrent enrollment: BIOL 2301. Lab 3, Cr 1

BIOL 2102 Human Anatomy and Physiology Laboratory II
Emphasis on endocrine, cardiovascular, respiratory, digestive, urinary, and reproductive systems. Includes related dissections and instrumentation designed to facilitate basic hands-on understanding of human anatomy and physiology. Prerequisite: BIOL 2301 and 2101. Prerequisite or concurrent enrollment: BIOL 2302. Lab 3, Cr 1

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. Prerequisite or concurrent enrollment: BIOL 2321. Lab 4, Cr 1

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. Prerequisite or concurrent enrollment: BIOL 2101. Lec 3, Cr 3

BIOL 2302 Human Anatomy and Physiology II
Formerly BIOL 2402. Continuation of BIOL 2301; Includes human urogenital, circulatory, respiratory, digestive and endocrine systems; human development; emphasis on nutrition, metabolism, electrolytic and fluid balance. Prerequisite: BIOL 2301 and BIOL 2101. Prerequisite or concurrent enrollment: BIOL 2102. Lec 3, Cr 3

BIOL 2317 Evolution
This course reviews the history of evolutionary thought and examines modern evolutionary theory. Topics include Darwinism and evolution, mecha-

nisms of evolutionary change, speciation and the history of life, and macroevolutionary trends. The course concludes with a survey of current research, including applications to human evolution. Lec 3, Cr. 3. Prerequisites BIOL 1106/1306 and 1107/1307.

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. Prerequisite: BIOL 1306 BIOL 1106, BIOL 1307, BIOL 1107 or BIOL 2301, BIOL 2101. BIOL 2302, BIOL 2102. Prerequisite or concurrent enrollment: BIOL 2121; CHEM 1311 and 1312 highly recommended. Lec 3, Cr 3

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. Prerequisite: Twelve semester hours of Biology. No lab in course. Lec 3, Cr 3

BIOL 3403 Genetics
Formerly BIOL 3303. Introduction to genetics with consideration of its application in biology and human welfare. Prerequisite: Nine semester hours of biology. Lec 4, Cr 3

BIOL 3408 Plant Morphology
A study of the morphology, development and relationships of fungi, algae, liverworts, mosses, ferns, gymnosperms and angiosperms. Prerequisite: Nine semester hours of biology. Lec 3, Lab 3, Cr 4

BIOL 3409 Ecology
A study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Prerequisite: 12 semester hours of biology. Lec 3, Lab 3, Cr 4

BIOL 3412 Cell Biology
A study of cell structure and function with emphasis on bioenergetics, membranes, genes, and genetic control, cell division and its regulation, cellular differentiation. (May not be repeated for credit.) Prerequisite: Nine semester hours of biology. Lec 3, Lab 3, Cr 4

BIOL 3414 Invertebrate Zoology
A study of the comparative morphology, evolution, systemics, and natural history of the invertebrates. Prerequisite: Nine semester hours of biology. Lec 3, Lab 3, Cr 4

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. Prerequisite: Senior Standing; 24 semester credit hours in BIOL. Lec 1, Cr 1.

BIOL 4109 Herpetology Lab
The lab and fieldwork will familiarize students with herptofauna of the lower Rio Grande Valley and with plant and animal associations in a variety of habitats. Fieldwork will be undertaken locally as well as other localities. Students will be required to keep a journal of field observations and a catalogue of specimens observed. The instructor will provide keys and relevant scientific journal articles. Lab. 3 Cr. 1.

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

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) Prerequisite: Junior Standing, completion of three advanced courses in Biology (nine upper-division semester credit hours, and approval of instructor. Lec 1, Cr 1

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) Prerequisite: Junior standing, completion of three advanced courses in Biology (nine upper-division semester credit hours), and approval of instructor. Lec 2, Cr 2

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 cataloguing. 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

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. Prerequisite: Nine semester hours of biology. Lec 3, Cr 3

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. Prerequisite: Nine hours of biology. Lec 3, Cr 3

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. Prerequisite: Junior standing, completion of 12 credit hours in Biology. Lec 3, Cr 3

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. Prerequisite: Junior standing. 16 sch of BIOL. Lab 6-8, Cr 3

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. Prerequisite: Junior standing, completion of three advanced courses in Biology (nine upper-division semester credit hours) and approval of instructor. Lec 3, Cr 3

BIOL 4402 Marine Zoology
A study of the common marine animals, especially invertebrates in coastal waters, particular attention is to be given to structural and physiological relationships. Prerequisite: 12 hours of biology. Lec 3, Lab 3, Cr 4

BIOL 4410 Marine Botany
A study of common local marine flora with emphasis on the macroscopic algae forms. Students are expected to furnish their own transportation to nine or ten field laboratory sessions. Prerequisite: Nine semester hours of biology. Lec 3, Lab 3, Cr 4

BIOL 4414 Plant Taxonomy
Identification of vascular plants, with emphasis on native flowering plants. Prerequisite: Nine semester hours of biology. Lec 3, Lab 3, Cr 4

BIOL 4420 Plant Anatomy
Anatomy of seed plants. Prerequisite: Nine semester hours of biology. Lec 3, Lab 3, Cr 4

BIOL 4425 Plant Physiology
An analysis of cell biology, biochemistry, metabolism, ecophysiology, and development of plants. Topics include water relations, respiration, photosynthesis, nitrogen fixation, mineral nutrition, plant hormones, plant molecular biology, genetic engineering, and the role of environmental signals to plant development. Prerequisites: BIOL 1306, 1307, 1106, 1107, CHEM 2323, 2325. Lec 3, Lab 3, Cr 4.

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. Prerequisite: BIOL 1106/1306 and 1107/1307. Lec 3, Lab 3, Cr 4.

BIOL 4450 Ornithology
The study of classification, morphology, ecology, distribution, migration patterns, and behavior of birds. Emphasis on local species. Field trip required. Prerequisite: Nine semester hours in biology. Lec 3, Lab 3, Cr 4.

Building Trades (*CNBT, CRPT, ELPT, ELTN, PEPB, WDWK*)

One Semester Core For Building Trades

CNBT 1301 Introduction to Construction
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 Mechanical, Plumbing, and Electrical System 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 Materials and Methods
This course provides and 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 regulation knowledge.

Carpentry Specialization

CNBT 1307 Commercial and Industrial Blueprint Reading
This is a course in blueprint reading and analysis that covers the theory of projection, architectural and engineering symbols, relationship of views, and measuring with emphasis on commercial and industrial construction. Math calculations typical to layout and takeoff relative to blueprint reading and interpretation will also be covered.

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 1329 Introduction to Carpentry
This course is an introduction to the carpentry trade. Topics include safety, tools, equipment, terminology, mathematical computation, and the development of basic construction methods and skills typical to the trade.

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 Systems
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.

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.

Electrical Worker Specialization

ELPT 1311 Basic Electrical Theory

This course is an overview of the theory and practice of electrical circuits including mathematical calculations as applied to alternating and direct current. Students will explain atomic structure and basic electrical values, calculate values for circuit combination and voltage drop, and utilize electrical measuring instruments typical to the electrical trade.

ELPT 1321 Introduction to Electrical Safety and Tools

This course is a comprehensive overview of safety rules and regulations and the selection, inspection, use and maintenance of common tools for electricians. The student will explain electrical hazards and how to avoid them in the workplace, discuss safety issues concerning lock-out/tag-out procedures, and demonstrate safe work habits using common hand and power tools typical to the electrical trae.

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 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 overcurrent 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 lighting 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 2343 Electrical Systems Design

This course develops skills in the electrical design of residential and commercial projects including building layout, types of equipment, placement, sizing of equipment, and all electrical calculations according to the requirements of the National Electrical Code (NEC).

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 troubleshoot various conditions typical to electrical installations and equipment.

Plumbing Specialization

CNBT 1366 Practicum

The practicum provides for 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.

PFPB 1345 Piping Standards and Materials

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 & 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 pluming fixtures in addition to practicing general principles of sound customer relations.

PFPB 2301 Piping Fabrication & 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 2345 Residential Construction Plumbing II

This course allows for in-depth instruction and practice in the setting of residential bathroom, and kitchen plumbing fixtures. The student will install and put into service various types of water closets, lavatories and bidets, gas and electric water heaters, and kitchen sinks with dishwashers and garbage disposals.

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 fittings, 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 Construction 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 reading 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.

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

BUSI 2441 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 1324 or 1314 . Lec 3, Cr 3

BUSI 3312 Administrative Office Management
The management functions of planning, organizing, actuating and controlling in a facilitating administrative system are applied to case problems in office administration. Principles of internal organization, motivational theories and informational technology are studied through the medium of the role playing, panels and critiques, and discussion. Pertinent research applicable to the field of office management is also studied. Lec 3, Cr 3

BUSI 3117 Biliteracy 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. Prerequisite: Admission to upper division. Lab 2, Cr 1

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. Prerequisite: Satisfaction of general requirements in English. Prerequisite: ENGL 2311. Lec 3, Cr 3

BUSI 3342 Intermediate Business and Economic Statistics
A continuation of elementary statistics, including regression and correlation, index numbers, time series, nonparametric statistics and other decision-making tools. Computer laboratory assignments covering the above topics will be assigned. Prerequisite: Admission to upper division and BUSI 3341. Lec 3, Cr 3

BUSI 4330 International Business
Business concepts, analytical processes, and philosophical bases for international business operations. Emphasizes environmental dynamics, multinational business organizations, cultural and economic constraints, unique international business practices, and international operations, strategies, and policy. Prerequisite: Admission to upper division and MANA 3361, MARK 3371, FINA 3380, or consent of instructor. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and, FINA 3380, MANA 3361, MARK 3371. Lec 3, Cr 3

Graduate Courses

BUSI 6101 Environments of Business
BUSI 6105 Current Issues in Business
BUSI 6310 Business Research
BUSI 6317 Administrative Communication
BUSI 6380 International Business
BUSI 6390 Administrative Policy and Strategy
BUSI 6399 Management Practicum

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

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. Prerequisite: Admission to Upper Division, BLAW 3337 with grade of "C" or better. Lec 3, Cr 3

Graduate Courses

BLAW 6301 Legal Environment of Business
BLAW 6305 Comparative Business Law
BLAW 6302 Business Law for Educators
BLAW 6303 Business Law II

Business Management Information Systems (BMIS)

BMIS 1101 Introduction to Windows 95 Software
This computer course provides theory and hands-on skills for student familiarization of the Windows 95 software program. Emphasis on window techniques, exploring windows desktop, files and folders, file management explorer, printers and fonts, customizing windows, and control panel settings. Lec 1, Cr 1

BMIS 1110 Introduction to Word Processing for Windows
This course is designed to familiarize students in the use of the WordPerfect for Windows software program. Applications include creating, editing, printing and saving documents, formatting features, merging, macros and sorting data, tables and writing tools operation. Lec 1, Cr 1

BMIS 1120 Ten-Key by Touch
This course is a practical approach to operating and using the ten-key pad by touch. Designed to assist students in using the ten-key pad by touch to solve different business problems. Lec 1, Cr 1

BMIS 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

BMIS 1135 Fundamentals of Access for Windows 95 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

BMIS 1140 Introduction to the SPSS Statistical Program
This course is an introductory course to acquaint students with the SPSS Statistical program and its functions. The creation, manipulation, saving and printing of data files will be the focus of the course. Lec 1, Cr 1

BMIS 1145 Introduction to the Internet with Netscape Navigator
A hands-on introductory course designed to teach students the fundamentals of how to browse the World Wide Web using the Netscape Navigator. Introduces the basics of browsing the Web, sending and receiving e-mail, and exploring Usenet News Groups as well as the use of the title bar, menu bar, tool bar and status indicator. Lec 1, Cr 1

BMIS 1150 Fundamentals of Desktop Publishing
This course is designed to introduce students to the basics of desktop publishing features in both Word and WordPerfect 6.1 for Windows. The use of text alignment, character and spacing, columns, graphic boxes, graphic lines, special enhancements, tables and charts. Lec 1, Cr 1

BMIS 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

BMIS 1160 Fundamentals of PageMaker for Windows
This course is designed to introduce students to the basics of the PageMaker for Windows software program. This program assists a learner with starting, editing and completing a publication, including lines and graphics, color, layout and printing. Lec 1, Cr 1

BMIS 1165 New Software Topics
This course is designed to be an introductory course used to acquaint students with the latest new software package that has been developed within the last year. Students that would like to become acquainted with a new program that may not be widely used, but specific to a particular field such as legal, medical, real estate, may fall into this category. Lec 1, Cr 1

BMIS 1170 Introduction to Peachtree Accounting
This course will introduce students to the basic approach to computerized accounting and bookkeeping using the Peachtree accounting program. Both theory and hands-on skills will be taught. Lec 1, Cr 1

BMIS 1175 Introduction to Quickbooks
This course will introduce students to the basic approach to computerized accounting and bookkeeping using the Quickbooks accounting program. Both theory and hands-on skills will be taught. Lec 1, Cr 1

BMIS 1180 Introduction to Income Tax Preparation
This course will introduce students to automated income tax preparation using Turbo Tax. Lec 1, Cr 1

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. Prerequisites: Admission to Upper Division. Lec 3, Cr 3

Business Technology Courses

Accounting Technology *(ACNT)*

ACNT 1229 Payroll and Business Tax Accounting
A study of payroll procedures, taxing entities, and reporting requirements of local, state, and federal taxing authorities in a manual and computerized environment. The student will develop personnel and payroll records that provide the information required under current laws and process payroll data and tax data and prepare reports. Prerequisite: ACNT 1403. Lec 2, Cr 2

ACNT 1391 Special Topics in Accounting
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
Formerly Accounting Fundamentals
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. Prerequisite: ACNT 1403 with a "C" or better. Lec 4, Cr 4

ACNT 1411 Introduction to Computerized Accounting
Introduction to utilizing the computer in maintaining accounting records, making management decisions, and processing common business applications with primary 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 1403 with a "C" or better.

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. Prerequisite: ACCT 2401 or ACNT 1403 with a "C" or better. Lec 4, Cr 4

ACNT 2366 Practicum – Accounting
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 and learning outcomes vary. Lec 1, Lab 20, Cr 3

Business Law – Technical *(BUSG)*

BUSG 2317 Business Law/Commercial
The relationships of law and business as they relate to commercial transactions. Lec 3, Cr 3

Business Management *(BMGT)*

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

International Business *(IBUS)*

IBUS 1301 Principles of Imports-Exports I

A study of export management processes and procedures. Topics include government controls, licensing of products, documentation, commercial invoices, and traffic procedures. Application to human and public relations, management of personnel, finance, and accounting procedures. Lec 3, Cr 3

IBUS 2331 International Human Resource Management

A study of the effects of the process of internationalization on human resource management including the requirements of local or host country nationals, expatriates, or parent country nationals, and hired country nationals. Emphasis on Asia-Pacific, Europe, Latin America, and emerging economies. Lec 3, Cr 3

IBUS 2339 International Banking and Finance

A course in international monetary systems, financial markets, flow of capital, foreign exchange, and financial institutions. Topics include export-import payments and financing the preparation of letters of credit, related shipping documentation, and electronic transfers. An introduction to multinational financial decisions, such as financing foreign investment or working capital. Lec 3, Cr 3

IBUS 2341 International Comparative Management

A study of cross-cultural comparisons of management and communications processes. Emphasis on cultural geographic distinctions and antecedents that affect individual, group, and organizational behavior. Topics include sociocultural demographic, economic, technological, and political-legal environment of cluster countries and their relationship to organizational communication and decision making. Lec 3, Cr 3

IBUS 2345 Import Customs Regulations

A study of the duties and responsibilities of the licensed custom broker or customhouse broker. Topics include processes for customs clearance including appraisement, 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 2366 Practicum – International Business

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 be repeated if topics and learning outcomes vary. Lec 1, Lab 20, Cr 3

Legal Assisting *(LGLA)*

LGLA 1303 Legal Research

This course provides a working knowledge of the fundamentals of effective legal research. Topics include law library techniques, computer assisted legal research, briefs, and legal memoranda. The student will locate, read, and understand primary and secondary legal authority; design and implement effective research strategies; and be familiar with computer assisted legal research tools and the proper role of these tools. Prerequisite: LGLA 1313, LGLA 1345 or 1346, POFL 1305 and ITSW 1301 or word processing skills. 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 Legal Research or LGLA 1301 Legal Research and Writing. Lec 3, Cr 3

LGLA 1307 Introduction to Law and the Legal Professions

This course provides an overview of the law and the legal professions. Topics include legal concepts, systems, and terminology; ethical obligations and regulations; professional trends and issues with particular emphasis on the paralegal. Lec 3, Cr 3

LGLA 1313 Intro to Paralegal Studies

This course provides an overview of the paralegal profession including ethical obligations, regulation, professional trends and issues, and the paralegal's role in assisting the delivery of legal services. The student will develop a legal vocabulary; explain the ethical obligations of the legal professional trends and issues, and the paralegal's role in assisting the delivery of legal services. Prerequisite: ITWS 1301 or word processing skills 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 1345 Civil Litigation

This course presents fundamental concepts and procedures of civil litigation with emphasis on the paralegal's role. Topics include pretrial, trial, and post trial phases of litigation. The student will define and properly use terminology relating to civil litigation; locate, describe, and analyze sources of law relating to the civil litigation process; describe the role and ethical obligations of the paralegal in civil litigation; and draft documents commonly used in civil litigation. Prerequisite: POFL 1305 and LGLA 1313 or current enrollment and ITSW 1301 or word processing skills. 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, and 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; and draft documents commonly used in wills, trusts, and probate administration. Prerequisite: ITWS 1301 Introduction to Word Processing or word processing skills. 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. Prerequisite: ITWS 1301 Introduction to Word Processing or word processing skills. 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: LGLA 1313 and LGLA 1345 or 1346 and ITSW 1301 or word processing skills. Lec 3, Cr 3

LGLA 2307 Law Office Management

This course presents the fundamentals of law office management and organization including basic principles and structure of management, administrative and substantive systems in the law office, and law practice technology. The student will identify and explain the fundamental principles of management and administrative and substantive systems of the law office; explain the role of technology in the management and administration of the law office; apply management principles and technology; and explain ethical issues relating to law office operations. Prerequisite: ITWS 1301 Introduction to Word Processing. Lec 3, Cr 3

LGLA 2333 Advanced Legal Document Preparation

Formerly LGLA 2337. This course is designed for the student to learn preparation of legal documents based on hypothetical fact 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. Lec 3, Cr 3

LGLA 2380 Cooperative Education-Paralegal/Legal Assisting

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 by Department Chair or Co-op Coordinator. Lec 1, Lab 20, Cr 3

Medical Office (MDCA, MRMT, POFM, & SRGT)

MDCA 1443 Medical Insurance

Emphasizes 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

MRMT 1303 Medical Office Procedures

Introduction to basic medical office skills including telephone techniques, filing and indexing, mail handling, appointment scheduling, travel arrangements, correspondence and business transactions, and office machines. The course will emphasize on developing human relations and customer service skills. Lec 3, Cr 3

MRMT 1382 Cooperative Education-Medical Transcription

An intermediate or advanced course with lecture and work-based instruction that helps students gain practical experience in the discipline, enhance skills, and integrate knowledge. The work supervisor provides indirect supervision while the lecture is provided by the college faculty or by other individuals under the supervision of the educational institution. Cooperative education may be a paid or unpaid learning experience. Prerequisite: Consent of the Business Co-op Coordinator. Lec 3, Cr 3

MRMT 1407 Medical Transcription Fundamentals

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. Utilizes transcribing and information processing equipment compatible with industry standards. Designed to develop speed and accuracy. Lec 4, Cr 4

POFM 1453 Medical Coding

This course is a study of presentation and application of basic coding rules, principles, guidelines, and conventions utilizing various coding systems. Prerequisites: SRGT 1301-Medical Terminology, basic keyboarding, and computer skills. Lec 4, Cr 4

SRGT 1301 Medical Terminology

Study of the basic structure of medical words including prefixes, suffixes, roots, combining forms, plurals, pronunciation, spelling, and the definitions of medical terms. Emphasis is on building a professional vocabulary required for employment within the allied health care field. Lec 3, Cr 3

Professional Office Legal *(POFL)*

POFL 1305 Legal Terminology

An introduction to legal terminology including spelling, pronunciation, and definition of legal terms and an overview of the law and the professions. The student will develop a legal vocabulary; and explain fundamental legal concepts, procedures, terminology, and current issues in law. Prerequisite: Keyboarding and word processing skills. Lec 3, Cr 3

POFL 2301 Legal Document Processing

Skill development in the production of legal documents used in the legal and court systems. The student will utilize editing and proofreading skills and knowledge to produce error-free legal documents; use current and emerging technology to produce client-quality legal documents; and produce legal documents appropriate to the needs of the local legal community. Prerequisite: POFL 1305 and ITSW 1301 or word processing skills. Lec 3, Cr 3

Marketing - Technical *(MRKG)*

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

Information Technology Software *(ITSW)*, Professional Office Technology *(POFT)*, Professional Office Information *(POFI)*

ITSW 1301 Introduction to Word Processing

(Formerly OFAD 2304 Basic WordPerfect) 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. Prerequisite: Keyboarding proficiency. Lec 3, Cr 3

ITSW 1304 Introduction to Spreadsheets

(Formerly TSEC 2340 Spreadsheet Applications for the Office) Instruction in the concepts, procedures, and importance of electronic spreadsheets. The student will identify spreadsheet terminology and concepts; create formulas and functions; use formatting features; and generate charts, graphs, and reports. Recommended: Proficiency in word processing software and keyboard-

ing skills 30 words per minute. Lec 3, Cr 3

ITSW 1310 Presentation Media Software (Powerpoint)

Instruction in the utilization of presentation software to produce multimedia presentations. Graphics, text, sound, animation and/or video may be used in 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 other media; and modify sequence and slide master. Prerequisite: Proficiency in word processing software (ITSW 1301 or equivalent). Lec 3, Cr 3

ITSW 2331 Advanced Word Processing

(Formerly OFAD 2305 Advanced WordPerfect) 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. Prerequisite: ITSW 1301 Introduction to Word Processing or equivalent. Lec 3, Cr 3

POFI 2331 Desktop Publishing for the 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, and multiple page displays. The student will define desktop publishing terminology; manipulate text and graphics to create a balanced and focused layout; and create fliers, brochures, and multiple page documents according to specified procedures. Prerequisite: ITSW 2331 Advanced Word Processing or equivalent. Lec 3, Cr 3

POFT 1192 Special Topics in Administrative Assistant/Secretarial Science, General (Student Portfolio)

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. Learning outcomes/objectives are determined by local occupational need and business and industry trends. Prerequisite: Student must be graduating the semester enrolled or approved by Dept. Chair. Lec 1, Cr 1

POFT 1319 Records and Information Management I

(Formerly OFAD 1314 Filing Systems) 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 1302 Business Communications I

(Formerly TSEC 1305 Business Communications) Introduction to a practical application of basic language usage skills with emphasis on fundamentals of writing and editing for business. The student will apply the basic rules of grammar, spelling, capitalization, number usage, and punctuation; utilize terminology applicable to technical and business writing; develop proofreading and editing skills; and write effective sentences and paragraphs for business applications. Prerequisite: Keyboarding proficiency. Lec3, C r 3

POFT 1309 Administrative Office Procedures I

(Formerly TSEC 2301 Office Procedures) 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. Prerequisite: Basic keyboarding skills. Lec 3, Cr 3

POFT 1313 Professional Development for Office Personnel

Formerly TSEC 1315. 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; identify 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 1329 Keyboarding and Document Formatting

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

Formerly TSEC 1310. Skill 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

Formerly TSEC 1370. An introduction to shorthand/notetaking 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; take dictation at a minimum speed of 50 words per minute on new material; transcribe notes with 95 percent accuracy; and produce mailable documents from dictation. Prerequisite: Basic keyboarding proficiency. Lec 3, Cr 3

POFT 2301 Document Formatting & Skillbuilding

Formerly TSEC 1325. A continuation of keyboarding skills in document formatting, speed, and accuracy. Emphasis on proofreading, editing, and following instructions, and keying documents from various copy. The student will produce alphabetic, alphanumeric material at a minimum speed of 40 words per minute (wpm) with minimum proficiency; apply mailability standards to document production; use proofreading and editing skills; and format and produce a variety of business documents using word processing software. Prerequisite: Proficiency in word processing software (ITSW 1301 Introduction to Word Processing or equivalent). Lec 3, Cr 3

POFT 2303 Speed and Accuracy Building

Formerly TSEC 1312. 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. Prerequisite: Keyboarding by touch. Lec 3, Cr 3

POFT 2312 Business Communications II

Formerly TSEC 2320. Skill development in practical applications which emphasize the improvement of writing skills necessary for effective business communications. The student will compose and produce effective business communications appropriate to industry needs; apply critical evaluation techniques to business communications; and recognize the importance of coherent, ethical communication principles in business and industry. Prerequisite: Business Communications I and proficiency in word processing software (ITSW 1301 Introduction to Word Processing or equivalent). Lec 3, Cr 3

POFT 2321 Machine Transcription

Skill development in mailable business document production using computers and dictation equipment. Skill refinement in grammar and punctuation with emphasis on proofreading and formatting. The student will operate the transcription machine competently; demonstrate correct transcription technique; implement correct grammar usage; demonstrate effective proofreading skills; and transcribe dictation to produce mailable copy on the first draft. Prerequisite: Minimum 35 words per minute (wpm) keyboarding skills, basic word processing skills, and basic grammar skills. Lec 3, Cr 3

POFT 2380 Cooperative Education – Administrative Assistant/ Secretarial Science, General

Formerly TSEC 2401 Cooperative Education I. 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 Co-op Coordinator or department chair. Lec 1, Lab 20, Cr 3

POFT 2381 Cooperative Education-Administrative Assistant Secretarial Science, General

Formerly TSEC 2405 Cooperative Education II. 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 Co-op Coordinator or department chair. Lec 1, Lab 20, Cr 3

Chemistry (CHEM)

CHEM 1105 Introductory Chemistry Laboratory I

Laboratory practice that illustrates elementary general, organic, and biochemical experimental techniques. Prerequisite or concurrent enrollment: CHEM 1305. Lab 3, Cr 1

CHEM 1107 Introductory Chemistry Laboratory II

Continuation of CHEM 1105, with greater emphasis on organic and biochemical laboratory techniques. Prerequisite: CHEM 1305 and credit or registration for CHEM 1105 and CHEM 1307. Lab 3, Cr 1

CHEM 1111 General Chemistry Laboratory I

Introduction to laboratory techniques of chemical experimentation. Prerequisite or concurrent enrollment: CHEM 1311. Lab 3, Cr 1

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. Prerequisite or concurrent enrollment: CHEM 1111 and CHEM 1312. Lab 3, Cr 1

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 states of matter, solution calculations, and acid-base concepts; includes a brief introduction to organic chemistry and biochemistry. Concurrent enrollment: CHEM 1105. Lec 3, Cr 3

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; structures and metabolic reactions of carbohydrates, lipids, and proteins; a look at hormones, enzymes, and biosynthetic pathways; physiological action of drugs, food, nutrients, poisons, and causing agents. Prerequisite: CHEM 1305. Concurrent enrollment: CHEM 1107. Lec 3, Cr 3

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. Prerequisite: Credit for two years of high school algebra OR credit or registration for MATH 1314. Lec 3, Cr 3

CHEM 1312 General Chemistry II

Continuation of CHEM 1311. Study of chemical kinetics and equilibria, electron transfer reactions, electrochemistry, nuclear chemistry, chemical thermodynamics, and some descriptive inorganic chemistry. Prerequisite: CHEM 1311. Lec 3, Cr 3

CHEM 2123 Organic Chemistry Laboratory I

Laboratory application of techniques used in experimental organic chemistry. Prerequisite or concurrent enrollment: CHEM 2323. Lab 3, Cr 1

CHEM 2125 Organic Chemistry Laboratory II

Additional laboratory application of techniques used in experimental organic chemistry. Prerequisite: CHEM 2123 and credit or concurrent enrollment in CHEM 2325. Lab 3, Cr 1

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. Prerequisite: CHEM 1312 and CHEM 1112. Lec 3, Cr 3

CHEM 2325 Organic Chemistry II

Continuation of CHEM 2323. Includes a brief introduction to the chemistry of polymers, fats, carbohydrates, amino acids and proteins. Prerequisite: CHEM 2323. Lec 3, Cr 3

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. Prerequisite: CHEM 2123, 2125, 2323, 2325, and concurrent enrollment in CHEM 3303. Lab 3, Cr 1

CHEM 3105 Analytical Laboratory

Laboratory methods in analytical chemistry, including quantitative separation techniques, electrochemistry, and absorption spectroscopy. Prerequisite or concurrent enrollment: CHEM 3305 Lab 4, Cr 1

CHEM 3110 Physical Chemistry Lab I

The use of modern instrumentation to illustrate physical chemical techniques used to study electrochemistry, molecular structure, calorimetry, and thermodynamics. Prerequisite or concurrent enrollment: CHEM 3310. Lab 3, Cr 1

CHEM 3112 Physical Chemistry Lab II

The use of modern instrumentation to illustrate physical chemical techniques used to study macromolecules, chemical kinetics, properties of gases, spectroscopy and photochemistry. Prerequisite or concurrent enrollment: CHEM 3305. Lab 3, Cr 1

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. Prerequisite: CHEM 1112, 1312. Lec 3, Cr 3

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. Prerequisite: CHEM 2323, 2123. Lec 3, Cr 3

CHEM 3304 Biochemistry II
A detailed study of the design, integration and control of metabolism. Hormone action and the regulation of gene expression. Prerequisite: CHEM 3303. Lec 3, Cr 3

CHEM 3305 Analytical Chemistry
Modern analytical chemistry, including separation methods and quantitative chemistry, introduction to methods of analytics in electrochemistry, absorption and emission spectroscopy. Prerequisite: CHEM 1312, 1112, Junior standing, and registration for CHEM 3105. Lec 3, Cr 3

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 Physical Sciences Department. Prerequisite: Junior standing in chemistry or consent of the instructor. Lec 3, Cr 3

CHEM 3310 Physical Chemistry I
Study of the classical thermodynamics including applications to gases, liquids, solutions and phase equilibria, ionic equilibria, and electrochemistry. Prerequisite: MATH 2314, PHYS 1302, CHEM 1312. Lec 3, Cr 3

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. Prerequisite: CHEM 3310. Lab 3, Cr 3

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. Prerequisite: CHEM 3305 and CHEM 3105. Lab 4, Cr 1

CHEM 4110 Chemical Seminar
Students are expected to research a current chemical topic, previously approved by a faculty member in the Physical Sciences Department, and to present it in a formal seminar to fellow students and faculty members. Prerequisite: Senior standing in chemistry or consent of the professor. Lec 3, Cr 3

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. Prerequisite: CHEM 3305 and CHEM 3105. Lab 3, Cr 3

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. Prerequisite: Student must have completed 6 hours of advanced chemistry and consent of the professor. Lec 1, Lab 6, Cr 3

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. Prerequisites: Senior standing in Chemistry or consent of the instructor.

CHEM 4404 Selected Topics in Biochemistry
In depth discussion of biochemical topics with emphasis on up to date developments in this field. It also includes the study of contemporary biochemical techniques. Prerequisite: CHEM 3304 and CHEM 3103. Lec 3, Lab 3, Cr 4

CHEM 4412 Selected Topics in Physical Chemistry
An advanced course in physical chemistry that includes computational chemistry, molecular modeling and molecular dynamics. Prerequisite: CHEM 3312, CHEM 3112. Lec 3, Lab 3, Cr 4

CHEM 4423 Selected Topics in Organic Chemistry
Advanced study of reaction mechanisms and synthesis design. Also includes theory and practice of structure determination. Prerequisite: CHEM 2325, CHEM 2125. Lec 3, Lab 3, Cr 4

Child Care and Development *(CDEC)*

CDEC 1313 Curriculum Resources for Early Childhood 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 8, 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. Prerequisite: CDEC 1319. Lec 1, Lab 5, Cr 3

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 experiences to support divergent thinking. Prerequisite: CDEC 1319. Lec 1, Lab 5, Cr 3

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 (or Field Experience) – Child Development and Early Childhood

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. Prerequisite: CDEC 1319. Lec 1, Lab 15, Cr 4

CDEC 1396 Special Topics in Administration 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 2321 The Infant and Toddler

This course is a study of appropriate infant and toddler (birth to 3 years) programs, including an overview of development, quality care-giving routines, appropriate environments, materials and activities, and teaching/guidance techniques. 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/partnerships, 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) programs, 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. Prerequisite: CDEC 1319, CDEC 1467, CDEC 1357, CDEC 1358. Lec 1, Lab 20, Cr 5

Communication (COMM)

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. Prerequisite or concurrent enrollment: COMM 2311, 2315. Lab 3, Cr 1

COMM 1335 Introduction to Television

The study of the development, regulation, economics, social responsibilities and industry practices in broadcasting and cable communication; non-broadcast television; new technology; and other communication systems. Lec 3, Cr 3

COMM 2303 Survey of Recording Techniques

An introduction into audio recording including the nature of sound, operation of recording equipment, session procedures, studio techniques, recording techniques, and sound reinforcement for live performances. Prerequisite: READ 0301 or appropriate assessment. Lec 3, Cr 3

COMM 2311 News Gathering and Reporting I

Theory and practice of news gathering and writing with emphasis on effective writing. Assignments cover general news, interviews, speeches, meetings, and other fields of activity. Concurrent enrollment: COMM 1129. Lec 3, Cr 3

COMM 2315 News Gathering and Reporting II

A continuation of COMM 2311, with emphasis on further developing news gathering and reporting skills. Reports about speeches, interviews, meetings, as well as other types of reportorial writing are assigned. Prerequisite: COMM 2311. Concurrent enrollment: COMM 1129. Lec 3, Cr 3

COMM 2324 Studio Technology I

Students will produce, engineer, mix, setup, and perform in actual recording sessions. Samples for portfolios may be acquired. Prerequisite: MUSI 2373. Lec 1, Lab 4, Cr 3

COMM 2325 Studio Technology II

Continuation of COMM 2324. Lec 1, Lab 4, Cr 3

COMM 2331 Radio and TV Announcing

Study of voice, diction, pronunciation, phonetics, and delivery in various types of announcing. Lec 3, Cr 3

COMM 2373 Basic Recording Technique

A continuation and intensive study of materials presented in MUSI 2303. Prerequisite: MUSI 2303. Lec 3, Cr 3

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

Computer Science (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. Prerequisite: MATH 0322 with a grade of "C" or better, or 17 on the ACT math area. Lec 3, Cr 3

COSC 1315 Logic and Computing

Introduction to programming logic and common software applications. Number representations, machine architecture and web design will be covered. This course is a requirement for Computer Science majors. The course is recommended for students entering other science, engineering, and math programs. This course satisfies the computer literacy requirement. Prerequisite: MATH 1314 with a minimum grade of a "B" or better or 17 in the ACT Math area. Lec 3, Cr 3

COSC 1418 Programming Structures I (Formerly COSC 1318)

A programming intensive course in which a high level language, such as Pascal or C, introduces the student to the design, testing, debugging and imple-

mentation of algorithms. Examples of algorithms taken include data structures based on records and arrays, and cover the relevant topics from numerical methods and the field of business. Concepts of compilation, time-sharing, batch and interactive processing, subroutines, library functions, and syntax & semantics of a programming language are introduced. Prerequisites: MATH 1314, MATH 1316, COSC 1315 or a college-level computer literacy course. Lec 3, Lab 3, Cr 4

COSC 2312 Foundations of Computer Science
The student is introduced to number systems and applied Boolean algebra relevant to the design of computer hardware. Introduction to machine architecture and assembly language. Classical and modern aspects of programming languages and the relationship of formal languages with their grammars are studied. Credit may only be awarded for COSC 2310 and COSC 2320 or COSC 2312. Prerequisites : MATH 1316, MATH 3373, COSC 1315 or a college-level computer literacy course. Lec 3, Cr 3

COSC 2314 Computer System Tools
Students are familiarized with modern computer system tools via several team projects. The topics may include databases, spreadsheets, multimedia, 4GLs, and presentation graphics. Prerequisite: COSC 1418. Lec 2, Lab 2, Cr 3

COSC 2316 Multimedia and Web 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. Prerequisite: COSC 1418. Lec 3, Cr 3

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: COSC 2318, MATH 2314, and MATH 2342. Lec 3, Cr 3

COSC 2318 Programming Structures II
A programming intensive course to deepen the concepts of data structures such as queues, stacks, trees, lists, tables, user-defined structures/records, files, and Input/Output. Programming style leading to modularity, reusability and documentation of procedures is practiced. Recursive and non-recursive algorithms error detection and recovery, program testing and their performance evaluation are put into practice via several projects of moderate complexity. Examples of algorithms taken cover relevant topics from numerical methods and the field of business. Prerequisites: COSC 1418 and MATH 1348. Cannot receive credit for both COSC 3300 and COSC 2318. Lec 3, Cr 3

COSC 3310 Systems Programming and Concurrent Processes
This assembly language intensive course introduces the student to structure of computer systems and machine language and operating systems. Concurrent processes are introduced in terms of process synchronization and communication. Prerequisite: COSC 2312, COSC 2318, MATH 2313, and PHYS 1301. Cannot receive credit for both COSC 3334 and COSC 3310) Lec 3, Cr 3

COSC 3325 Digital Logic and Computer Organization
Combinational and sequential logic (reinforced by several lab projects) are studied leading to the design of a processor. Hardware description languages in conjunction with hardwired/microprogramming controllers are studied. Prerequisite: COSC 2312, COSC 2318, MATH 2313, and PHYS 1301 (Cannot receive credit for both COSC 3320 and 3325.) Lec 3, Cr 3

COSC 3330 Networking and Database Management
A modern operating system is used to enable students to perform exercises in multitasking, distributed DBMS, networking, and user interfaces. Computer networking and network programming, and concepts of computer graphics are introduced. Prerequisite or concurrent enrollment: COSC 2312, COSC 2318, MATH 2314, MATH 2342, and PHYS 1302. Lec 3, Cr 3

COSC 3345 Data and Information Structures
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 requirement for Math majors. Students majoring or minoring in both Mathematics and Computer Science cannot receive dual credit for this course. Prerequisite: COSC 2318 and MATH 2313 (credit may only be awarded for COSC 3333, COSC 3345, or COSC 4340.) Lec 3, Cr 3

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. Prerequisite: COSC 2312, COSC 2318, MATH 2313, and PHYS 1301). (Cannot receive credit for both COSC 3336 and COSC 3355.) Lec 3, Cr 3

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. Prerequisite: Approval by the Instructor. 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. Prerequisite: Students must complete a minimum of 27 hours in Computer Science. Lab 3, Cr 1

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 compiler for a miniset of a language are given. Prerequisite: COSC 2312, COSC 2318, COSC 3345, and MATH 2314. (or concurrent enrollment). Lec 3, Cr 3

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 2312, COSC 2318, COSC 3345, MATH 2314 and MATH 2342. Cannot receive credit for both COSC 4331 and 4310. 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 crypotology, network programming, and secure channels. Prerequisites: COSC 3330 and COSC 2317. 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 2318, COSC 3345, and MATH 2314. 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 2318 and COSC 3345. 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. Prerequisites: COSC 2317, COSC 2318, and MATH 2314. 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 Include Image formation, acquisition, calibration, object recognition, video understanding, stereo Imaging, optical flow and classification methods. System Implementation and applications In communications, medicine, robotics and manufacturing are Introduced. Prerequisites: COSC 2317, COSC 4380, COSC 2318 and MATH 2314. Lec 3, Cr 3

COSC 4340 File Structures
Students are introduced to physical data representation, structure and processing of files, partitioned organization, searching, sorting, merging and other file operations, indexing and hashing, and B-trees. Prerequisite: COSC 1418. (Credit may only be awarded for COSC 3333, COSC 3345, or COSC 4340.) 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. Prerequisite:, COSC 3330. Cannot receive credit for both COSC 3335 and COSC 4342. Lec 3, Cr 3

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. Prerequisites: At least a "C" In the following courses: COSC 3330, MATH 2342 and MATH 3373. Lec 3, Cr 3

COSC 4346 Systems Analysis and Design
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. Prerequisite: COSC 1418 (Cannot receive credit for both COSC 3337 and 4346.) Lec 3, Cr 3

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. Prerequisite: COSC 3325. Lec 3, Cr 3

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. Prerequisites: At least a "C" In the following courses: COSC 3345 and MATH 3373. Lec 3, Cr 3

COSC 4355 Expert Systems
This course covers the theoretical and practical principles of modern Expert Systems construction

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. Prerequisite:. COSC 2318 and MATH 2314. (Cannot receive credit for both COSC 3350 and COSC 4360.) Lec 3, Cr 3

COSC 4380 Special Topic
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. Prerequisite: Approval by the Instructor. Lec 3, Cr 3

Computer Information Systems

ITSC 1301 Introduction to Computers
Formerly TCIS 1311 Computer Fundamentals. 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. Prerequisite: None Lec 2, Lab 2, Cr 3

ITSE 1329 Programming Logic and Design
Formerly TCIS 1373 Computer Logic and Flowcharting. 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. Prerequisite: None Lec 3, Cr 3

ITSC 1421 PC-Operating Systems-Windows
Formerly TCIS 1372 Computer Center Operations. Introduction to window-based microcomputer operating systems. Topics include installation and configuration, file management, memory and storage management, peripheral device control, and use of utilities. Prerequisite: COSC 1315 or COSC 1310 Lec 3, Lab 2, Cr 4

ITSE 1431 Introduction to Visual Basic Programming
Formerly TCIS 1401 Introduction to Basic Programming. An 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. Prerequisite: None Lec 3, Lab 2, Cr 4

ITSC 1409 Integrated Software Applications I
Formerly TCIS 1404 Introduction to Microcomputers. Integration of applications from popular business productivity software suites. Instruction in embedding data, linking and combining documents using word processing, spreadsheets, databases, and/or presentation media software. Prerequisite: None Lec 3, Lab 2, Cr 4

ITSC 2435 Application Problem Solving
Formerly TCIS 1405 Advanced Microcomputers. Utilization of current application software to solve advanced problems and generate customized solu-

tions, involving project and software specific curricular area. Prerequisite: ITSC 1409 Lec 3, Lab 2, Cr 4

ITSE 2449 Advanced Visual Basic Programming

Formerly TCIS 1408. Further applications of programming techniques using Visual BASIC. Topics include file access methods, data structures and modular programming, program testing and documentation. Prerequisite: ITSE 1431 Lec 3, Lab 2, Cr 4

ITSC 1425 Personal Computer Hardware

(Formerly TCIS 1410 PC and LAN Maintenance) 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. Prerequisite: ITSE 1431 Lec 3, Lab 2, Cr 4

ITSE 1350 System Analysis and Design

Formerly TCIS 2316 Business Systems Design. Comprehensive introduction to the planning, design, and construction of computer information systems using the systems development life cycle and other appropriate design tools. Prerequisite: ITSE 1418 Lec 2, Lab 2, 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 a database; design and generate tables, forms, and reports; and devise and process queries. Lec 3, Cr 3

ITSW 2365 Practicum (or Field Experience) – Data Processing Technology/Technician

Formerly TCIS 2328 Computer Information Systems Field Project. 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. Prerequisites: ITSE 2451 and ITSE 1350 Lec 3,, Cr 3

ITSE 1418 Introduction to Cobol Programming

Formerly TCIS 2401. 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 files. Prerequisite: None Lec 3, Lab 2, Cr 4

ITSE 2409 Introduction to Data Base Programming

Formerly TCIS 2404 Data Base Concepts. Application development using database applications using a structures query language; create queries and reports from database tables, and create documentation. Prerequisite: None Lec 3, Lab 2, Cr 4

POFI 2431 Desktop Publishing for the Office

Formerly TCIS 2414 Computer Graphics. 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. Prerequisite: ITSC 1409 Lec 3, Lab 2, Cr 4

ITSE 1414 Introduction to RPG Programming

Formerly TCIS 2420 RPG II Programming. Introduction to computer programming using RPG. Emphasis on the fundamentals of structures design, development, testing, implementation, and documentation. Includes language syntax, data and file structures, input/output devices, and files. Prerequisite: ITSE 1418 Lec 3, Lab 2, Cr 4

ITSE 2451 Advanced Cobol Programming

Formerly TCIS 2424 Advanced COBOL. Further applications of programming techniques using COBOL, including file access methods, data structures and modular programming, program testing and documentation. Prerequisite: ITSE 1418 Lec 3, Lab 2, Cr 4

Criminal Justice (CJSA, CRIJ)

CJSA 2388 Criminal Justice External Learning Experience

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

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 crimes; 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 crimes 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 juveniles processed through Texas juvenile courts. Prerequisites: ENGL 1302 with grade of "C" or better. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: ENG: 1302 with a grade of "C" or better. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 2313 Correctional Systems and Practice

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. Prerequisite: ENGL 1302 with grade of "C" or better. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: ENGL 1302 with grade of "C" or better. Concurrent enrollment will be accepted with approval of instructor. Lec 3,

Cr 3

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. Prerequisite: ENGL 1302 with grade of "C" or better. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 3302 Current Literature & 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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 3315 Legal Aspects of Evidence
Critically examines the legal controls on police officers, 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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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' rights, and validity of conviction. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 3345 Correctional Administration
Fundamental concepts of management, organization, and administration as specifically applicable to correctional institutions, field services, and community-based corrections. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 4301 Practicum-Field Experiences
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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 4311 Advanced Police Organization and Administration
In-depth discussion of organizational and administrative theory, comparative discussion of philosophies utilized in business and public administration with potential relationships to police organizations, and the methodology of societal trends affecting criminal justice administration. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 4362 Special Topics in Criminal Justice
Gives advanced undergraduate students 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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

CRIJ 4370 Senior Seminar in Criminal Justice 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. Prerequisite: Six hours of sophomore English. Concurrent enrollment will be accepted with approval of instructor. Lec 3, Cr 3

Dance (DANC)

DANC 1241 Ballet I
Introduction to technique, theory and vocabulary of classical ballet. Previous ballet experience necessary. Lab 3, Cr 2

DANC 1242 Ballet II
A continuation of DANC 1341. Prerequisite: DANC 1241 or equivalent skills. Lab 3, Cr 2

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. Lab 3, Cr 2

DANC 1252 Theatre Dance II
A continuation of DANC 1351. Prerequisite: DANC 1241 or equivalent skills. Lab 3, Cr 2

DANC 2241 Ballet III
A continuation of DANC 1342. Prerequisite: DANC 1242 or equivalent skills. Lab 3, Cr 2

DANC 2242 Ballet IV
A continuation of DANC 2241. Prerequisite: DANC 2241 or equivalent skills. Lab 3, Cr 2

DANC 2251 Theatre Dance III
A continuation of DANC 1352. Prerequisite: DANC 1252 or equivalent skills. Lab 3, Cr 2

DANC 2252 Theatre Dance IV
A continuation of DANC 2251. Prerequisite: DANC 2251 or equivalent skills. Lab 3, Cr 2

Diagnostic Medical Sonography (DMSO)

DMSO 1342 Intermediate Acoustical 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 instrument 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 Pathophysiology
A study of the pathology and pathophysiology of the abdominal structures 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 1441 Ultrasound I
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 2342 Ultrasound III
This course emphasizes 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 patient history and laboratory data as it relates to ultrasound; and select appropriate transducer for area of interest. Lec 2, Lab 4.

DMSO 2343 Advanced Acoustical 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 2253 Sonography III
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 structures; demonstrate appropriate scanning technique 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 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 2441 Ultrasound II
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 structures; 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.

DMSO 1166 Practicum II
7 hours per week (21 hours per week in summer)

DMSO 1167 Practicum III
7 hours per week (21 hours per week in summer)

DMSO 1266 Practicum I
16 hours per week

DMSO 1267 Practicum IV
16 hours per week

DMSO 2166 Practicum V
7 hours per week (21 hours per week in summer)

DMSO 2167 Practicum VII
7 hours per week (21 hours per week in summer)

DMSO 2266 Practicum V
16 hours per week
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. As outlined in the learning plan, the student will master the theory, concepts, and skills involving the tools, materials, equipment, procedures, regulations, laws, and interactions within and among political, economic, environmental, and legal systems associated with the workplace; demonstrate ethical behavior, safety practices, interpersonal and teamwork skills, appropriate verbal and written communications in the workplace.

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 Air Conditioning (HVAC) Troubleshooting and Repair
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 Mechanics and Repairer
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. Prerequisites: DFTG 1405, DFTG 1409, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1444 Pipe Drafting
A study of pipe fittings, symbols, specifications and their applications to a piping process system. This application will be demonstrated through the creation of symbols and their usage in flow diagrams, plans, elevations, and isometrics. Prerequisites: DFTG 1405, DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1448 Topographical Drafting
A course in map drafting. Emphasis plotting of surveyors' field notes, plotting elevations, contour drawings, plan and profiles, and laying out traverses. Prerequisites: DFTG 1405, DFTG 1409, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1452 Intermediate CAD
A continuation of practices and techniques used in basic computer-aided drafting, emphasizing batched files, scripted files, customized program menus, and extracted attributes. Introduction to three-dimensional drafting. Prerequisites: DFTG 1405, DFTG 1409, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1454 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. Prerequisites: DFTG 1417, DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1456 Descriptive Geometry
Examination of the graphical solution to problems involving points, lines, and planes in space. Prerequisite: DFTG 1405. Lec 3, Lab 3, Cr 4

DFTG 1458 Electrical/Electronics Drafting
A study of the principles of layout of electrical and electronic drawings, stressing modern representation used for block diagrams, schematic diagrams, logic diagrams, wiring/assembly drawings, printed circuit board layouts, motor control diagrams, power distribution diagrams, and electrical one-line diagrams. Prerequisites: DFTG 1405, DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1470 Drafting Computations
This is a course in basic computational skills related to various drafting areas. The course covers discipline-specific elements of basic math, geometry, algebra, and trigonometry and includes using the calculator and the computer as problem-solving tools. Lec 3, Lab 3, Cr 4

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. Prerequisites: DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 1493: Special Topics: Wood Design and Drafting
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. Special emphasis on wood design and drafting. Prerequisites: DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 2386 Internship
An experience external to the college for an advanced student 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 course will also involve an Exit Exam covering all Drafting Core courses. Prerequisites: All DFTG core courses completed.

DFTG 2410 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. Prerequisites: DFTG 1405, DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

D*FTG 2432 Advanced CAD*

Exploration of the use of system customization for drawing production enhancement and the principles of data manipulation. Presentation of advanced applications, such as 3-D object creation and linking graphical entities to external nongraphic data. Prerequisites: DFTG 1405, DFTG 1409, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 2440 Solid Modeling/Design

A computer-aided modeling course. Development of three-dimensional drawings and models from engineering sketches and orthographic drawings and utilization of three-dimensional models in design work. Prerequisistes: DFTG 1405, DFTG 1409, DFTG 1470. Lec 3, Lab 3, Cr 4

DFTG 2448 Plane Surveying

Plane surveying includes use of surveying instruments, basic measuring procedures, vertical and horizontal control, and traverse closure. Prerequisites: DFTG 1448, DFTG 1452 or DFTG 2440, DFTG 1470. Lec 3, Lab 3, Cr 4

Drama (DRAM)

DRAM 1310 Introduction to Theatre

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 Theatre

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)

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, Keyenesian and neoclassical models of the economy; the Federal Reserve; fiscal and monetary policy; the balance of payments; economic growth and development. Open only to students who have completed all required developmental courses in reading and/or writing as assessed by the University. Lec 3, Cr 3

ECON 2302 Microeconomics

Introduction to price theory. A detailed study of markets emphasizing the themes of efficiency and equity. 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 developmental courses in reading and/or writing as assessed by the University. Lec 3, Cr 3

ECON 3352 Intermediate Microeconomic Theory

The theory of consumer demand and the theory of the firm. Supply and demand analysis, distribution theory and imperfect competition. Prerequisite: Admission to upper division. Lec 3, Cr 3

ECON 4310 Comparative Economic Systems

The major types of economics will be described to show how different economic and social arrangements are used to achieve full employment, price stability, equitable income distribution, and economic growth. Prerequisite: Admission to upper division. 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. Prerequisite: Admission to upper division. Lec 3, Cr 3

ECON 4359 History of Economic Thought

A survey is made of the entire field of economics. Prescientific, classical, and contemporary works are studied to understand the development of economic theory and its current direction and scope. Prerequisite: Admission to upper division. Lec 3, Cr 3

Education (BILS, EDBI, EDCI, EDEC, EDLI, EDMG, EDSC, EDSL)

Bilingual Education – Spanish–(BILS)

BILS 3310 Emergent Literacy in the Bilingual Classroom

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 a bilingual classroom. Taught in Spanish. Field experience is required. Prerequisites: EDCI 4301, 4302, 4304, EDEC 4385, and SPAN 3330, 4310. Lec 3, Cr 3

BILS 3312 Teaching Reading in the Bilingual Classroom

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. Prerequisite: BILS 3310 and SPAN 4368. Lec 3, Cr 3

BILS 3314 Teaching the Language Arts and Social Studies

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. Field experience is required. Prerequisites: BILS 3312. Lec 3, Cr 3

BILS 3316 Assessment in the 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. Prerequisites: BILS 3310 and BILS 3312. Lec 3, Cr 3

EDBI 4608 Student Teaching EC-4 Bilingual Generalist

Formerly EDCI 4611. This course places students in EC-4 bilingual 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 se-

mester, all day, Monday through Friday placement.

Education — Curriculum and Instruction (EDCI)

EDCI 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

EDCI 4203 Technology and the School Curriculum
Students will understand the use of technology applications in classroom administration, instruction and evaluation. They will use technologies as a learning media to enhance instructional learning in all content areas. Learning with technology and using it as a tool are emphasized. Prerequisite: EDCI 4301. Lec 2, Cr 2

EDCI 4301 Foundations of Education in a 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. Prerequisite: Admission to Teacher Education. Lec 3, Cr 3

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

EDCI 4304 Instructional Planning and Curriculum Development
Formerly EDCI 4305. This field-based course presents principles of 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. Prerequisite: EDCI 4301, 4302 and concurrent enrollment in EDCI 4305. Lec 3, Cr 3

EDCI 4305 Instructional Methodology and Classroom Management
Formerly EDCI 4306. 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. Prerequisite: EDCI 4301, 4302 and concurrent enrollment in EDCI 4304. Lec 3, Lab 3, Cr 3

EDCI 4310 Student Teaching
– ESL
This course must be taken by all undergraduate student teachers working toward an English-as-a-Second-Language endorsement for teaching in ESL programs. The course requires observation and teaching in a public school ESL classroom for six weeks full-time, Monday through Friday. This work is done under the direction of a fully certified teacher of the class to which the student is assigned. Periodic observations and evaluations are done by the course instructor. Weekly seminars and individual conferences are a required part of the course. Prerequisite: Approval by the Teacher Education Committee. Student must also be enrolled in EDCI 4311 or EDCI EDSC 4398.

EDCI 4311 Student Teaching
Formerly EDCI 4311 and 4312. This course places students in EC-4 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 half semester, all day, Monday through Friday placement, and must be enrolled in EDCI 4398. Prerequisite: Approval by the Teacher Education Committee and concurrent enrollment in EDSC 4398. Lec 1, Cr 3

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

EDCI 4320 Post Baccalaureate Internship: Elementary/ Secondary
Supervised classroom teaching and seminars designed to relate to classroom teaching/learning experience to corresponding educational theory applicable to all educational levels. Prerequisite: Departmental approval.

EDCI 4321 Post Baccalaureate Internship: Elementary/ Secondary
Supervised classroom teaching and seminars designed to relate to classroom teaching/learning experience to corresponding education theory applicable to all educational levels. Prerequisite: Departmental approval.

EDCI 4328 Methods and Techniques of Teaching Music in the Elementary Schools
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. Prerequisite: MUSI 1308 and 1312. Lec 3, Cr 3

EDCI 4329 Methodology and Technology Teaching Music in Secondary School

EDCI 4608 Student Teaching EC-4
Formerly EDCI 4311 and 4312. This course places students in EC-4 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 half semester, all day, Monday through Friday placement. Prerequisite: Approval by the Teacher Education Committee. Lec 1, Cr 3

EDEC 4385 Growth and Development of Young Children (Formerly EDEC 4390)
Emphasis on developmental and growth characteristics from 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, readings, lectures; class activities Include day care as well as TEA accredited schools for pre-kindergarten and kindergarten children. Fifteen hours of field
experience required. Lec 3, Cr 3

EDEC 4389 The Environment and Early Childhood
Formerly EDEC 4391. This course 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, assess-

ment, classroom guidance, Interdisciplinary lesson planning, culture, language and special needs. Fifteen hours of field experience will be required In addition to the 45 contact hours of classroom Instruction. Prerequisites: EDEC 4385, EDEC 4386, EDEC 4387 Lec 3, Cr 3

EDLI 3310 Emergent Literacy: Early Childhood Kindergarten
Formerly READ 3310. Students will understand early development of oral language, writing, reading, and viewing. Students plan and present lessons in oral language, phonological and phonemic awareness, alphabetic principle, and multicultural children's literature lessons. Multi-sensory, developmentally appropriate, and English as a Second Language practices are applied. Field experience is required. Prerequisites: EDCI 4301, 4302, 4304, 4305. Lec 3, Cr 3

EDLI 3323 Foundations of Beginning Literacy
Formerly READ 3323. Students focus on best practices in beginning reading and writing. Students plan and present lessons on decoding, comprehension, fluency development, children's literature, and beginning writing lessons. They apply techniques for teaching English as a Second Language learners and diverse student populations. Field experience is required. Prerequisite: EDLI 3310, EDCI 4301, 4302 and 4304. Lec 3, Cr 3

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 writing process, written conventions, and teaching methods for English as a Second Language in designing lessons. Field experience is required. Prerequisite: EDLI 3323. Lec 3, Cr 3

EDLI 3329 Literacy and Assessment
Formerly READ 3329. Students use state-mandated and other formal and informal assessments to help plan instruction based on their understanding of normal literacy development. They determine independent, instructional, and frustrational levels of reading and analyze miscues to plan instruction and intervention. Field experience is required. Prerequisite: EDLI 3323. Lec 3, Cr 3

EDLI 3341 Children's Literature
Formerly READ 3341. A survey of books and related materials for the elementary/middle school age; principles of book selections; intensive reading of books required. Prerequisites: Admission to Teacher Education May be taken concurrently with EDLI 3324. Lec 3, Cr 3

EDLI 3343 Foundations 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. Prerequisites: EDCI 4301, 4203, EDMG 4341, 4342, 4343. Lec 3, Cr 3

EDLI 4329 Assessment of Developing Literacy
Formerly READ 3329. This course focuses on formal and informal assessment to plan and implement instruction for all learners. Students develop a case study based on their work with a student's assessment and intervention activities. Field-based experience is required. Prerequisite: EDLI 4351. Lec 3, Cr 3

EDLI 4347 Teaching Language Arts to Students with Different Needs
Formerly READ 3327. 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. Prerequisite: EDLI 3343 and Admission to the School of Education. Lec 3, Cr 3

EDLI 4350 Adolescent Literature
Formerly READ 3351. This course focuses on different genres of literature in a 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. Prerequisites: Admission to School of Education and EDLI 4329. Lec 3, Cr 3

EDLI 4351 Reading in the Content Area
Formerly READ 4351. 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 experience is required. Prerequisite: Admission to School of Education. Lec 3, Cr 3

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. Prerequisites: Admission to School of Education, EDCI 4301. Additional prerequisites for middle school majors: EDMG 4342, 4343 and 4344. Lec 3, Cr 3

EDLI 4367 Teaching Reading to the English Language Learner
Formerly READ 4367. 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 (4-8) (EDMG)

EDMG 4341 Understanding Learners in the Middle Grades
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. Prerequisite: Admission to School of Education. Lec 3, Cr 3

EDMG 4342 Instructional Planning and Curriculum in the Middle Grades
Formerly EDCI 4305. 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 experience is required. Prerequisites: EDMG 4341, concurrent enrollment in EDMG 4343. Lec 3, Cr 3

EDMG 4343 Methods and Classroom Management in the 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 environ-

ments. Field experience is required. Prerequisites: EDMG 4341, concurrent enrollment in EDMG 4342. Lec 3, Cr 3

EDMG 4345 Teaching English Language Arts in the Middle Grades

Formerly EDCI 4309. 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. Prerequisites: EDMG 4341, 4342 and 4343. Lec 3, Cr 3

EDMG 4346 Teaching Science and Mathematics in the Middle Grades

This course emphasizes teaching mathematics and science using standards-based approaches and processes with diverse student populations at the middle grade level. The course includes student-centered approaches to teaching mathematics and science including assessment models and processes. Field-based experience is required. Prerequisites: EDMG 4341, 4342 and 4343. Lec 3, Cr 3

EDMG 4347 Teaching English Language Learners in the Middle Grades

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. Prerequisites: EDMG 4341, 4342 and 4343, ENGL 4328. Lec 3, Cr 3

EDMG 4648 Student Teaching in the Middle Grades

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. Prerequisites: Approval of the Student Teaching Office. Lec 1, Cr 6

Education - Secondary (8-12) (EDSC)

EDSC 4303 Understanding Learners 8-12

Formerly EDCI 4303. 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. Prerequisites: EDCI 4301 or concurrent enrollment. Lec 3, Cr 3

EDSC 4374 Designing Instruction for Grades 8-12

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. Prerequisites: EDCI 4301, EDSC 4303. Lec 3, Cr 3

EDSC 4375 Strategies for Delivering Instruction in Grades 8-12

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. Prerequisites: EDCI 4301, EDSC 4303. Lec 3, Cr 3

EDSC 4376 Ethical Standards for Classroom Management in Grades 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. Prerequisites: EDCI 4301, EDSC 4303. Lec 3, Cr 3

EDSC 4377 Methods and Techniques of Teaching Art in the 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, 1312, 1316, 3381 and 3382

EDSC 4378 Teaching Mathematics in the 8-12 Classroom

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. Prerequisite: Admission into School of Education. Lec 3, Cr 3

EDSC 4380 Teaching ESL 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. Prerequisite: EDSC 4375. Lec 3, Cr 3

EDSC 4398 Student Teaching

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. Prerequisites: Approval by the Teacher Education Committee and concurrent enrollment in EDCI 4311. Lec 1, Cr 3

EDSC 4641 Student Teaching 8-12

Formerly EDCI 4641. 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. Prerequisite: Approval by the Teacher Education Committee. Lec 1, Cr 6

EDSL 4306 Content Area Methods in the ESL Classrooms

This course focuses on the current methods and theories of planning and teaching elementary math, science, and social studies for 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. Prerequisites: EDCI 4302, EDCI 4304, and EDCI 4305

EDSL 4307 Teaching ESL in the PK-1 Classrooms

Best practices in teaching English as a Second Language are stressed. Topics covered include basic principles of teaching a second language, approaches for teaching the EC-4 learner and assessing language proficiency. Field experience is required. Prerequisites: EDCI 4301, 4302. Lec 3, Cr 3

EDSL 4308 Teaching ESL in the 2nd-4th Grade Classrooms

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. Prerequisites: EDCI 4301, 4302. Lec 3, Cr 3

Electrical, Electronic and Communications Engineering Technology (EECT)

EECT 1367 Electronics Practicum 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 Electronics Practicum 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 Electronics Practicum 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

EECT 2439 Communications Circuits
A study of communications systems with emphasis on amplitude modulation, frequency modulation, phase modulation, and digital pulse modulation. Discussion of several types of modulators, demodulators, receivers, transmitters, and transceivers. Cr 4

Electrical Engineering (ELET)

ELET 1410 Introduction to Electrical Technology
Introduction to principles of electricity, magnetism, and power, covering AC and DC circuits and properties. Basic circuit analysis and design techniques for digital logic circuits. Practice in fabrication and testing of electronic circuits and assemblies. Lec 3, Lab 3, Cr 3

ELET 2140 Electronic Engineering Technology Laboratory
Laboratory application of circuit design, testing, simulation, and components. Covers application of analog and digital theory. Emphasis on industrial control systems, fault diagnosis, trouble shooting, repair and design of systems. Corequisite: ELET 2330. Lab 3, Cr 1

ELET 2301 Electrical Systems Technology
Electrical circuits and machines, circuit elements, voltage, current and power. Elementary transients, poly-phase circuits. Types and characteristics of DC motors, AC motors and transformers. Prerequisite: ELET 1410. Lec 2, Lab 3, Cr 3

ELET 2330 Electronic Systems Technology
Electronic devices with applications in digital and analog circuits. Emphasis on modern industrial control systems, data acquisition and conversion, signal processing, basic circuits and instruments, measurements and feedback systems. Prerequisite: ELET 2301. Lec 3, Cr 3

ELET 3314 Instrumentation and Control
Computer-based instrumentation and control systems including transducers, sensors, signal conversion and conditioning, amplification, filtering and offsetting. Prerequisite: ELET 2330. Lec 2, Lab 3, 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, subroutine and interrupt processing. Prerequisite: ELET 2140. 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. Prerequisite: ELET 3412. Lec 3, Lab 3, Cr 4

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. Prerequisite: ELET 2330. Lec 3, Lab 3, 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 discreet time domain analysis and design and computer-based design and analytical tools. Prerequisite: ELET 3414 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 testing techniques. Prerequisite: ELET 2140. Lec 3, Lab 3, Cr 4

Electronics (CETT, CPMT, EECT, IEIR, INTC, LOTT, RBTC)

CETT 1321 E. Fabrication (Capstone)
A study of electronic circuit fabrication techniques including printed circuit boards, wire wrapping, bread boarding, and various soldering techniques. Lec 0 Lab 3 Cr 3

CETT 1425 Digital Fundamentals
An entry-level course in digital electronics covering number systems, binary mathematics, digital codes logic gates, Boolean algebra, Karnaugh maps, and combinational logic. Emphasis on circuit logic analysis and troubleshooting digital circuits. Lec 3 Lab 4 Cr 4

CETT 1429 Solid State Devices
A study of diodes and bipolar semiconductor devices, including analysis of static and dynamic characteristics, bi techniques, and thermal considerations of solid state devices. Lec 3 Lab 4 Cr 4

CETT 1441 Solid State Circuits
A study of various semiconductor devices incorporated in their circuits and their applications. Emphasis on circuit construction, measurements and analysis. Lec 4 Lab 4 Cr 4

CETT 1445 Microprocessor
An introductory course in microprocessor software and hardware; its architecture timing sequence, operation, and programming; and discussion of appropriate software diagnostic language and tools. Lec 3 Lab 4 Cr 4

CEET 2435 Advanced Microprocessor
An advanced course utilizing the microprocessor in control systems and interfacing. Emphasis on microprocessor hardware and implementation of peripheral interfacing. Lec 3 Lab 4 Cr 4

CPMT 1411 Computer Maintenance
A study of the information for the assembly of a microcomputer system. Emphasis on the evolution of microprocessors and microprocessor bus structure. Lec 3 Lab 4 Cr 0

IEIR 1402 DC Circuits
Fundamentals of direct current including Ohm's Law. Emphasis on methods of analyzing series, Parallel, and combination circuits including measurement devices. Lec 3 Lab 4 Cr 4

IEIR 1404 AC Circuits
Fundamentals of alternating current including series and parallel circuits, phasors, and capacitive and inductive networks. Discussion of circuit analysis and measurement. Lec 3 Lab 4 Cr 4

IEIR 1406 Electrical Motors
Fundamentals of single phase and three phase alternating current motors and direct current motors including operating principles, Characteristics, application, selection, installation, maintenance, and troubleshooting. Lec 3 Lab 4 Cr 4

IEIR 1410 Motor Controls
General principles and fundamentals of electrical controls and control components including starters, troubleshooting techniques, various protective devices, schematics, and diagrams. Lec 3 Lab 4 Cr 4

INTC 1307 Electronics Test Equipment
A study of the theory and application of analog and digital meters, oscilloscopes, frequency generation, frequency measurements, and special measuring instruments. Emphasis on accuracy and limitations of instruments and calibration techniques. Lec 3 Lab 0 Cr 3

RBTC 1401 Progammable Controllers
A study in programmable controllers. Topics include processor units, numbering systems, memory organization, relay type devices, timers, counters, data manipulators, and programming. Lec 3 Lab 3 Cr 4

LOTT 1401 Introduction to Fiber Optics
An introductory course in fiber optics and its application including advantages of fiber, light transmission in fiber, types of fiber, sources, detectors, and connectors. Lec 3 Lab 3 Cr 4

RBTC 1405 Robotics Fundamentals
An introduction to flexible automation. Topics include installation, repair, maintenance, and development of flexible robotic Manufacturing systems. Lec 3 Lab 3 Cr 4

Emergency Medical Technology (*EMSP*)

EMSP 1019 CPR 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 1401 Emergency Medical Technician – Basic
Introduction to the level of Emergency Medical Technician (EMT) – Basic. Includes all the skills necessary to provide emergency medical care at a basic level with an ambulance service or other specialized services. Lec 3 Lab 4 Cr 4

EMSP 1266 Practicum/Field Experience – Emergency Medical Technology/Technician 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. 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 the knowledge and skills required to reach competence in performing patient assessment and airway management. Lec 2 Lab 2 Cr 3

EMSP 1267 Practicum/Field Experience–Emergency Medical Technology/Technician 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. This course may be repeated if topics and learning outcomes vary. Lec 0 Lab 16 Cr 2

EMSP 1209 Emergency Medical Dispatching
Study of the 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 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 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 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 2345 EMS Supervision / Management
Instruction, literary review, group discussion, and case study on topics pertinent to the emergency medical service (EMS) field supervisor or manager. Lec 2 Lab 2 Cr 3

EMSP 1147 Pediatric Advanced Life Support
A course in a system of protocols for management of the pediatric patient experiencing difficulties in medical and/or trauma related emergencies. Lec 0 Lab 3 Cr 1

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

EMSP 2266 Practicum/Field Experience-Emergency Medical Technology/Technician-III
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 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 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 emer-

gencies. Lec 3 Lab 2 Cr 4

EMSP 2267 Practicum/Field Experience-Emergency Medical Technology/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 may be repeated if topics and learning outcomes vary. Lec 0 Lab 16 Cr 2

Engineering (ENGR)

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. Prerequisite: MATH 1316 or 1348 or 2312 Lec 2, Cr 2

ENGR 1407 Plane Surveying

Use and care of instruments, note keeping, distance measurements, traverse surveying, areas, angles and elevations, legal principles, field problems, earthwork, volumes, triangulation and base lines. Prerequisite: MATH 1316 or high school equivalent. Lec 2, Lab 4, Cr 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, communications, visualization, graphics and illustration, machine and hand shop tools and safe practices in machine, tool and lab usage. Prerequisite: Concurrent enrollment in ENGL 1301 and MEET 1301. Lec 3, Cr 1

****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 and communications settings. Prerequisite: ENGL 1301, ENGT 1101 and MEET 1301. Concurrent enrollment in ENGL 1302. 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. Prerequisite: MATH 2313 or ENGT 2341. Lec 3, Cr 3

ENGT 2341 Applied Math for Technology I

*Application of interactive and computer based software for solving problems in dynamic systems. May not be taken for credit toward graduation by students pursuing baccalaureate degree in Engineering Technology. Prerequisite: MATH 1348. Lec 2, Lab 3, Cr 3

****ENGT 2342 Applied Math for Technology II***

Continuation of ENGT 2341. Prerequisite: ENGT 2341. Lec 2, Lab 3, Cr 3

****ENGT 2401 Engineering Materials***

Introduction to the structure, properties, processing, destructive and nondestructive 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 1348 and CHEM 1305/1105. Lec 3, Lab 3, Cr 4

ENGT 3301 Advanced Analytical Math

Application of computer systems for the solution of advanced calculus and differential equation problems. 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 electro-mechanical 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. Prerequisite: ENGT 3301. Lec 3, Cr 3

ENGT 3320 Engineering Economics

Analysis of the economic performance of Manufacturing systems, analysis of projects and selection from among alternatives. Covers basic cost classifications, profit and productivity, internal rate of return and time value concepts. Lec 3, Cr 3

ENGT 3325 Junior Lab 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.

ENGT 4140 Classical Foundations of Science and Technology

Seminar course on classical writers of various cultures with a focus on those contributing to modern thought, especially that of science and technology, including Archimedes, Aeschylus, Thucidides, Newton, and others and examples of engineering and technical developments in various cultures. Prerequisite: Senior standing and consent of advisor. Lec 4, Cr 4

ENGT 4241 Senior Design Project I

Project definition, task analysis and planning, project control. Begins work on industry-based major design project. Prerequisite: Senior standing and consent of advisor. Lab 6, Cr 2

ENGT 4242 Senior Design Project II

Continuation of ENGT 4241. Completion of industry-based design project. Prerequisite: ENGT 4241. 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.

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, Cr 3

English (ENGL)

ENGL 0101 Developmental Writing Lab

Developmental course. Practice in expository and argumentative essay writing for students who have failed the writing portion of the 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, and 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. Prerequisite: Appropriate assessment score in writing or grade of A, B, or C in ESOL 0318. Lec 3, Cr 3

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 effective 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. Prerequisite: Grade of B or C in ENGL 0320 or appropriate assessment score in writing. Lec 3, Cr 3

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. Prerequisite: A grade of A in ENGL 0320, grade of A, B, or C in ENGL 0321, or placement based on assessment scores. Lec 3, Cr 3

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. Lec 3, Cr 3

ENGL 2311 Technical and Business 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. Prerequisite: ENGL 1301. Lec 3, Cr 3

ENGL 2332 World Literature I
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. Prerequisite: ENGL 1301 and ENGL 1302 or ENGL 2311. Lec 3, Cr 3

ENGL 2333 World Literature II
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. Prerequisite: ENGL 1301 and ENGL 1302 or ENGL 2311. Lec 3, Cr 3

ENGL 3301 Medieval Literature
A study of various types of medieval literature, including epic, romance, and allegory, with special emphasis on Middle English writers. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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. Prerequisites: ENGL 1301, 1302, and 2332 or 2333. Must be taken before or concurrent with first upper-level English course work. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3306 English 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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3309 Major British Authors
A course that introduces students to the characteristics of major historical periods through the study of representative British literary works. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3312 Survey of American Literature I
A chronological study of the principal authors, their works and the trends in American literature, from the Colonial period to the Civil War. Prerequisite: ENGL 1301, 1302 and 2332 or 2333. Lec 3, Cr 3

ENGL 3313 Survey of American Literature II
A chronological study of the principal authors, their works and trends in American literature from the Civil War to the present. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3319 Introduction to Descriptive Linguistics
An introduction to linguistic science, primarily phonetics, phonology, syntax, morphology, and the history of English. Prerequisite: ENGL 1301, 1302, and 2332 or 2333 Lec 3, Cr 3

ENGL 3324 Victorian and Modern British Poetry
A study of British poetry from 1832 to the present. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3330 English Grammar
Theories of grammar with practical applications. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Prerequisite for bilingual/bicultural students: ENGL 3319. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3343 American Realism and Naturalism
A study of American writing from 1865 to 1925 with an emphasis on fiction from such writers as Howells, Twain, Wharton, Crane, Dreiser, and Anderson. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3344 American Poetry to 1900
A study of American poetry from Anne Bradstreet to Emily Dickinson. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 3346 Twentieth-Century American Novel
A study of major American novelists and the genre since 1900. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 4301 Shakespeare
A study of representative plays in comedy, history, and tragedy. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 4316 Mexican American Literature
A study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflection in this literature. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 4322 Creative Writing I
A course in writing poetry. Students will explore the elements of poetry by writing original poems and examining published poems. At the professor's discretion, students may have opportunities to practice writing in other genres, such as short fiction and short drama. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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 current cultural and ethical concerns. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

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. Prerequisite: ENGL 1301, 1302, and 2332 or 2333. Lec 3, Cr 3

ENGL 4350 English Studies: The Theory and Practice
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. Prerequisite: 24 semester hours of upper-level English. Lec 3, Cr 3

English As A Second Language (AESL AND RDCS)

(Note: The following courses are not academic credit courses and are not eligible for financial aid.)

RDCS 1000 Introduction to English Skills
Multi-syllabus approach links grammar, communication skills, functions and topics covering listening, speaking, reading and writing as well as pronunciation and vocabulary. Intro level designed for the student who has never studied and has limited experience with English. Pre-TOEFL score = below 160

RDCS 1001 Beginning English Skills
Multi-syllabus approach linking grammar, communication skills, functions and topics covering listening, speaking, reading and writing as well as pronunciation and vocabulary. Beginning level is for students who have had some English instruction and understand some of the basics. Pre-TOEFL score = 160 to 170.

RDCS 1004 AND RDCS 1005 Intermediate English Skills and High-Intermediate Skills
This level builds on and extends the foundations for accurate and fluent communication established in previous levels. It extends grammatical, lexical and functional skills, enabling learners to take part in general communication through the wide variety of stimulating and challenging activities. It is recommended that Intermediate English Lab be taken with this course. Pre-TOEFL score = 170-190/190-200

AESL 0040 Advanced English Skills
Higher level comprehension skills are developed, with listening and reading activities taken from authentic sources such as narratives, lectures, commercials and involve cross-cultural themes. It is recommended that Advanced English Lab be taken with this course. Pre-TOEFL score = over 200

AESL 0041 Beginning Grammar
Grammar in a communicative setting. Beginner level.

AESL 0042 and AESL 0043

Intermediate Grammar and High-Intermediate Grammer
Grammar in a communicative setting. Intermediate level.

AESL 0044 Advanced Grammar
Grammar in a communicative setting. Advanced level.
AESL 0050 Academic Reading Beginning

AESL 0051 and 0052

Academic Reading Intermediate and High-Intermediate
Understanding and retaining content of academic, technical and business-oriented materials is the focal point of this course. Academic, business and industry materials, specific to and used in various academic disciplines and occupations will be part of the curriculum. Grammar, vocabulary, language skills and reading strategies are combined to strengthen the reading skills of the academically and professionally oriented student. Intermediate level.

AESL 0053 Academic Reading Advanced
Critical reading strategies as and after the student reads. Reading skills with emphasis on understanding and retaining content of academic, technical and business-oriented materials is the focal point of this course. Academic, business and industry materials, specific to and used in various academic disciplines and occupations will be part of the curriculum. Grammar, vocabulary, language skills and reading strategies are combined to strengthen the reading skills of the academically and professionally oriented student. Advanced level.

AESL 0061 Academic Writing Intermediate
Critical thinking, discussion and writing tasks. The process approach is integrated with the traditional development of various writing forms. Simple outlining and the process of writing, basic essay pattern and organization, culminating in fundamentals of the research paper, outside references and using the library. Intermediate level.

AESL 0062 Academic Writing High Intermediate
Critical thinking, discussion and writing tasks. The process approach is integrated with the traditional development of various writing forms. Simple outlining and the process of writing, basic essay pattern and organization, culminating in fundamentals of the research paper, outside references and using the library. Advanced level.

AESL 0070 International Business English
This is a flexible learner-centered courses of communication skills for people who need English in their day-to-day work. Relevant language skills are developed through a wide range of stimulating, realistic communicative activities and exercises. This course thoroughly covers essential business tasks: writing letters, reports, memos, notes, faxes, phone calls, meetings.

AESL 0071 English for the Secretary
Vocabulary of technical/occupational terms, pronunciation and basic English language structures that are required by secretaries and other office workers for successful on-the-job performance. Oral and written communication skills are stressed. The student learns the English that is needed for their job.

AESL 0072 English for Medical Careers
This course presents a basic and thorough course of English through discussion of all body systems, medical procedures, and related terminology. It is designed for those desiring employment in a health care profession or for individuals who need to improve their English skills in order to talk with their patients and colleagues.

AESL 0073 English for Computer Programming
This is an intermediate course for people who have interest in or are working in computers. The course aims to develop listening, speaking, reading and writing in English with special emphasis on vocabulary acquisition and grammatical accuracy by using a range of authentic texts and listening activities covering everything from the latest applications of computer technology (i.e. virtual reality) to computer processes and components.

AESL 0074 Preparation for the TOEFL
This is a very intensive and complete course that will prepare the student to take the TOEFL. Skill-building areas include reading, writing, listening, speaking and grammar. Vocabulary building is also stressed. This course is helpful to the person who would like to study an intensive general course of English.

AESL 0075 Pronunciation And Vocabulary Development for International Students
A comprehensive pronunciation course that is designed to help students learn rhythm, stress and intonation in addition to improving their pronunciation of English. This course focuses on the typical problems most non-native speakers have with English along with particular problems the individual might have.

Other Language Courses
(Note: The following courses are not academic credit courses and are not eligible for financial aid.)

AESL 0090 Spanish Conversation

– Beginning

AESL 0091 Spanish Conversation – Intermediate

AESL 0092 Spanish Conversation – Advanced

AESL 0093 Spanish for Health Care Professionals

AESL 0094 Spanish for Business – Beginning

AESL 0095 Spanish for Business – Intermediate

AESL 0096 French Conversation – Beginning

AESL 0097 French Conversation – Intermediate

AESL 0098 German Conversation – Beginning

AESL 0099 German Conversation – Intermediate

English As A Second Language (ESOL)

ESOL 0311 Level I – Beginning English Skills
Multi-syllabus approach links grammar, communication skills, functions and topics covering listening, speaking, reading and writing as well as pronunciation and vocabulary. Intro level designed for the student who has never studied and has limited experience with English. Pre-TOEFL score = 160-170

ESOL 0312 Level I – Beginning Grammar
Grammar in a communicative setting. Beginner level.

ESOL 0313 Level II – Beginning Reading

ESOL 0314 Level II – Beginning Writing

ESOL 0315 Level III – Academic Reading Intermediate
Understanding and retaining content of academic materials is the focal point of this course. Grammar, vocabulary, language skills and reading strategies are combined to strengthen the reading skills of the academically and professionally oriented student. Intermediate level.

ESOL 0316 Level III – Academic Writing Intermediate
Critical thinking, discussion and writing tasks. The process approach is integrated with the traditional development of various writing forms. Simple outlining and the process of writing, basic essay pattern and organization, culminating in fundamentals of the research paper, outside references and using the library. Intermediate level.

ESOL 0317 Level IV – Academic Reading High- Intermediate
Critical reading strategies as and after the student reads. Reading skills with emphasis on understanding and retaining content of academic materials is the focal point of this course. Grammar, vocabulary, language skills and reading strategies are combined to strengthen the reading skills of the academically and professionally oriented student. High- Intermediate level.

ESOL 0318 Level IV – Academic Writing High-Intermediate
Critical thinking, discussion and writing tasks. The process approach is integrated with the traditional development of various writing forms. Simple outlining and the process of writing, basic essay pattern and organization, culminating in fundamentals of the research paper, outside references and using the library. High- Intermediate level.

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. Prerequisite. Admission to upper division. Lec 3, Cr 3

FINA 3381 Money and Banking
The components, nature, functions, creation and destruction 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. Prerequisite: Admission to upper division. Lec 3, Cr 3

FINA 3382 Investment Principles
This course covers the basics of investing in stocks and bonds. Topics include buying and selling stocks and bonds both through traditional brokerage firms and on the Internet, how capital markets work, valuation of stocks using financial statement and ratio analysis as well as traditional valuation theory and how to value bonds and understand bond ratings systems. Prerequisite: Admission to upper division and FINA 3380 & BUSI 3341. Lec 3, Cr 3

FINA 3384 Fundamentals of Real Estate
This course provides an understanding of the principles underlying real estate valuation. The course could deal with financial institutions involved in real estate financing, calculating appraisal and legal aspects; and mortgage payments. Prerequisites: Admission to Upper Division or consent of instructor. Lec 3, Cr 3

FINA 3385 Principles of Insurance and Risk Management
Methods to control risks facing individuals and business are analyzed; including the institutions involved in providing insurance. The topics covered include risk analysis, loss prevention, property, casualty and life insurance policies. Prerequisite: FINA 3380. 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: Admission to upper division and FINA 3382. 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: Admission to upper division and FINA 3381. 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. Prerequisite: Admission to upper division and other prerequisites. Will vary depending on specific topics and FINA 3380. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and FINA 3381. Lec 3, Cr 3

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. Prerequisite: FREN 1311 or consent of instructor. Lec 3, Cr 3

FREN 2311 Intermediate French I
A review of the grammar. Emphasis on reading and writing. Prerequisite: FREN 1312 or equivalent skills. Lec 3, Cr 3

FREN 2312 Intermediate French II
A continuation of FREN 2311. Prerequisite: FREN 2311 or equivalent skills. Lec 3, Cr 3

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, underground 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 languages and religion, environmental perception, cultural ecology, and human settlement patterns. Lec 3, Cr 3

GEOG 3320 Cultural Geography for Educators
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 emphasis in the course is given to human cultural diversity. Topics discussed include population distribution and demography, agricultural practices and regions, patterns and processes of religions and their spatial distributions, ethnicity and nations, urban geography and the development of cities, and natural resources and their management. Prerequisite: Junior standing. Lec 3, Cr 3

GEOG 3333 Latin-American Geography
A regional study of the 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 World Resources
A survey of the distribution of world resources, with special emphasis on new and novel solutions to problems of resource scarcity. Topics include food, scenic and recreational resources, and other selected components of the biosphere and lithosphere. Cultural, economic, demographic, and political behaviors of human societies are considered as they affect the world's physical resources. Lec 3, Cr 3

Geology (GEOL)

GEOL 1403 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. Occasional field trips may be required. Lec 3, Lab 3, Cr 4

GEOL 1404 Historical Geology
The geologic history of the earth and its inhabitants as revealed by fossil record with emphasis on North America. Occasional field trips may be required. Lec 3, Lab 3, Cr 4

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. Prerequisite: GEOL 1403 and credit or registration for CHEM 1312. Lec 2, Lab 4, Cr 3

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 German 1311. Prerequisite: GERM 1311 or equivalent skills. Lec 3, Cr 3

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. Prerequisite: GERM 1312 or equivalent skills. Lec 3, Cr 3

GERM 2312 Intermediate German II
A continuation of German 2311. Prerequisite: GERM 2311 or equivalent skills. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 3322 Politics of Developing Nations
Analysis of political institutions and processes with focus on "Third World" nations. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 3323 Introductions 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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 3343 International Politics
A study of the political principles, problems and factors involved in the foreign policies and relations of the nation-state with particular emphasis on the sources and uses of national power and the difficulties in limiting the use of such power. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 3385 Internship
This course is designed for 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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4321 American Constitutional Law: Civil Liberties
A study of the limitations of governmental powers in the United States by use of court cases, with primary emphasis on civil and political rights. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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; executive policy outputs; the relation of the executive to the other elements of the political system. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4366 American Political Parties
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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4369 Latin American Politics
A survey of governmental processes 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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

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. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4372 Classical Political Theory
A study of classical political philosophy from Socrates to Machiavelli. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4373 Modern Political Theory
A study of political philosophy from Machiavelli through the 20th Century. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4374 American Public Policy
An analysis of the formation, implementation, and assessment of selected public policies in America. Prerequisite: GOVT 2301, GOVT 2302. Lec 3, Cr 3

GOVT 4390 Political Science Senior Seminar
This course will help senior students to organize, consolidate and systematically demonstrate their knowledge of American Government, Political Theory, International Relations/Comparative Politics and Public Administration. Lec 3, Cr 3

Health Professions

(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 and Ethics for Health Profession
Introduction to the relationship between legal aspects and 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 Professionals
A study of drug classifications, actions, therapeutic uses, adverse effects, methods of administration client education, and calculation of dosages. Lec 3, Lab 0

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 to 1650
A study of world history to 1650 tracing the rise, decline and renewal of major civilizations, emphasizing those societies which have been in the forefront of human change at any one time. Prerequisite: HIST 1301 and HIST 1302. Lec 3, Cr 3

HIST 2322 World History since 1650
A study of world history since 1650 tracing the rise, decline and renewal of major civilizations, emphasizing those societies which have been in the forefront of human change at any one time. Prerequisite: HIST 1301 and HIST 1302. Lec 3, Cr 3

HIST 2380 Mexican American History
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 the following: a) elements of pre-Columbian roots, b) Spanish/Caribbean cultural, social and political systems, c) Mexican history and heritage and d) their collective impact on the contemporary Hispanic population in United States. Prerequisite: HIST 1301 and HIST 1302. Lec 3, Cr 3

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. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

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 new government through the transformation of American Society by the Jacksonian Era of the Common Man. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 3333 Colonial Mexico, Central and South America
A study of the establishment of Spanish dominion; geography and natural resources; institutional and social development; cultural aspects and contribution. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 3334 Mexico and the Borderlands Through Independence
This course surveys Mexican history with emphasis on pre-Columbian Indians, the Conquest, Spanish colonial institutions, and independence. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 3335 Mexico Since Independence
This course surveys major developments in nineteenth and twentieth century Mexico with emphasis on the early national period, the Reform, the Porfiriato, and the Revolution. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 3340 Texas History
A history of 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. Prerequisite: HIST 1301 and HIST 1302. Lec 3, Cr 3

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. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4313 Twentieth Century America, 1917 to present
A study of the history of the United States from World War I to the present with emphasis on domestic and foreign affairs in their relationship to and effect on each other. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4343 Era of the Sectional Conflict, 1840-1877
United States history from 1840 to 1877 with emphasis upon the development of sectionalism, the breakdown of American political parties, Civil War and Reconstruction. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4344 United States Diplomatic History
A survey of American foreign policy, its implementation and ramifications, and the interaction between the United States and other nations from 1776 to the present, with special emphasis on relations with Mexico. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

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 political and cultural trends of the Latin American nation since independence. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4365 History of the Middle Ages
A study of European Medieval roots to 1500. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4367 History of Early Modern Europe
A study of the transition of European society into modernity in the 16th, 17th, and 18th centuries. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4370 The Renaissance and the Reformation: 1300-1650
A study of the political, social and cultural development of Western Europe from the decline of the Medieval system, through the Age of the New Monarchies, with emphasis on France, Germany and Italy. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4373 History of Spain
An introduction to the rich drama of Spanish history from early cave painters through Reconquista, Empire, and Generation of 98 to European Union. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

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. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4378 German-led Modern Europe
A study of Europe from the late 19th century to present in which Germany has provided the principal model for culture and political change, with a consideration of the roots of this German model back to the start of the 19th century. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4380 History of World War I and II
A history of the causes, course, and outcomes of the two World Wars. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4381 U.S. Military History
A study and analysis of the American military experience from the Revolutionary War through the Persian Gulf War to the present day. This course is specifically designed for ROTC cadets, but is open to other interested students as an elective. Lec 3, Cr 3

HIST 4385 Ancient History
Formerly HIST 4396. A study of the historical foundations of the Middle East, Greece, and Rome. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

HIST 4387 History of Asia and Russia
Formerly HIST 4398. A survey of Asian and Russian history and culture. Prerequisite: Six semester hours of lower division History. Lec 3, Cr 3

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. Prerequisite: The student must have completed all lower division requirements and at least 15 hours of upper division work in History. Lec 3, Cr 3

HIST 4392 World History Senior Seminar
This course will help senior 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. Prerequisite: The student must have completed all lower division requirements and at least 15 hours of upper division work in History. Lec 3, Cr 3

Human Services (THUM)

See THUM Human Services

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

INDS 3303 Culture and Humanity: Human Diversity in 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 practice of field work (in either English or Spanish) for the analysis of the historical, social, economic, cultural, political, folkloric, and linguistic aspects of the U.S.-Mexico border region. Prospects for the future of the borderlands area are addressed. 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. Prerequisite: SPAN 3332 and SPAN 3333 or approval of instructor. Lec 3, Cr 3 Prerequisite: TRSP 3332 or SPAN 3332 and six hours of freshman English. Lec 3, Cr 3

INTG 4367 Interpreting II
Advanced practice in English to Spanish and Spanish to English consecutive and simultaneous interpreting with close attention to terminology and documentation. Prerequisite: SPAN 3332 and SPAN 3333 or approval of instructor. Lec 3, Cr 3 Prerequisite: TRSP 3332 or SPAN 3332 and six hours of Freshman English. Lec 3, Cr 3

Italian (ITAL)

ITAL 1311 Elementary Italian I
A course designed to develop fundamental skills in listening comprehension, speaking, reading and writing, emphasizing conversation, vocabulary acquisition, reading, composition and culture. Lec 3, Cr 3

ITAL 1312 Elementary Italian II
A continuation of Italian 1311. Prerequisite: ITAL 1311 or consent of instructor. Lec 3, Cr 3

Kinesiology (KINE)

KINE 11XX Kinesiology Activity
Instruction in individual dual and fitness activities which 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 taken the I level or already possess the fundamental skills in the activity. A course cannot be repeated for credit. Lab 2, Cr 1

KINE 1100 Advanced Life Saving
KINE 1101 Aerobic Dance and Exercise
KINE 1102 Angling and Bait Casting
KINE 1103 Archery
KINE 1104 Badminton
KINE 1105 Ballet I
KINE 1106 Ballet II
KINE 1107 Basketball
KINE 1108 Body Mechanics
KINE 1109 Bowling
KINE 1110 Flag Football
KINE 1111 Folk and Square Dance
KINE 1112 Folklorico
KINE 1113 Golf
KINE 1114 Gymnastics
KINE 1115 Jazz and Modern Dance
KINE 1116 Jogging
KINE 1117 Paddle Tennis
KINE 1118 Pington
KINE 1119 Racquetball
KINE 1120 Sailing
KINE 1121 Self Defense
KINE 1122 Soccer
KINE 1123 Softball
KINE 1124 Swimming
KINE 1125 Table Tennis
KINE 1126 Tap Dance
KINE 1127 Tennis I
KINE 1128 Tennis II
KINE 1129 Volleyball
KINE 1130 Weight Training
KINE 1131 Wrestling
KINE 1132 Surfing
KINE 1133 Basic Sports Skills
KINE 1134 Physical Conditioning
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 Sport 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. Required for kinesiology majors and minors. Lec 3, Cr 3

KINE 1304 Personal and Community Health
This 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 1306 First Aid
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 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 Physical Activities in the Elementary School
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
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. Prerequisite: BIOL 1407 or 2401. Lec 3, Cr 3

KINE 3255 Health and Motor Development for EC-4
This course focuses on motor activities and health skills 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. Lec 2, Cr 2

KINE 3302 Foundations of Sports and Exercises for Pre-Adolescents

Theory application of modified individual, dual, and team sports for the pre-adolescent. 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 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 sport in the U.S. and the modern sports movement in the U.S. including intercollegiate and interscholastic sports. 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. Formerly KINE 2370. Prerequisite: BIOL 1407 or 2401. Lec 3, Cr 3

KINE 4310 Measurement Techniques in Physical and Exercise 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 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 or exercise science that are not available as part of the regular course offerings. Courses may be repeated for credit when the topics vary, but not more than nine hours will apply to a bachelor's degree. 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

Machine Shop (*MCHN*)

MCHN 1253 Intermediate Machine Shop II

A continuation of Intermediate Machine Shop I. Includes programming and operation of CNC machines. Lec 1, Lab 3, Cr 2

MCHN 1300 Machinist I

Designed to prepare the student for the use of math related to machining courses. 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 and 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 Basic Machine Shop 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, bandsaws, 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 1352 Intermediate Machine Shop I

Operation of drills, milling machines, lathes, and power saws. Includes precision measuring techniques and an introduction to CNC machining. Lec 1, Lab 8, Cr 3

MCHN 2433 Advanced Lathe Operations

An advanced study of lathe operations. The identification and/or use of special cutting tools and support tooling, such as, form tools, carbide inserts, taper attachments, follower, and stead rest. Close tolerance machining required. Lec 3, Lab 4, Cr 4

MCHN 2437 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, face mills, involute cutters, rotary tables, and indexing heads. A review of related math and machine theory. Lec 3, Lab 4, Cr 4

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 developments within the field of personnel administration are reviewed. A 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. Prerequisite: MANA 3361. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and BUSI 3341. Lec 3, Cr 3

MANA 3365 Organizational Behavior

Formerly MANA 4361. Development of management theory with emphasis on the investigation of individual and group behavior in organizations. Prerequisite: Admission to upper division and MANA 3361. Lec 3, Cr 3

MANA 4362 Organization Theory and Design

Formerly MANA 3364. A study is made of the theory and process of designing, utilizing, and evaluating organizational structures. Prerequisite: Admission to upper division and MANA 3361. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and MANA 3361, MARK 3371. Lec 3, Cr 3

MANA 4367 Topics in Management

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. Lec 3, Cr 3

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, on the relationship of this process to contemporary labor legislation, contract negotiations, and daily administration of company and union relations. Prerequisite: Admission to upper division and MANA 3361. Lec 3, Cr 3

Manufacturing Engineering Technology (MFET)

See MFET Manufacturing Engineering Technology

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. Prerequisite: Admission to upper division. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and MARK 3371. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and MARK 3371, MANA 3361. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and MARK 3371. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and MARK 3371 MARK 3372. Lec 3, Cr 3

MARK 4377 Topics in Marketing

The study of significant topics related to Marketing. Course may be repeated for credit when topic varies. Prerequisite: Admission to upper division and Will vary depending on specific topics. Lec 3, Cr 3

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. Prerequisite: Admission to upper division and MARK 3371, BUSI 3341. Lec 3, Cr 3

Mathematics (MATH)

MATH 0100 Developmental 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 TASP 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 or the CDI Math Lab working with computer tutorials as recommended by the instructor. Graded satisfactory or unsatisfactory. Offered: Fall, Spring, Summer. Lab 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. Prerequisite: none 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; percent; metric measurement; algebraic equations; statistics; pictographs; tables; bar, circle and line graph interpretations; and word problems. Offered: Fall, Spring, Summer. Lec 3, Cr 3

MATH 0321 Introductory Algebra
A first course in algebra designed to prepare students for Intermediate Algebra. 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. Prerequisite: MATH 0320 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Offered: Fall, Spring, Summer. 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. Prerequisite: MATH 0321 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Offered: Fall, Spring, Summer. 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. Prerequisite: Math 0120 or Math 0320 with a minimum grade of C or equivalent as determined by the mathematics assessment test. Lec 3, Lab 3, Cr 4

MATH 0422 Intermediate Algebra
This is a second course in algebra designed to prepare students for General Education 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. Prerequisite: Math 0421 or Math 0321 with a minimum grade of C or equivalent as determined by the mathematics assessment test. Lec 3, Lab 3, Cr 4

MATH 1313 College Mathematics
A course designed for the applications of mathematical principles and methods needed to meet the high demands for mathematics competency in business and industry, and development of analytical thinking. Topics include sets, logic, introduction to probability and statistics, informal geometry, problem solving, and calculators. Prerequisite: MATH 0321 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. (Students wishing to transfer to a four-year institution should consult with a counselor regarding transferability of credit.) Offered: Fall, Spring, Summer Lec 3, Cr 3

MATH 1314 College Algebra
A college level course in algebra. Topics include zeros and graphs of polynomial 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; binomial theorem; mathematical induction; permutations; combinations; probability; and applications of these topics. Prerequisite: MATH 0322 or Math 0422 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Offered: Fall, Spring, Summer. Lec 3, Cr 3

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. Prerequisite: MATH 1314 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Offered: Fall, Spring, Summer. Lec 3, Cr 3

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. Prerequisite: MATH 0322 or Math 0422 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Offered Fall, Spring, Summer Lec 3, Cr 3

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. Prerequisite: MATH 1314 or MATH 1324 with a minimum grade "C" or equivalent as determined by the mathematics assessment test. Offered Fall, Spring, Summer Lec 3, Cr 3

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. Prerequisite: Math 0422 or Math 0322 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Lec 3 Cr 3

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 math-

ematics. Prerequisite: MATH 0322 or Math 0422 with minimum grade of "C" " or equivalent as determined by the mathematics assessment test. Offered: Fall, Spring, Summer. Lec 3, Cr 3

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. Prerequisite: MATH 1335 with a minimum grade of "C." Could be offered any semester. Lec 3, Cr 3

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. Prerequisite: MATH 1316 with a minimum grade of "C" or high school Trigonometry, Analysis, and/or Calculus and successfully assessed. Offered: Fall, Spring, Summer. Lec 3, Cr 3

MATH 1412 Pre-Calculus
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. Prerequisite: MATH 1314 with a minimum grade of "C" or equivalent as determined by the mathematics assessment test. Offered: Fall, Spring, Summer. Lec 4, Cr 4

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 Theorem; higher derivatives; concavity; techniques of graphing; antiderivative; the definite integral and integration with applications. Prerequisite: MATH 1412 with a minimum grade of "C" or MATH 1348 with a minimum grade of "C" or high school Trigonometry, Analysis, and/or Calculus and successfully assessed. Offered: Fall, Spring, Summer Lec 3, Lab 1, Cr 3

MATH 2314 Calculus II
A continuation of MATH 2313 that includes topics such as applications of the definite integral; differentiation and integration of inverse, logarithmic, exponential, inverse trigonometric, and hyperbolic functions with applications; solving differential equations; various techniques of integration with applications; improper integrals; approximate integration; limits of sequences; infinite series; various tests for convergence of a series; power series; Taylor and Maclaurin Series; and application of power series. Prerequisite: MATH 2313 with a minimum grade of "C" or MATH 2413 with a minimum grade of "C". Lec 3, Lab 1, Cr 3

MATH 2318 Linear Algebra
This is an introductory course in linear algebra. Topics include systems of linear equations, vectors in n-space, matrix operations, determinants, and vector spaces. Prerequisite: MATH 1348 with a minimum grade of "C" or MATH 1412 with a minimum grade of "C". Offered: Fall, Spring, Summer. Lec 3, Cr 3

MATH 2342 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. Could be offered any semester. Lec 3, Cr 3

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. Prerequisite: MATH 1412 with a minimum grade of "C" or MATH 1348 with a minimum grade of "C" or high school Trigonometry, Analysis and/or Calculus and successfully assessed. Lec 3, Lab 2, Cr 4

MATH 2414 Calculus II
This course is a continuation of MATH 2413. The 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 sequences; infinite series; various tests for convergence of a series; power series; Taylor and Maclaurin Series; and application of power series. Prerequisite: MATH 2413 or MATH 2313 with a minimum grade of "C". Lec 3, Lab 2 Cr 4

MATH 3302 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 theorem, and Stokes theorem. Prerequisite: MATH 2314 with a minimum grade of "C" or Math 2414 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 3303 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: Junior Level Standing. Could be offered any semester. Lec 3, Cr 3

MATH 3304 Geometric Structures
This course is a study of Euclidean Geometry and Plane Geometry for the purpose of developing the understanding of and ability to create mathematical proofs. Prerequisite: Junior Level Standing. Could be offered any semester. Lec 3, Cr 3

MATH 3305 Euclidean and Transformational Geometry
This is an in-depth study of geometrical concepts. Topics include axiomatic geometry and transformational geometry. Prerequisite: MATH 1348 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 3335 Contemporary Math I
This course is designed for students seeking teacher certification for grade levels Early Childhood through eighth 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. Prerequisite: MATH 1314 with a minimum grade of "C" or MATH 1332 with a minimum grade of "C" or MATH 1324 with a minimum grade of "C". Lec 3, Cr 3

MATH 3336 Contemporary Math II
This course is designed for students seeking teacher certification for grade levels Early Childhood through eighth grade. Selected topics will be studied from an advanced point of view and will include Integers, Fractions and Decimals, Statistics and Probability, Geometry and Measurement. Prerequisite: MATH 3335 with a minimum grade of "C". Lec 3, Cr 3

MATH 3347 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 with a minimum grade of "C" or MATH 2414 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

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 application problems and solving systems of linear differential equations. Prerequisite: MATH 2314 with a minimum grade of "C" or MATH 2414 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 3364 Survey of Mathematics 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 the ExCET for Secondary Mathematics. Prerequisite: MATH1314 Lec 3, Cr 3

MATH 3365 Survey of Mathematics of 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 synthetic and analytic geometry, trigonometry and calculus, which are included in domains 3, 4, and 5 of the ExCET for Secondary Mathematics. Prerequisite: MATH1314 Lec 3, Cr 3

MATH 3373 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 1314 and Junior standing. Could be offered any semester. Lec 3, Cr 3

MATH 3379 Fundamental Mathematics for Sciences and 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; vectors and spatial analytic geometry; and calculus and differential equations. Prerequisite: Math 2314 with a minimum grade of "C" or Math 2414 with a minimum grade of "C". Lec 3, Cr 3

MATH 4302 Theory of Numbers
This course includes a study of divisibility of integers, prime factorizations, congruence, and Diophantine equations. Prerequisite: MATH 2313 with a minimum grade of "C" or MATH 2413 with a minimum grade of "C" and MATH 3373 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 4339 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. Prerequisite: MATH 2314 with a minimum grade of "C" or Math 2414 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 4348 Advanced Linear Algebra
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". Could be offered any semester. Lec 3, Cr 3

MATH 4351 Modern Algebra
This course provides an introduction to algebraic structures. Topics to be taken from groups, rings and fields. Prerequisite: MATH 2314 with a minimum grade of "C" or Math 2414 with a minimum grade of "C" and MATH 3373 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 4357 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 3347 with a minimum grade of "C" and MATH 3373 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 4364 Special Problems in Mathematics
This course covers special undergraduate topics in mathematics not offered elsewhere in the department. May be repeated for credit. Prerequisite: MATH 2314 with a minimum grade of "C" or MATH 2414 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

MATH 4365 Problem Solving and Mathematical Modeling
This 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 2314 with a minimum grade of "C" or MATH 2414 with a minimum grade of "C". Lec 3, Cr 3

MATH 4371 Multivariable Analysis
This course covers various topics selected from the theory and application of the calculus of functions of several variables. Prerequisite: MATH 3347 with a minimum grade of "C" and MATH 3373 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

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. Prerequisite: MATH 2314 with a minimum grade of "C" or MATH 2414 with a minimum grade of "C". Could be offered any semester. Lec 3, Cr 3

Mechanical Engineering Technology (MEET)

MEET 1301 Introduction to Computers for Technologists
Development of computer skills in operating system utilities, word processing, spreadsheets, databases, graphics, communications, networking and programming with applications in engineering technology. Lec 2, Lab 2, Cr 3

MEET 3330 Transport Technologies I
First and second laws of thermodynamics, fluid properties, conduction, convection and radiant heat transfer. Prerequisite: MATH 2314. Lec 3, Cr 3

MEET 3331 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 3330. Lec 3, Cr 3

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. 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: MEET 3351. Lec 2, Lab 3, Cr 3

MEET 3351 Mechanical Engineering Laboratory
Team-based and individual open-ended projects, investigations and assignments in mechanical fluid and thermal systems. Emphasis on system analysis and improvement. Co-requisite: MEET 3330. Lab 9, Cr 3

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. Prerequisite: MEET 3351 and MEET 3331. Lec 2, Lab 3, Cr 3

Manufacturing Engineering Technology (MFET)

MFET 2321 Manufacturing Process Planning
Fundamentals of Manufacturing, design and concepts of systems of Manufacturing, product planning and design including design optimization, process planning and optimization, facility layout and systematic layout planning, aggregate production planning and production scheduling, automation and its role in Manufacturing optimization, and modern Manufacturing planning concepts. Lec 3, Cr 3

MFET 2420 Manufacturing Process Technologies
Introduction to Manufacturing processes including metal cutting, measurements and metrology, deformation processes, casting, welding, joining, and composites. Prerequisite: ENGT 2401. Lec 3, Lab 3, Cr 4

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. Prerequisite: ENGT 2303, MFET 2420. Lec 3, Cr 3

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, repairability, engineering specifications, productivity and product cost will be introduced. Prerequisite: MFET 2420, 2140, ENGT 2201. Lec 2, Lab 3, Cr 3

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. Prerequisite: MFET 2420. Lec 3, 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. Prerequisite: MFET 2140, MFET 2420, ENGT 2201. 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. Prerequisite: MFET 2420. Lec 2, Lab 3, Cr 3

MFET 3351 Plastics Manufacturing Technology
Focuses on the important relationship between Material properties, molding processes, product design and performance of finished products. Prerequisite: MFET 2420. 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. Prerequisite: MFET 3311. 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. Prerequisite: Senior Standing. Lec 3, Cr 3

Manufacturing Engineering Technology (MFET)

MFET 2321 Manufacturing Process Planning
Fundamentals of Manufacturing, design and concepts of systems of Manufacturing, product planning and design including design optimization, process planning and optimization, facility layout and systematic layout planning, aggregate production planning and production scheduling, automation and its role in Manufacturing optimization, and modern Manufacturing planning concepts. Lec 3, Cr 3

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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. Prerequisite: Senior Standing. Lec 3, Cr 3

Medical Laboratory Technology (MLT)

MLAB 1201 Introduction to Clinical Laboratory
An introduction to clinical laboratory science, including quality control, laboratory math, safety, basic laboratory equipment, laboratory settings, accreditation and certification. Lec 1, Lab 4, Cr 2

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, Lab 4, Cr 2

MLAB 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. Lec 1, Lab 4, Cr 2

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 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 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 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 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 1166 Practicum
Practical general training and experiences in the workplace. The college and the employer develop and document and 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 2501 Clinical Chemistry
An introduction to 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 technique, chemical laboratory safety, electrolytes, acid-base balance, proteins, carbohydrates, lipids, enzymes, metabolites, endocrine function, and toxicology. Lec 4 Lab 4 Cr 5

MLAB 2437 Immunohematology
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. Lec 3 Lab 4 Cr 4

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 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 1191 Special Topics – Seminar
This seminar is designed to correlate the patient aspects and laboratory aspects of disease states using the case study route. These case studies will be used to show the interrelationships between the various laboratory disciplines and reinforce didactic information in these areas. Students will analyze case studies from the five major areas including clinical chemistry, hematology, immunohematology, microbiology, and immunology/urinalysis. Lec 1 Lab 0 Cr 1

Manufacturing Engineering Technology (MFET)

MFET 2321 Manufacturing Process Planning
Fundamentals of Manufacturing, design and concepts of systems of Manufacturing, product planning and design including design optimization, process planning and optimization, facility layout and systematic layout planning, aggregate production planning and production scheduling, automation and its role in Manufacturing optimization, and modern Manufacturing planning concepts. Lec 3, Cr 3

MFET 2420 Manufacturing Process Technologies
Introduction to Manufacturing processes including metal cutting, measurements and metrology, deformation processes, casting, welding, joining, and composites. Prerequisite: ENGT 2401. Lec 3, Lab 3, Cr 4

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. Prerequisite: ENGT 2303, MFET 2420. Lec 3, Cr 3

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, repairability, engineering specifications, productivity and product cost will be introduced. Prerequisite: MFET 2420, 2140, ENGT 2201. Lec 2, Lab 3, Cr 3

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. Prerequisite: MFET 2420. Lec 3, 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. Prerequisite: MFET 2140, MFET 2420, ENGT 2201. Lec 2, Lab 3, Cr 3

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Basics of assembly equipment and processes for printed circuit board assembly including surface mount, insertion machines, screen printing, soldering, cleaning and testing. Prerequisite: MFET 2420. Lec 2, Lab 3, Cr 3

MFET 3351 Plastics Manufacturing Technology
Focuses on the important relationship between Material properties, molding processes, product design and performance of finished products. Prerequisite: MFET 2420. 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. Prerequisite: MFET 3311. 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. Prerequisite: Senior Standing. Lec 3, Cr 3

Military Science (ROTC)

See Reserve Officer Training (ROTC)

Music (MUAP, MUSI)

Theory

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 (IPA). Prerequisite: READ 0300 or appropriate assessment. Lab 2, Cr 1

MUSI 1165 Diction II
A continuation of MUSI 1162 with an emphasis on the Spanish and French languages. Prerequisite: MUSI 1162. Lab 2, Cr 1

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. Course may be repeated for additional credit. 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 signatures and meters, scales and modes, key signatures, intervals, and chords. Designed for non-music majors, but may also be taken (as a prerequisite to MUSI 1311) by music majors or minors with no previous experience. Lec 3, Cr 3

MUSI 1311 Music Theory I
Intervals, scales, chord structures, chord progressions, simple cadences, use of inversions, non harmonic tones, seventh chords, simple modulations and harmonization of melodies, part-writing, music reading, keyboard skills aural rhythmic, melodic and harmonic dictation are studied. Prerequisite: READ 0302 or appropriate assessment score. Lec 3, Lab 2, Cr 3

MUSI 1312 Music Theory II
Continuation of MUSI 1311. Prerequisite: MUSI 1311 with minimum grade of "C" and must be concurrently enrolled in class piano or have passed the piano proficiency exam. Lec 3, Lab 2, Cr 3

MUSI 2311 Music Theory III
This course is the study of figured bass, alto and tenor clefs, elementary formal concepts, intervals, scales, chord structure, simple cadences, use of inversions, non-harmonic tones, seventh chords, modulations, harmonization of melodies, part writing, sight singing, keyboard and aura skills. Prerequisites: MUSI 1312 with minimum grade of "C" and must have completed two semesters of class piano or have passed the piano proficiency exam. Lec 3, Lab 2, Cr 3

MUSI 2312 Music Theory IV
Continuation of MUSI 2311. Prerequisite: MUSI 2311 with minimum grade of "C". Lec 3, Lab 2, Cr 3

MUSI 3211 Orchestration & 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. Prerequisite: MUSI 2312 Lec 2, Cr 2

MUSI 3311 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 voicings and reharmonization. Several written arrangements for the various ensembles common to the genre

will be part of the course requirements. Lec 3, Cr 3

MUSI 3312 Counterpoint and Analysis
A survey of polyphony of the eighteenth through the twentieth centuries with emphasis on creative projects. Prerequisite: MUSI 2312 Lec 3, Cr 3

MUSI 3289 Introduction to Conducting
An introduction to the basic techniques of conducting. This course is intended for both instrumental and choral music majors. Prerequisite: MUSI 1312 Lec 2, Cr 2

MUSI 3363 Intermediate Jazz Improvisation
This course is a continuation of MUSI 1263 Improvisation. Application of the Locriam, Lydian and Phrygian modes, to jazz improvisation will be studied. Additionally the whole-tone, diminished and altered dominant scale application will be studied. Prerequisite: MUSI 1263. Lec 3, Cr 3

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. Prerequisite: MUSI 3289. Lec 2, Cr 2

Literature

MUSI 1306 Music Appreciation
A non technical survey course designed for the intelligent appreciation of traditional musical styles represented throughout history. Recordings, videos, and live performances help illustrate the influence of music within the various fine arts. (Does not fill any requirement for a music major.) Lec 3, Cr 3

MUSI 1308 Music Literature
An introduction to important musical trends, styles, and literature of Western Civilization from the Middle ages to the present. Prerequisite: MUSI 1312 or concurrent enrollment in MUSI 1312. Lec 3, Lab 1, Cr 3

MUSI 2310 Special Topic – Jazz History and Interpreting
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. (Does not fill any requirement for a music major.) Lec 3, Cr 3

MUSI 3205 Teaching Fine Arts in the Elementary School
Students will have the opportunity 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: MUSI 1306. Lec 2, Lab 1, Cr 2

MUSI 3308 Music History I
A comprehensive study of musical styles, forms and textures of music from antiquity to the Baroque era. Prerequisite: MUSI 1308 Music Literature, with a minimum grade of "C" and MUI 2312 Music Theory IV with a minimum grade of "C". Lec 3, Lab 1, Cr 3

MUSI 3309 Music History II
A comprehensive study of musical styles, genres, composers and literature from the Pre-Classical era to the present. Prerequisite: MUSI 1308 Music Literature, with a minimum grade of "C" and MUSI 2312 Music Theory IV with a minimum grade of "C". Lec 3, Lab 1, Cr 3

Class Instruction

MUSI 1114 Keyboard Skills I
This course is designed to teach student keyboardists the requisite skills to interpret and perform works in the jazz idiom. Prerequisite: Advanced keyboard skills. Lab 3, Cr 1

MUSI 1115 Keyboard Skills II
A continuation of Keyboard Skills I. Prerequisite: MUSI 1114. Lab 3, Cr1

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. Lab 3, Cr 1

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

MUSI 1181 Piano Class
Development of piano technique and musical style in a class situation. This course is intended and usually limited to music majors and minors. Others amy 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. Prerequisite: MUSI 1183. Lab 3, Cr 1

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

MUSI 1189 Strings Class I
Introduction to the fundamentals of the violin, viola, cello and bass, with emphasis on basic technique and bowing. Lab 3, Cr 1

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. Prerequisite: MUSI 1192. 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. Prerequisite: MUSI 1166 Lab 3, Cr 1

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 Prerequisite: MUSI 1168. Lab 3, Cr 1

MUSI 2188 Percussion Class II
Continuation of MUSI 1188. Prerequisite: MUSI 1188. Lab 3, Cr 1

MUSI 2189 Strings Class II
Advanced instruction with emphasis on third positions and vibrato. Continuation of MUSI 1189. Prerequisite: MUSI 1189. Lab 3, Cr 1

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. Prerequisite: MUSI 1312,1308. Lec 3, Cr 3

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 rules, regulations, and competition of the University Interscholastic League and the T.B.A. Texas Bandmasters Association. Prerequisite: MUSI 1308, 1312, 3289. Lec 3, Cr 3

MUSI 3307 Secondary Instrumental Techniques
This course provides an introduction to the following: basic literature for beginning, intermediate, and secondary bands; small ensemble literature; solo instrumental repertoire; concert programming; counting systems; sight-reading methods and texts; jazz band literature and improvisation materials. It also surveys the rules, regulations, and competition of the University Interscholastic League and the T.B.A. Texas Bandmasters Association. Prerequisite MUSI 1308, 1312, 3289. Lec 3, Cr 3

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. Prerequisite: MUSI 2312. Lec 3, Cr 2

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. Prerequisite: Advanced standing in music. It is intended to be one of the very last classes that music major would study. Lec 3, Cr 3

Ensembles

MUSI 1131/3131Estudiantina
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 1132/3132 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. Prerequisite: Advanced Keyboard Skills. Lab 3, Cr 1

MUSI 1137/3137 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. Prerequisite: Advanced guitar skills. Lab 3, Cr 1

MUSI 1239/3239 Stage Band/Jazz Ensemble
Rehearsal and performance of popular, dance, and jazz music on and off campus. Membership is determined by permission of director through audition. Course may be repeated for additional credit. Lab 4, Cr 2

MUSI 1241/ 3241 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 1154/3154 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 directory through audition. Course may be repeated for additional credit. Concurrent enrollment in MUSI 1241 required. Lab 3, Cr 1

MUSI 1159/3159 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, Cr1

MUSI 2127/3127 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 2135/3135 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 Upper Level Jazz Ensemble

MUSI 2139/3139 Instrumental Chamber Ensembles
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 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

Lower-Division Applied Lessons for Music Educators
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 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 1, Pract 10, Cr 2

Applied Music I MUAP 1287
Applied Music II MUAP 1288
Applied Music III MUAP 2287
Applied Music IV MUAP 2288

Upper-Division Applied Lessons for Music Educators
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 progress 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. Fee $70.00 Lab 1, Pract 10, Cr 2

MUAP 3201 Applied Music V

MUAP 3202 Applied Music VI

MUAP 4201 Applied Music VII

MUAP 4202 Applied Music VIII

Lower-Division Applied Lessons for Non-Music Educators

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

Applied Music I MUAP 1387

Applied Music II MUAP 1388

Applied Music III MUAP 2387

Applied Music IV MUAP 2388

Upper-Division Applied Lessons for Non-Music Educators

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 3401 Applied Music V

MUAP 3402 Applied Music VI

MUAP 4401 Applied Music VII

MUAP 4402 Applied Music VIII

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. Prerequisites: Admission to the Associate Degree Program. Lab 3, Cr 1

RNSG 1301 Pharmacology

Introduction to the science of pharmacology with emphasis on the actions, interactions, adverse effects, and nursing implications of each drug classification. Topics include the roles and responsibilities of the nurse in safe administration of medications within a legal/ethical framework. Prerequisites: Completion of Level 1 courses; Co-requisites: RNSG 1231, 1247, 1210, and 2260. Cr 3, Lec 3, Lab 0

RNSG 1205 Nursing Skills

Study of the 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. Prerequisite: Admission to the Associate Degree Nursing Program, BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH1314 or 1332, PSYC 2301. Lec 1, Lab 4, Cr 2

RNSG 1210 Introduction to Community -Based Nursing

Overview of the delivery of nursing care In a variety of community -based settings; 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 judgement, skill, and professional values within a legal/ethical framework. Prerequisite: Admission to the LVN-RN transition program or completion of Level 1 courses. Cr 2, Lec 2, Lab 0

RNSG 1215 Health Assessment

Development of skills and techniques required for a comprehensive health assessment within a legal/ethical framework. Prerequisite: Admission to the Associate Degree Nursing Program, BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH1314 or 1332, PSYC 2301 or departmental approval. Lec 1, Lab 3, Cr 2

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 settings experiencing health problems Involving fluid and electrolytes; peri-operative care; pain; respiratory disorders; peripheral vascular disorders; Immunologic disorders; and Infectious disorders. Discussion of knowledge, judgement, skills and professional values within a legal/ethical framework. Prerequisite: Completion of Level 1 courses; Corequisites: RNSG 1210, 1301, and 2260. Cr 2, Lec 2, Lab 0

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, judgement, skills, and professional values within a legal/ethical framework. Prerequisite: RNSG 1231; Corequisites: RNSG 1210, 1301 and 2260. Cr 2, Lec 2, Lab 0

RNSG 1251 Care of the Childbearing Family

Study of concepts related to the provision of nursing care for childbearing families. Topics may include selected complications. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Prerequisites:, RNSG 2301, 1205, 1215, 1423, 1260, 2260. RNSG 1201, 2404, 2260, 2213, 2163, BIOL 2321/2121 PSYC 2314; Corequisite: RNSG 2201, 2162, SPCH 1318, ENGL 1301 Lec 2, Cr 2

RNSG 1260 Clinical: Nursing RN: Foundations of 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. Prerequisite: Admission to the Associate Degree Nursing Pro-

gram BIOL 2301, BIOL 2101, BIOL 2302, BIOL 2102, MATH 1314 or 1332, PSYC 2301. Co-requisite: Concurrent enrollment in RNSG 1423 is required RNSG 1108, RNSG 1205, RNSG 1215. Cl 12, Cr 2

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, judgement, skills, and professional values within a legal/ethical framework. Prerequisite: Admission to the nursing program. Cr 4 , Lec 3, Lab 3

RNSG 2461 Clinical: Nursing RN: Transition to 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. Prerequisites: Admission to the Associate Degree Nursing Program, BIOL 2301/2101, BIOL 2302/2102, BIOL 2321/2121, MATH 1313, PSYC. 2301, 2314 ENGL 1301, PSYC 2314. Cl 12, Cr 4

RNSG 1423 Introduction to Professional Nursing
Introduction to the profession of nursing including the roles of the registered nurse with emphasis on the application of a systemic, problem-solving process to provide care to diverse clients across the life span; and including applicable competencies in knowledge, judgment, skills and professional values within a legal/ethical framework. Prerequisites: Admission to the Associate Degree Nursing Program, BIOL 2301/2101, 2302/2102, MATH 1314 or 1332, PSYC 2301, or departmental approval. Lec 3, Lab 2, 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. Prerequisite: RNSG 2201, RNSG 2162, RNSG 2213, RNSG 2163, SPCH 1318, ENGL 1301. Co-requisite: Concurrent enrollment in RNSG 2414, RNSG 2360, RNSG 2166 is required, Humanities Elective. Lec 1, Cr 1

RNSG 2161 Clinical: Nursing RN: Care of Childbearing Family
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. Prerequisites: RNSG 1108, 1205, 1215, 1423, 1260 2404, 2260, 2213, 2163. Co-requisite: RNSG 2162, 1251, 2161, SPCH 1318, ENGL 1301 Cl. 6, Cr 1

RNSG 2162 Clinical: Nursing 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. Prerequisite: RNSG 1108, 1205, 1423, 1260, 1201, 2213, 2163, 2301, 2404, 2260, 1215, BIOL 2321/2121. Corequisite: RNSG 1251, 2161, ENGL 1301, SPCH 1318 PSYC 2314. Cl 6, Cr 1

RNSG 2163 Clinical: Nursing RN: Mental Health Nursing
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. Prerequisites: RNSG 2301, 2414, 2260, 1251, 2161, BIOL 2320, 2121, PSYC 2314. Cl. 6, Cr 1

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 and learning outcomes vary. Prerequisites: RNSG 2201, 2162, 1251, 2161, 2213, 2163, 2414, 2760, SPCH 1318, ENGL 1301. Cl 8, Cr 1

RNSG 2201 Care of Children and Families
Study of concepts related to the provision of nursing care for children and families emphasizing judgment, and professional values in a legal/ethical framework.. Prerequisites: RNSG 2301, RNSG 2404, RNSG 2260, RNSG 2213 RNSG 2163, PSYC 2314, BIOL 2320, BIOL 2121,. Co-requisite: Concurrent enrollment in clinical RNSG 2162, RNSG 1251, RNSG 2161, is required, ENGL 1301, SPCH 1318. 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. Prerequisites: RNSG 1108,1205,1215,1423,1260,1201,2301,2404,2260 RNSG 2404, RNSG 2260, PSYC 2314. Co-requisites: Concurrent enrollment in clinical RNSG 2163 is required and BIOL 2320, BIOL 2121. Lec 2, Cr 2

RNSG 2260 Clinical: Nursing RN: Principles and Concepts of Decision -Making
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. Prerequisites: RNSG 1108, 1205, 1215, 1423, 1260. Co-requisite: Concurrent in RNSG 2404 is required, RNSG 2301, PSYC 2314. Cl. 12, Cr 2

RNSG 2301 Community-Based Nursing
Study of the delivery of nursing care across the lifespan in a variety of structured community-based settings. Emphasis on the delivery of safe, comprehensive nursing care to diverse clients/families with a multidisciplinary team approach,. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework Prerequisites: RNSG 1108, 1205, 1215, 1423, 1260,. Co-requisites: Concurrent enrollment in RNSG 2404, RNSG 2260 is required, PSYC 2314. Lec 3, Cr 3

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 issues impacting nursing and health care today and in the future. Topics include knowledge, judgment, skills, and professional values within a legal/ethical framework. Prerequisites: Admission to the Associate Degree Nursing Program, BIOL 2301/2101, BIOL 2302/2102, BIOL 2321/2121 or MATH 1314,1332, ENGL 1301, PSYC 2301/2314 Co-requisite: Concurrent enrollment in clinical RNSG 2461, and RNSG 2301 is required. Lec 2, Lab 4, Cr 3

RNSG 2360 Clinical: Nursing RN: Care of the Client 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. Prerequisites: RNSG 2201, 2162, 2213, 2163, 1251, 2161 SPCH 1318, ENGL 1301. Cl 14, Cr 3 Co-requisites: RNSG 2414, 2121

RNSG 2404 Care of the Client with Common Health Care Needs

Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients/families across the life span with common health care needs. Opportunities for collaboration with members of the multidisciplinary health care team. Content includes applicable competencies in knowledge, judgment, skills and professional values within a legal/ethical framework. Prerequisite: RNSG 1108, 1205, 1215, 1423, 1260. Co-requisite: Concurrent enrollment in RNSG 1201, 2260, and RNSG 2301 required, PSYC 2314. Lec 4, Cr 4

RNSG 2414 Care of the Client with Complex Health Care Needs

Application of a systematic problem-solving process and critical thinking skills to provide nursing care to diverse clients /families across the life span with complex health care needs in health maintenance and health restoration. Opportunities to collaborate with members of the multidisciplinary health care team. Topics include the role of the nurse as client advocate and coordinator of care and applicable competencies in knowledge, judgment, skills, and professional values within a legal/ethical framework. Prerequisite: RNSG 1251, 2161, 2201, 2162, 2213, 2163, SPCH 1318, ENGL 1301. Lec 4, Lab 1, Cr 4 Co-requisite: RNSG 2160, 2121

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. Prerequisite: Acceptance into program. *CBE, Cr 3

NURS 3304 Perspectives in Professional Nursing 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 th emphathy, commitment and analytic skills associated with holistic nursing practice and the heritage of nursing. Students will be encouraged to embrace the values of altruism, autonomy, human dignity, integrity and social justice as a member of the nursing profession. Prerequisites: NURS 3701, 3702, 3303, 3604. 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. Prerequisites: NURS 3701, 3702, 3303,3604. Lec 2, Lab 6, Cr 4

NURS 3604 Clinical Skills in Nursing Practice

The focus of this course is on the clinical nursing 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 demonstrate 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 nasogasteic irrigation and suction. Prerequisite: NURS 3701, NURS 3702, NURS 3303. *CBE, Cr 6

NURS 3606 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 lifestyle modifications. Prerequisites: NURS 3701, 3702, 3303, 3604. Lec 3, Lab 9, Cr 6

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, integumnet cellular growth and thermal regulation are included in this course. Prerequisite: Acceptance into program. *CBE, Cr 7

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, postpartal, and neonatal periods. Both the normal and complicated phases of childbearing are covered. Pharmacology, nutrition, the teaching process, and communication are presented within the framework of the nursing process. Nursing care of children of all ages and at various stages of the health-illness continuum is examined. Prerequisite: Acceptance into program. *CBE, Cr 7

NURS 4307 Transcultural Nursing

This course focuses on theoretical foundations for understanding cultural diversity in health and illness beliefs and behaviors and practical implications 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. Prerequisites: NURS 3701, 3702, 3303, 3604. 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 basis for identifying researchable problems in nursing. This course develops skills in critical thinking through the critique of research projects. Prerequisites: NURS 3701, 3702, 3303, 3604, 3405, 3606. 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 rel-

evant 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. Prerequisites: NURS 3701, 3702, 3303, 3604, 3304, 3305, 3606. Lec 3, Cr 3

NURS 4336 Special Topics in Nursing
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. Prerequisite: Registered Nurse or consent of instructor. Lec 3, Cr 3

NURS 4508 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. Prerequisites: NURS 3701, 3702, 3303, 3604, 3304, 3405, 3606. Lec 3, Lab 6, Cr 5

NURS 4610 Professional Nursing in the Community
This course is both community-based and community-focused with an 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. Prerequisites: NURS 3701, 3702, 3303, 3604, 3405, 3606, 3304. Lec 3, Lab 9, Cr 6

NURS 4612 Leadership in Professional Nursing
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. During the clinical practicum students will have the opportunity to function as a nurse manager. Prerequisite: NURS 3701, NURS 3702, NURS 3303, NURS 3604, NURS 3405, NURS 3606, NURS 3407, NURS 4408, NURS 4309, NURS 4610. Lec 3, Lab 9, Cr 6

Nursing – Vocational Nursing (TVNU)

TVNU 1207 Geriatrics
This course is designed to introduce the vocational nursing student to the special needs of the geriatric patient. Emphasis will be placed on the use of the nursing process, an understanding of the pathological variations from normal functioning, and application of the principles from the biological, physical, social, and behavioral sciences. Prerequisite: Admission to the program. Lec 2, Cr 2

TVNU 1212 Pharmacology I
This course is designed to present information to assist the student in developing beginning understanding of drug forms, effects by classification, current drug therapy, accurate calculation of dosages, and principles of medication preparation and safe administration. Prerequisite: Successful achievement of the first semester.

TVNU 1213 Pharmacology II
This course will include a separate segment that is designed to enable the student to develop a beginning understanding of the scientific principles and techniques in intravenous therapy and establish a foundation that will further enable the student to develop competence in performance of skills related to intravenous therapy. This course will also assist the student to develop a basic understanding of the need for the drug in accordance to the disease process and administration requirements. This course will stress accurate dosage calculations of medications administered intravenously. Prerequisite: Successful achievement of TVNU 1212. Lec 2, Cr 2

TVNU 1261 Clinical Practicum III
This course introduces the student to the clinical aspect of the care of the pediatric patient and the family's needs and support. Includes application of the nursing process. Concurrent with TVNU 1310. Prerequisite: Successful completion of the first semester. Enrollment in corresponding lecture classes. Co-requisite: TVNU 1310 Pediatric Nursing. Lab 6, Cr 2

TVNU 1266 Nursing Skills Theory Lab
This course includes the introduction of the Vocational Nursing student to the nursing arts laboratory where emphasis is placed on the utilization of the concepts and principles learned in TVNU 1204. These concepts are demonstrated as a guide in developing competence in the performance of the specific nursing skills. The nursing process provides the focus for all nursing interventions as practiced in the lab activities. Concurrent with TVNU 1204. Prerequisite: Admission to the program. Lab 10, Cr 2

TVNU 1269 Clinical Practicum II
This course is designed for an introduction to maternity and newborn nursing care with practical experience in the areas of labor and delivery, postpartum care and care of the newborn. Teaching the new mother and father is incorporated. Concurrent with TVNU 1308. Prerequisite: Successful completion of the first semester. Enrollment in corresponding lecture classes. Co-Requisite: TVNU 1308 Maternal & Newborn. Lab 6, Cr 2.

TNVU 1302 Fundamentals of Nursing
This course is designed to guide the vocational student in self assessment for necessary personal and professional adjustments that are essential in developing as a valuable member of the health care team. The course provides basic theories and principles of human growth and development, techniques for effective communication skills, and concepts to assist the student in understanding positive mental health practices. Prerequisite: Admission to program. Lec 3, Cr 3

TVNU 1308 Maternal and Newborn
This course is designed to introduce the student to concepts related to the family unit. Course content will include physiological changes associated to pregnancy, fetal development, prenatal care, nursing care during labor and delivery, post partum, and care of the newborn infant. Use of the nursing process will be integrated throughout the course. Prerequisite: Successful achievement of the first semester. Co-Requisite: TVNU 1269 Clinical II. Lec 3, Cr 3

TVNU 1310 Pediatric Nursing
This course introduces the student to the special needs of the child and the family. Emphasis will be placed on the use of the nursing process along with an understanding of pathophysiological variations, and the application of principles from the biological, physical, social, and behavioral sciences. Prerequisite: Successful achievement of the first semester. Co-Requisite: TVNU 1261 Clinical III. Lec 3, Cr 3

TVNU 1315 Advanced Medical-Surgical Nursing I
This course is a continuation of Medical-Surgical Nursing. It is designed to familiarize the student with selected disorders that affect the nervous, sensory, and endocrine systems. Emphasis is placed on knowledge deficits for the patient and his family and the need for patient teaching as an important aspect of comprehensive care and respective compliance. Prerequisite: A grade of "C" or above in TVNU 1513. Lec 3, Cr 3

TVNU 1317 Advanced Medical-Surgical Nursing II
This course is designed to assist the student in developing a beginning understanding of mental health problems with emphasis on recognizing inappropriate human behavior and corresponding approaches for therapeutic nursing interventions, introduce students to essential concepts of emergency nursing and role transition with emphasis on the expanded roles of a vocational nurse. Lec 3, Cr 3

TVNU 1364 Clinical Practicum IV
This course is designed to allow the student to gain experience in nursing care. Knowledge and application of the nursing process are utilized in providing direct patient care in the clinical facility. Administration of medications will be emphasized. Concurrent with TVNU 1513. Prerequisite: Successful completion of the first semester. Enrollment in corresponding lecture classes. Corequisite: TVNU 1212 Pharmacology & TVNU 1513 Medical Surgical Nursing I. Lab 11, Cr 3

TVNU 1365 Clinical Practicum I
This course is designed with an introduction to basic patient care in the clinical facility. The student has the opportunity to apply nursing procedures in the clinical setting. Application of the nursing process is emphasized. Concurrent with TVNU 1204. Prerequisite: Admission to the program. Co-Requisite: TVNU 1207 Geriatrics. Lab 12, Cr 3

TVNU 1366 Clinical Practicum V
This course provides the foundation for more complex nursing utilizing the nursing process. The student is expected to assess, plan and correlate nursing care according to individual patients. Concurrent with TVNU 1315. Prerequisite: Successful completion of the first and second semesters. Enrollment in corresponding lecture classes. Co-Requisite: TVNU 1213 Pharmacology II. Lab 12, Cr 3

TVNU 1368 Clinical Practicum VI
This course is designed to integrate the nursing skills and knowledge from the previous semesters. The nursing process is utilized in more complex nursing situations. Concurrent with TVNU 1317. Prerequisite: Successful completion of first and second semesters. Enrollment in corresponding lecture classes. Lab 28, Cr 3

TVNU 1403 Anatomy and Physiology
This course is designed to provide the vocational nursing student with introductory level information of the structure and function of the human body as a basis to later give understanding of disease processes and their effect on the human body. Prerequisite: Admission to the program. Lec 4, Cr 4

TVNU 1513 Medical Surgical Nursing I
This course is designed to introduce the student to concepts and theories associated with the nursing care of the adult patient with a major focus on selected pathophysiological conditions and modalities of treatment, including the impact of illness, cultural influences, and the incorporation of the family in implementation of the nursing process. Prerequisite: Successful achievement of the first semester. Co-requisite: TVNU 1364 Clinical IV. Lec 5, Cr 5

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. Concurrent enrollment with VNSG 1460. Lec 2, Cr 2

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. Concurrent enrollment with VNSG 1460, 1502. Lec 2, Cr 2.

VNSG 1304 Foundations 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. Concurrent enrollment with VNSG 1460. Lec 3, Cr. 3

VNSG 1420 Anatomy & Physiology for Allied Health
Introduction to the normal structure and function of the body including an understanding of the relationship of body systems in maintaining homeostasis. Concurrent enrollment with VNSG 1460. Lec 4, Cr. 4

VNSG 1460 Clinical I
A method of instruction providing detailed education, training and work-based experience, and direct elderly patient/client care generally at a clinical site. Specific detailed learning objectives are developed for each course such as nursing home experience and care of elderly client in a general unit by the faculty. On-site clinical instruction, supervision, evaluation and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Concurrent with VNSG 1226, 1227, 1304, 1420, 1502. Lec 8, Cr. 4

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 sterile technique. Concurrent enrollment with VNSG 1227, 1460. Lec 5, Cr. 5

VNSG 1231 Pharmacology
Fundamentals of medication and their diagnostic, therapeutic, and curative effects. Includes nursing interventions utilizing the nursing process. Concurrent enrollment with VNSG 1429, 2461. Lec 2, Cr. 2

VNSG 1261 Clinical II
A method of instruction providing detailed education, training and work-based experience, and direct mother and newborn patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for practical experience in labor and delivery, postpartum and nursery unit by the faculty. On-site clinical instruction, supervision, evaluation and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Concurrent enrollment with VNSG 1330. Lec 4, Cr. 2

VNSG 1262 Clinical III
A method of instruction providing detailed education, training and work-based experience, and direct pediatric patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for pediatric nursing experience by the faculty. On-site clinical instruction, supervision, evaluation, and placement are the responsibility of the college faculty. Clinical experiences are unpaid external learning experiences. Course may be repeated if topics and learning outcomes vary. Concurrent with VNSG 1334. Lec 4, 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. Concurrent with VNSG 1261. Lec 3, Cr. 3

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. Concurrent with VNSG 1262. Lec 3, Cr. 3

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. Concurrent with VNSG 1231, 2461. Lec 4, Cr. 4

VNSG 2461 Clinical IV
A method of instruction providing detailed education, training and work-based experience, and direct adult patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for medical-surgical nursing experience by the faculty. The experience will include emphasis on medication administration. On- site clinical 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. Concurrent with VNSG 1231, 1429. Lec 6 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. Concurrent with VNSG 2362. Lec 4, Cr. 4

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 earning 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. Concurrent with VNSG 432. Lec 6, Cr. 3

VNSG 1136 Mental Illness
Study of human behavior with emphasis on emotional and mental abnormalities and mode of treatment incorporating the nursing process. Concurrent with VNSG 1219, 2363. Lec 1, Cr. 1

VNSG 1219 Professional Development
Study the 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. Concurrent with VNSG 1136, 2363. Lec 2, Cr 2

VNSG 2363 Clinical VI
A method of instruction providing detailed education, training and work-based experience, and direct patient/client care in specialty unit, generally at a clinical site. Specific detailed learning objectives are developed for E.R., Day Surgery, ICU, OR, Rehabilitation unit, Case Management and Team Leading experience 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 and learning outcomes vary. Concurrent with VNSG 1136, 1219. Lec 6, Cr. 3

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 to 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 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

Physics (PHYS, PSCI)

PHYS 1101 General Physics Laboratory I
Laboratory experiments in classical mechanics, heat, and wave motion. Prerequisite or concurrent enrollment: PHYS 1301. Lab 3, Cr 1

PHYS 1102 General Physics Laboratory II
Laboratory experiments in electricity, magnetism, light, and modern physics. Prerequisite or concurrent enrollment: PHYS 1302. Lab 3, Cr 1

PHYS 1301 General Physics I
Fundamentals of classical mechanics, heat and thermodynamics, vibratory motion, waves and sound. Prerequisite: High school trigonometry or credit for MATH 1314 and credit for registration in MATH 1316. Lec 3, Cr 3

PHYS 1302 General Physics II
Fundamentals of electricity, magnetism, electromagnetic interaction, light, and modern physics. Prerequisite: PHYS 1301. Lec 3, Cr 3

PHYS 1401 College Physics I
This course introduces the student to the fundamentals of Physics. Linear motion, rotational motion, gravity and friction, and 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. Prerequisite: MATH 1316 or high school Trigonometry. Lec 3, Lab 3, Cr 4

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. Prerequisite: PHYS 1401. Lec 3, Lab 3, Cr 4

PHYS 1410 Applied Physics
A course designed primarily for the technology programs to explain the basic concepts of the properties of matter, mechanics, and heat, with emphasis on applications and problem solving. Prerequisite: One year of high school algebra. Lec 3, Lab 3, Cr 4

PHYS 1411 Introduction to Astronomy
This course is designed to give an introduction to the study of Astronomy. Topics included are the formation of the planetary system, birth, evolution, and death of stars. Black holes, Neutron stars and supernovas, and the current status of research in this area is also presented. Lec 3, Lab 2, Cr 4

PHYS 1415 Motion, Matter & Energy
A laboratory course in the physical sciences for non-science majors. Topics are selected from mechanics, electricity and magnetism, nuclear science and chemistry to illustrate the history, philosophy and methods of science. Lec 3, Lab 2, Cr 4

PHYS 1417 The Earth, The Sky, and The Heavens
A laboratory course in the physical sciences for non-science majors. Topics are selected from Geology, geophysics, meteorology, oceanography, electricity, astronomy, and astro-physics to illustrate the philosophy and methods of science. Lec 3, Lab 2, Cr 4

PHYS 2125 Engineering Physics Laboratory I
Laboratory experiments in classical mechanics, heat, and vibratory motion. Prerequisite or concurrent enrollment: PHYS 2325. Lab 3, Cr 1

PHYS 2126 Engineering Physics Laboratory II
Laboratory experiments in electricity, magnetism, light, and modern physics. Prerequisite or concurrent enrollment: PHYS 2326. Lab 3, Cr 1

PHYS 2325 Engineering Physics I
Introductory classical mechanics, including vibrations and waves, and heat and thermodynamics. Prerequisite or concurrent enrollment: MATH 2313. Lec 3, Cr 3

PHYS 2326 Engineering Physics II
Introductory electromagnetic theory and applications, electromagnetic waves, solid state and modern physics. Prerequisite: PHYS 2325 and credit or registration for MATH 2314. Lec 3, Cr 3

PHYS 2425 University Physics I
This course is the first of a three-semester sequence of courses for Physics and Engineering majors. The topics addressed will be an introduction to classical mechanics including statics and dynamics. Prerequisite or concurrent enrollment in MATH 2313. Lec 3, Lab 3, Cr 4

PHYS 2426 University Physics II
This is the second course in the three-semester introductory sequence for physics and engineering majors. The topics addressed will be an introduction to oscillation and waves, and heat and thermodynamics. Prerequisite: PHYS 2425 and credit or concurrent enrollment MATH 2314. Lec 3, Lab 3, Cr 4

PHYS 2427 University Physics III
This is the third semester of the introductory sequence for physics and engineering majors. The topics addressed will be and introduction to electricity, magnetism, light and optics. Prerequisite: PHYS 2426. Lec 3, Lab 3, Cr 4

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. Prerequisite Junior standing in the Physics Degree Program Lab 6, Cr 2

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. Prerequisite PHYS 3400, MATH 3349. Lec 3, Cr 3

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 cycles. Prerequisite: PHYS 3400, MATH 3349. Lec 3, Cr 3

PHYS 3390 Mathematical Methods in Physics
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 Scrˆdinger's equation. Prerequisite: MATH 2314 and PHYS 2326. Lec 3, Cr 3

PHYS 3400 Modern Physics
Special relativity, Planck's radiation law, elements of quantum theory, atomic and molecular structures and spectra. The atomic nucleus, nuclear reactions, and an introduction to elementary particles. Prerequisite: PHYS 2326 and credit or registration for MATH 3329. Lec 3, Lab 3, Cr 4

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. Prerequisite Senior standing in Physics degree program and consent of a supervising faculty member. Lec 1, Lab 9, Cr 3

PHYS 4320 Quantum Mechanics
The Schrˆdinger equation, operators, and pertubation methods. Applications to the harmonic oscillator and the hydrogen atom. Prerequisite: PHYS 3400, MATH 3349. Lec 3, Cr 3

PHYS 4330 Electromagnetic Theory
The theory of electrostatics, electromagnetics, electrical and magnetic properties of materials, electric and magnet fields, electric current, Ohm's law, the Biot-Savart law, Maxwell's Equations. Prerequisite: PHYS 3400 and MATH 3349. Lec 3, Cr 3

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. Prerequisite: Permission of the instructor. Lec 3, Cr 3

PHYS 4390 Computational Methods in the Physical Sciences
This is an introduction to the techniques and use of computers to solve 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 3390, PHYS 1302, COSC 1317 or 1318 or permission of instructor. Lec 3 Cr 3

PSCI 4310 Physical Science for Educators I
This is the first part of an undergraduate level, hands-on, physical science course designed for education majors enrolled in EC-4 programs. The course will provide the students with basic theoretical background in physical science (properties of matter, mixtures and solutions, balance and motion, waves, and physics of sound), will develop skills in physical experimentation using FOSS modules and other available lab equipment, and will enable the students to apply the basic laws and principles of physics to experimental observations. Prerequisites: Three hours of an introductory science course at an undergraduate level in any discipline. Lec 3, Cr 3

PSCI 4320 Physical Science for Educators II
This is the second part of an undergraduate level, hands-on physical science course designed for education majors enrolled in EC-4 programs. The course will provide the students with basic theoretical background in kinematics, dynamics, heat transfer, electricity, magnetism, and optics; will develop skills in physical experimentation, and will enable the students to interpret their experimental observations in terms of the basic laws and principles of physics. Prerequisite: PSCI 4310. Lec 3, Cr 3

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 Developmental Psychology
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 and Sociology
This course covers measures of central tendency and variability, statistical inference and correlation. May be counted as SOCI 2317 or PSYC 2317. Prerequisite: PSYC 2301. Lec 3, Cr 3

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. Prerequisite: PSYC 2317. Lec 3, Cr 3

PSYC 3302 Adolescent Psychology
This course investigates the physical, behavioral, mental, emotional, and social changes that accompany growth and development in adolescence. Prerequisite: PSYC 2301. Lec 3, Cr 3

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. Prerequisite: PSYC 2301. Lec 3, Cr 3

PSYC 3318 Theories of Learning
This course is the study of how the 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. Prerequisite: PSYC 2301. Lec 3, Cr 3

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 behavior and experience. Prerequisite: BIOL 1406 and six advanced hours in PSYC. Lec 3, Cr 3

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 Social Psychology
This course examines how an individual's behavior 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. Prerequisite: Six hours PSYC or SOCI. Lec 3, Cr 3

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. Prerequisite: Six hours of basic psychology, three hours of behavioral statistics. Lec 3, Cr 3

PSYC 3363 Human Sexuality
This course explores the multidimensional nature of human sexuality including the physiological, psychological, and sociological aspects of human sexuality. May be counted as SOCI 3363 or PSYC 3363. Prerequisite: PSYC 2301 or SOCI 1301. Lec 3, Cr 3

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 exists, and formulate a plan for their future professional development. Prerequisite: Psychology major with at least 24 hours including: PSYC 2301, 2317 & 3301. Lec 1, Cr 1

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. Prerequisite: PSYC 2317 and PSYC 3301. Lec 3, Cr 3

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. Prerequisite: PSYC 3318. Lec 3, Cr 3

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. Prerequisite: PSYC 2301. Lec 3, Cr 3

PSYC 4312 Psychology of Gender: Female and Male
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. Prerequisite: Nine hours of psychology and/or sociology. Lec 3, Cr 3

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. Prerequisite: Six hours of basic psychology. Lec 3, Cr 3

PSYC 4319 Cognitive Psychology
This course examines mental activities from an information processing perspective. Topics include perception, pattern recognition, attention, memory, decision making, and problem solving. Prerequisite: PSYC 3301. Lec 3, Cr 3

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. Prerequisite: PSYC 2301. Lec 3, Cr 3

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. Prerequisite: Six hours of basic psychology. Lec 3, Cr 3

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 and retention; morale, job satisfaction and productivity. Prerequisite: Six hours of psychology. Lec 3, Cr 3

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. Prerequisite: Six hours of Psychology including Abnormal Psychology (PSYC 4313). Lec 3, Cr 3

PSYC 4363 History, Systems and Theories in Psychology
This course chronicles the development of psychological thought from the ancient Greeks into the modern era in terms of the most influential people and the ideas and theories that they have proposed. Prerequisite: PSYC 2301. Lec 3, Cr 3

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. Prerequisite: PSYC 2301. Lec 3, Cr 3

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. Requires permission of a faculty member and Department Chair. Prerequisite: PSYC 2301. Lec 3, Cr 3

Radiologic Technology (RADR)

RADR 1166 Practicum 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 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
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 of Radiographic 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 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. 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
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 VI
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 a survey of specialized imaging modalities. Lec 2, Lab 0, Cr 2

RADR 2266 Practicum 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 may be repeated if topics and learning outcomes vary. Lec 0, Lab 20, Cr 2

RADR 2267 Practicum VII
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 of 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

Respiratory Therapy (RSPT)

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 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 1316 Basic Respiratory Care Procedures II
This course presents the basic principles and procedures, including lung expression therapy, postural drainage and percussion, artificial airways, manual resuscitation devices and suctioning. Lec 2, Lab 4, Cr 3

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 1260 Clinical 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 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 dysythmias 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 2131 Clinical Simulations in Respiratory Care
The theory and history of clinical simulation examinations. Topics include the construction types, scoring, and mechanics of taking the exam along with practice in taking both written and computerized simulations, basic concepts of computer usage. This is a capstone course for the Advanced Level certificate. Lec 1, Cr 1

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 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 2258 Advanced Respiratory Patient 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 2, Lab 0 Cr 2

RSPT 2262 Clinical III
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 2263 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 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 9, 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 2319 Mechanical Ventilation of 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 ventilatory support. Lec 2, Lab 4, Cr 3

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 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 2362 Clinical IV
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. 0 Lec 0, Lab 18, Cr 3

RSPT 3333 Respiratory 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 3347 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. A practicum will be arranged for this course which is the same as RSPT 2247 except for the practicum. Lec 2, Lab 6, Cr 3

RSPT 4358 Advanced Respiratory Care Patient Assessment
The student will be instructed in the advanced techniques of physical examination of the cardiopulmonary system and the bedside monitoring and assessment used in evaluating a patient's pulmonary condition. Lec 2, Lab 4, Cr 3

RSPT 4619 Mechanical Ventilation of Neonatal / Pediatric Patient
Instruction provided in the principles and practice of mechanically ventilating the neonatal patient. Laboratory instruction in operating typical neonatal ventilators will be provided with additional clinical practicum experience in neonatal intensive care units. Lec 3, Practicum 9

Reserve Officer Training (ROTC)

ROTC 1201 Dynamics of Leadership I
Introduces UTB/TSC, university life and the U.S. Army. Instills awareness of the role that Army ROTC plays in developing leaders. Provides students with skills and strategies that enable them to make successful transition to university life. Lec 2, Cr 2

ROTC 1202 Dynamics of Leadership II
Encompasses dynamics of leadership applicable to all careers through instruction in Rifle Marksmanship; Land Navigation; Leadership Laboratory; Field Training Exercises; U.S. Army Customs, Courteous and Career Opportunities and various leadership dimensions. Lec 2, Cr 2

ROTC 2201 Applied Leadership and Management
An application of basic leadership and management principles. The course applies ethics based leadership skills that develop individual abilities and contribute to the building of effective teams of people. Learn the role of the U.S. Army and Army Communications skills such as oral presentations, writing concisely, planning of events, coordination of group efforts, fundamentals of ROTC's Leadership Development Program. Optional weekend field training exercises are offered. Prerequisite: ARMY ROTC 1201, 1202, or consent of instructor. Lec 2, Cr 2

ROTC 2202 Intermediate Leadership and Management Techniques
Learn techniques for training others as an aspect of continued leadership development. Supervisory personnel and motivational techniques are studied through placement of students in positions of small unit leaders given assigned tasks. Introduction to basic tactical mission applications and principles. Optional weekend field training exercises are offered. Prerequisite: ARMY ROTC consent of instructor. Lec 2, Cr 2

ROTC 3202 Advanced Army Physical Development
A practicum in physical development where a student applies the physical development skills learned in Basic Army Physical Development and applies them to a program that best suits the individual. The student will be tested in accordance to FM 21-20 and The Army Physical Fitness Test to determine one's ability and AR 600-9 in attainment of a physical goal. Includes extensive outdoor physical conditioning and a leadership laboratory. Lec 2, Cr 2

ROTC 3401 Advanced Military Leadership
This course introduces the student to the responsibilities, character, and uniqueness of the commissioned officer as a professional. Topics include the role of the small unit leader, radio communications, advanced military leadership, tactical operations, and oral communications. Weekend field training exercises are mandatory. Prerequisite: Advanced ROTC standing. Lec 4, Cr 4

ROTC 4401 Staff Management and Responsibilities
An examination of the garrison and administrative responsibilities of the commissioned officer. An in-depth analysis of staff procedures, the military writing program, advanced leadership assessment, and the decision-making process. Precommissioning actions will also be conducted. Weekend field training exercises are mandatory. Prerequisite: ROTC 3401, ROTC 3402 and Advanced ROTC standing. Lec 4, Cr 4

ROTC 4403 Advanced Military Science
This course includes the ethical and professional responsibilities of the commissioned officer and studies the Military Justice System as well as the Army training system and Customs and Traditions of the Army from the perspective of a newly commissioned second lieutenant. Weekend field training exercises are mandatory. Prerequisite: ROTC 3401, ROTC 3402 and Advanced ROTC standing. Lec 4, Cr 4

Social Work (SOCW)

SOCW 2361 Introduction to Social Work
Traces the philosophy and historical development of social welfare as a 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
The development of social welfare institutions in the United States. Pays particular attention is 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 system, and problems of social reform. 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. Prerequisite: Sophomore standing recommended. Lec 3, Cr 3

SOCI 2317 Statistics of Psychology and Sociology
Measures of central tendency and variability; statistical inference; correlation and regression. May be counted as SOCI 2317 or PSYC 2317. Prerequisite: SOCI 1301. Lec 3, Cr 3

SOCI 2319 The 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 3305 Methods of Social Research
An overview of the use of scientific methods in social research, formulation of research designs, hypothesis testing, sampling, interviewing, observation, coding, use of documents, questionnaires and scales. Emphasis on interpretation of social data. Prerequisite: SOCI 1301 and SOCI 2317. Lec 3, Cr 3

SOCI 3313 Criminology
A study of crime, its causes, and its social treatment. Prerequisite: Three hours of sociology. Lec 3, Cr 3

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. Prerequisite: Three hours of sociology. Lec 3, Cr 3

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. Prerequisite: SOCI 1301. Lec 3, Cr 3

SOCI 3335 Social Theory (Formerly SOCI 4335)
This course surveys the major theorists of Sociology's classical era, as a well as modern theoretical approaches such as functionalism, neo-Marxism, symbolic interactionism, ethnomethodology, and exchange, network, and feminist theories. Students are encouraged to take this course as soon as possible after choosing Sociology as a major. Prerequisite: SOCI 1301. Lec 3, Cr 3

SOCI 3363 Sex and 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. Prerequisite: SOCI 1301. Lec 3, Cr 3

SOCI 3364 Minorities (Formerly SOCI 4313)
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. Prerequisite: SOCI 1301. Lec 3, Cr 3

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, book publishing, newspapers, and the internet. Prerequisite: SOCI 1301. Lec 3, Cr 3

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. Prerequisite: SOCI 1301. Lec 3, Cr 3

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. Prerequisite: SOCI 1301. Lec 3, Cr 3

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. Prerequisite: This course should be taken in the last semester before graduation. Lec 1, Cr 1

SOCI 4311 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 & 2312 or consent of instructor. Lec 3, Cr 3

SOCI 4314 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. Prerequisite: SOCI 1301 and either SOCI 3335 or CRIJ 3303. Lec 3, Cr 3

SOCI 4323 The Mexican American People
An examination of social, political and cultural processes which have shaped the Mexican American community in the United States; an analyses of its relations with other groups in society, its status, aspirations and power. An assessment of present opportunities and prospects for the future. Emphasis will be placed on the development and status of Mexican Americans in Texas. Lec 3, Cr 3

SOCI 4325 Population and Migration Problems
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 Prerequisite: SOCI 1301 and SOCI 2317. Lec 3, Cr 3

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. Prerequisite: SOCI 1301 and SOCI 3335. Lec 3, Cr 3

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. Theory is related to practice by examining specific case studies. Prerequisite: SOCI 1301 and SOCI 3335. Lec 3, Cr 3

SOCI 4383 Independent Studies
Designed to offer students the opportunity to gain experience in research or in-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. Prerequisite: Nine hours of SOCI and consent of the instructor. Lec 3, Cr 3

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. Prerequisite: Basic skills in reading and writing; Departmental approval required. Lec 3, Cr 3

SPAN 1314 Elementary Spanish II
Continuation of SPAN 1313. Prerequisite: SPAN 1313 or departmental approval. Lec 3, Cr 3

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

SPAN 1374 Basic Spanish for Bilinguals II
Continuation of SPAN 1373. Prerequisite: SPAN 1373. Lec 3, Cr 3

SPAN 2311 Intermediate Spanish I
A comprehensive review of Spanish grammar. Prerequisite: SPAN 1314 or departmental approval. Lec 3, Cr 3

SPAN 2312 Intermediate Spanish II
Continuation of SPAN 2311. Prerequisite: SPAN 2311 or departmental approval. Lec 3, Cr 3

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. Prerequisite: SPAN 1373 or 2312.

SPAN 2317 Business Spanish
An introduction to Spanish business correspondence and the translation of commercial documents from English to Spanish. Given in Spanish. Prerequisite: SPAN 1373 or departmental approval. Lec 3, Cr 3

SPAN 2321 Hispanic Literature and Civilization I
An introduction to the language, culture, and literature, of the Hispanic world. Given in Spanish. Lec 3, Cr 3

SPAN 2322 Hispanic Literature and Civilization II
A continuation of SPAN 2321. Given in Spanish. Prerequisite: SPAN 2321. Lec 3, Cr 3

SPAN 3301 Spanish Literature (1100-1750)
A survey of the literature of Spain from the beginnings to 1750. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 3302 Spanish Literature (1750-present)
A survey of the literature of Spain from the mid-18th century to present. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 3303 Advanced Spanish Composition
Intensive training in Spanish composition, including class publications of material in Spanish. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

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 beginnings 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. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

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. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 3330 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. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

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. Prerequisite: SPAN 2321, 2322. Lec 3, Cr 3

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. Prerequisite: SPAN 2321, 2322. Lec 3, Cr 3

SPAN 4303 Hispanic 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. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 4304 Spanish Lyric Poetry
A survey of lyric poetry from its beginning to the present. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 4305 Cervantes
A study of the principal works of Miguel de Cervantes with emphasis on Don Quijote. Given in Spanish. All readings, examinations, and papers in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

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 in classroom discussion, on exams, and in short papers by exposure to good models of literary analysis and criticism. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 4309 Contemporary Spanish Literature
A study of the principal literary works of Spain from the generation of 1898 to the present. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

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 exit 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. Prerequisite: SPAN 2321, SPAN 2322. Lec 3, Cr 3

SPAN 4311 The Mexican Novel
The study of the major novels of Mexico from beginning to the present. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 4312 The 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. Prerequisite: SPAN 3330. 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 is Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 4317 The 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. Prerequisite: SPAN 3330 or concurrent enrollment. Lec 3, Cr 3

SPAN 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. Given in Spanish. Prerequisite: SPAN 2321, SPAN 2322, and SPAN 3332 or 3333. Lec 3, Cr 3

SPAN 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. Given in Spanish. Prerequisite: SPAN 2321, SPAN 2322, and SPAN 3332 or 3333. Lec 3, Cr 3

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. Prerequisite: SPAN 2321 or SPAN 2322. Lec 3, Cr 3

SPAN 4369 Hispanic Theater
A study of selected dramatic works of representative Hispanic authors from a variety of geographical locales 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. Prerequisite: SPAN 2321 and SPAN 2322. Lec 3, Cr 3

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 considered to be a forerunner of today's Chicano novel, continues with post WWII male writers and ends with a more recent novel by a woman writer exploring feminist issues. Given in Spanish. Prerequisite: SPAN 2321 and 2322. Lec 3, Cr 3

SPAN 4373 Studies in Hispanic Cultures
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. Prerequisite: SPAN 2321 and 2322. 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. Prerequisite: 18 or more advanced hours in Spanish including SPAN 3301, SPAN 3303, SPAN 3311, and SPAN 3330. Lec 3, Cr 3

Spanish – 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. Prerequisite: Six hours of Freshman English and six hours of Spanish chosen from the following courses: SPAN 1373, 2316, 2317, 2321 and 2322. Lec 3, Cr 3

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. Prerequisite: TRSP 3332 or SPAN 3332 and six hours of Freshman English. Lec 3, Cr 3

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. Prerequisite: TRSP 3332 or SPAN 3332 and six hours of Freshman English. 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. Prerequisite: TRSP 3332 or SPAN 3332 and six hours of Freshman English. 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. Emphasis on sight translation and short consecutive interpreting, and also preparation for simultaneous interpreting. Prerequisite: TRSP 3332 or SPAN 3332 and six hours of Freshman English. Lec 3, Cr 3

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. Prerequisite: TRSP 3332 or SPAN 3332 and six hours of Freshman English. Lec 3, Cr 3

Speech (SPCH)

SPCH 1315 Fundamentals of Speech
Theory and practice of the basic principles of oral communication. The course is designed to help the student develop skills in various kinds of public speaking. Emphasis on audience analysis, research, speech composition and delivery. Students will present various types of speeches including informative, persuasive, and impromptu. 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 1321 Business and Professional Communication
Designed to provide the student with theory and practical experience needed to communicate in a variety of business settings. Emphasis is on interviewing, decision making, and public address. 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

Special Education (SPED)

Note for Undergraduate Special Education Courses: To be eligible to take any Special Education course, students must be admitted into the Teacher Education Program.

SPED 3370 Introduction to Exceptional Children
Formerly SPED 2370. This course is an introduction to the physical and psychological characteristics of the exceptional child. Emphasis is on theory, characteristics and educational programming for learners with special needs. Lec 3, Cr 3

SPED 4301 Language Development and Communication Disorders
This course examines monolingual and bilingual language development with an emphasis on common communication disorders. Prerequisite: SPED 3370, may be taken concurrently with SPED 4302, 4307, 4372. Lec 3, Cr 3

SPED 4302 Cognitive Development Associated with Exceptionalities
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. Prerequisite: SPED 3370, may be taken concurrently with SPED 4301, 4385, and 4372. Lec 3, Cr 3

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. Prerequisite: SPED 3370. May be taken concurrently with SPED 4301, 4302, or 4372. Lec 3, Cr 3

SPED 4313 Student 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 progress. Seminars and individual conferences are a required part of the course. 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. Lec 3, Cr 3

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, are also examined. Prerequisite: EDCI 4301. Lec 3, Cr 3

SPED 4372 Special Education In Inclusive Settings
For Special Education Minors. This course addresses laws and legislative Issues concerning special education. The roles of the regular and special educators In Inclusive settings will be explored as well as the dynamics of school, family, and community. Prerequisite: SPED 3370, may be taken concurrently with SPED 4301, 4302, 4307.

SPED 4375 Testing and Assessment of Exceptional Individuals
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 non-biased assessment of the bilingual child. Prerequisite: SPED 3370, 4301, 4302, may be taken concurrently with SPED 4385, 4395. Lec 3, Cr 3

SPED 4385 Classroom Approaches and Modifications for Students with Special Needs
Formerly SPED 4303. For Special Education Minors. This course offers training In strategies for teaching students with mild/moderate disabilities In academic areas. Course content Includes self-contained special education programs as well as procedures for modifying and adapting Instruction for students In a mainstreamed regular education setting. The social and cognitive development and training of students with mild/moderate disabilities will be addressed. Prerequisite: SPED 3370, may be taken concurrently with SPED 4375 and 4372. Lec 3, Cr 3

SPED 4386 Modifications in Inclusive Settings
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. Prerequisite: EDCI 4301 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. Prerequisite: SPED 3370, 4301, 4302, 4385, may be taken concurrently with SPED 4375. Lec 3, Cr 3

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B.A., M.Ed., The University of Texas at Brownsville

Rene Villarreal
Director of Admissions
B.A., get school names
M.Ed., University of Texas-Pan American

Academic Department Chairs and Program Directors

College of Liberal Arts

Behavioral Sciences Department
Virginia V. Wood, Chair

Criminal Justice Department
Susan Ritter, Chair

English and Speech Department
Robert Sledd, Chair

Fine Arts Department
Sue Zanne Urbis, Chair

Modern Languages Department
Cipriano Cárdenas, Chair

Social Sciences Department
Ron Lane, Government Division Chair
William Adams, History Division Chair

College of Science, Mathematics & Technology

Biological Sciences Department
Alfredo Muñoz, Chair

Computer Sciences/Computer Information Systems Department
who, Chair

Engineering Technology Department
Mario Diaz, Chair

Industrial Technology Department
Jesus Galvan, Interim Chair

Mathematics Department
Deloria Nanze-Davis, Chair

Physical Sciences Department
Gene J. Paull, Chair

School of Business

Accounting Department
R.B. Vinson, Chair

Business Administration Department
Susanne Hardebeck, Chair
Master of Business Administration Program
Karl Kampschroeder, Director

Business Technology Department
Mary M. Sullivan, Chair
Accounting Technology Program
James Defenbach, Director
Interantional Business Program
Mary Sullivan, Director

School of Education

Curriculum and Instruction Department
Paula Parson, Interim Chair
Alternative Certification Program
Rita Hernandez, Director

School Specialties Department
Charles Comeaux, Chair
Child Care and Development
Vacant, Program Director
Academic Advising/Teacher Certification
Gayle L. Brogdon, Coordinator
Field Experiences/Student Teaching
Vacant, Program Director

Kinesiology Department
Zelma D. Mata, Chair

School of Health Sciences

Allied Health Department
John L. McCabe, Chair
Emergency Medical Technology
Elizabeth A. Chavez, Program Director
Medical Laboratory Technology

Shamina Davis, Program Director
Radiologic Technology
Manuel Gavito, Program Director
Respiratory Therapy
John L. McCabe, Program Director

Nursing Department
Registered Nurse Programs
Edna Garza-Escobedo, Chair
Master of Science in Public Health Nursing
Ella Herriage, Program Director
BSN Degree Completion
Katherine Dougherty, Program Director
Associate Degree Nursing
Edna Garza-Escobedo, Program Director
Vocational Nursing, Brownsville
Gloria Spencer, Program Director

Partnership Faculty

College of Liberal Arts

Farhat Iftekharuddin, Ph.D., Dean

Behavioral Sciences Department

Virginia V. Wood, Ed.D., Chair

Ethel K. Cantu 1979
Associate Professor — *Psychology*
1969 B.A., University of California, Davis
1977 M.A., Texas A&I University

William C. Davis 1975
Associate Professor — *Psychology*
1970 B.A., University of Texas at Austin
1975 M.Ed., Pan American University
1982 Ed.D., East Texas State University

Robert Fisher 1991
Associate Professor — *Psychology*
1973 B.S., San Diego State University
1984 Ph.D., University of Tennessee

Diamantina Freeberg 1979
Associate Professor — *Psychology*
1967 B.A., Our Lady of the Lake College-San Antonio
1969 M.A., 1977 Ed.D., University of Tulsa

Mathew Johnson 1999
Assistant Professor — *Psychology*
1991 B.S., Northwest Missouri State University
1993 M.S., Imporia State University
1998 Ph.D., Texas Techical College

Wayne D. Lewis 1980
Associate Professor — *Sociology*
1969 A.B., University of Georgia
1975 M.A., University of Delaware
1987 M.S., Corpus Christi State University
1984 Ph.D., University of Denver

Sherry McCullough 1991
Associate Professor — *Sociology*
1965 B.A., 1987 M.S.W., 1991 Ph.D., University of Oklahoma

Gene J. Paull 1975
Professor — *Anthropology, Geography*
1967 B.A., Penn State University
1970 M.A., 1976 Ph.D., University of Arizona

David Pearson 1997
Associate Professor — *Sociology*
1979 B.A., University of Massachusetts
1981 M.A., 1988 Ph.D., Yale University

Scott Reid 1999
Assistant Professor — *Sociology*
1989 B.A., 1991 M.A., 1999 Ph.D., Kent State University

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Associate Professor — *Sociology*
1960 B.A., Wheaton College
1969 Ph.D., Syracuse University

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1966 B.A., Webster College
1971 M.A., St. Mary's University
1992 Ed.D., University of Houston

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1969 A.A., Texas Southmost College
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1990 B.A., Bellarmine College
1992 M.A., University of Louisville
1995 Ph.D., Kansas State Universty

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1980 B.S., Texas Woman's University
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1997 Ph.D., Sam Houston State University

Rodolfo Soliz 1977
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1977 B.S., Texas A&I University, Corpus Christi
1985 M.A., Corpus Christi State University

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1964 B.A., North Texas State University
1979 M.A., University of Texas at San Antonio
1985 Ph.D., Sam Houston State University

English and Speech Department

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1971 B.A., Pan American College
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1987 B.A., Arizona State University

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1996 Ph.D., University of Washington

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1968 B.A., Texas A&I University
1977 M.A., East Texas State University
1987 M.A., Pan American University

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1970 B.A., Duke University
1973 M.A., 1984 Ph.D., University of Texas at Austin

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1995 M.A., University of Texas at Brownsville
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1981 A.A., Texas Southmost College

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Assistant Professor *English*
1976 B.A., State University of New York – Binghamton
1980 M.A., University of New Mexico
1993 Ed.D., Harvard University

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Professor *Communications, Linguistics*
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1976 Ph.D., University of Texas at Austin
Institute for Educational Management, JFK School of Government, Harvard University

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Associate Professor *English*
1963 B.A., Austin College
1965 M.A., San Francisco State University
1986 Ph.D., University of Iowa

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Assistant Professor *English*
1965 B.A., 1968 M.A., Oklahoma State University

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1964 B.S., Texas Women's University
1980 M.F.A., Trinity University

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William Harris 1991
Assistant Master Technical Instructor *English*
1980 B.A., 1983 M.A., Pan American University

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1976 B.A., 1978 M.A., University of Dacca
1989 Ph.D., Oklahoma State University

Noor Islam 1994
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Joseph F. Jamar 1984
Assistant Professor *English*
1976 B.A., University of Southwestern Louisiana
1981 M.A.T., University of West Florida

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1967 B.A., St. Edward's University
1979 Ph.D., University of Texas at Austin

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1972 M.A., East Texas State University
1984 Ph.D., North Texas State University

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1982 B.A., California State University at San Bernadino
1987 M.A., Fresno State University
1993 Ph.D., University of Southern California

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Assistant Professor *English*
1962 B.A., Texas A&I University
1979 M.A., Pan American University

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1967 B.S., Kutztown State University
1968 M.A., 1971 Ph.D., Kent State University

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Associate Professor *English*
1968 M.A., University of Chicago

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1961 B.A., Pan American College
1963 M.A., 1965 Ph.D., Texas Technological College

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Lecturer *English*
B.A., 1963, Ball State University
M.A., 1972 Ball State University
M.A., 1980 Ball State University
Ph.D., Ball State University

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1974 B.S., 1980 M.A., Pan American University

Fine Arts Department

Sue Zanne Williamson Urbis, Ph.D., Chair

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Associate Professor — *Music*
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1976 B.M.E., Furman University
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1994 D.M.A., University of Texas at Austin

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Professor — *Art*
1977 B.F.A., Pan American University
1979 M.F.A., Washington State University

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B.M. University of North Texas
M.M. University of Louisiana-Monroe
D.M.A. University of Arizona

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1984 B.S., 1986 M.A., 1993 M.F.A., 1991 Ph.D., University of Wisconsin-Madison

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1980 B.M.,1982 M.M., 1994 D.M.A.,University of North Texas

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1972 B.A., Glassboro State College
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1980 M.F.A., Instituto Allende

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1969 B.A., Olivet Nazarene College
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1980 M.A., Eastern Illinois University

Richard Urbis 1985
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1975 B.M., Corpus Christi State University
1977 M.M. 1978 Artist Diploma,, The Juilliard School of Music

Sue Zanne Williamson Urbis 1995
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1977 B.M.E., Sam Houston State University
1981 M.A., Corpus Christi State University
1995 Ph.D., University of Arizona

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1979 Diploma in Piano, Universidad Veracruzana
1983 M.A., Trinity College of Music, London
1989 Fellowship Diploma (D.M.A.), London College of Music

Modern Languages Department

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Assistant Professor — *Spanish*
1980 B.A., Hope College
1984 M.A.I.S., University of Texas-Pan American

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Associate Professor — *Spanish, Translation Studies*
1968 B.A., 1970 M.A., Texas A&M University-Kingsville

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1992 M.A., 1994 Ph.D., University of Pittsburgh

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1972 B.S., 1974 M.A., Texas A&M University-Kingsville

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1968 B.A., 1971 M.A., Columbia University
1974 M. Phil, 1976 Ph.D., Columbia University
Diplomate Translator, Diplomate Interpreter, Interpreters Institute, Munich

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1994 B.A., University of Texas-Pan American
1996 M.A., University of Houston
2000 Ph.D., University of Massachusetts-Amherst

Cheryl L. Phelps 1984
Assistant Professor — *Spanish*
1969 B.A., 1975 M.A., University of North Texas

José Varela-Ibarra 1991
Professor — *Spanish*
1964 B.A., 1966 M.A., University of Hawaii
1974 Ph.D. University of Texas Austin

Delbert, Runyon 2000
Lecturer — *Spanish, Translation Studies*
1952 B.A. University of Texas at Austin
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Thomas Welther 1990
Assistant Professor — *German*
1982 B.A., 1983 M.A., University of Northern Iowa

Lucy García Willis 1973
Professor — *Spanish*
1970 B.A., 1972 M.A., Southwest Texas State University
1988 Ph.D., University of Texas at Austin

Social Sciences Department

Government Division

Ron Lane, Government Division Chair

Robert H. Angell 1976
Assistant Professor — *Government*
1970 B.S., 1976 M.Ed., Southwest Texas State University

Delina Barrera 2000
Title *Subject*
1983 BS, Texas A&M
1985 MPA, Texas Tech
1998 PhD, Texas Tech

Norman Binder 1973
Professor *Government*
1969 B.A., University of North Dakota
1971 M.A., 1974 Ph.D., University of Arizona

Charles Chapman 1999
Assistant Professor *Goverment*
1972 B.S., Southwest Texas State University
1974 M.A., Southwest Texas University
1979 J.D. University of Texas School of Law
1980 Ph.D., University of Texas at Austin

Ronald John Lane 1990
Master Technical Instructor *Government*
1972 B.A., Florida Southern College
1977-87 M.A., Western Illinois University

Edward G. Moore 1993
Lecturer *Government*
1973 B.A., University of Virginia
1975 M.Ed., Georgia State University

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Associate Professor *Government*
1963 B.S., 1967 M.A., University of Southern Mississippi
1970 Ph.D., University of Georgia

Angelia Soldan 1999
Assistant Professor *Philosophy, Government*
1975 M.A., University of Berlin, Germany
1985 Ph.D., Martin Luther University, Halle-Wittenberg, Germany
1990 Ph. D., Mumboldt University, Berlin, Germany

Government Division

William Adams, History Division Chair

William L. Adams 1989
Associate Professor *Government, History*
1966 B.A., Central Oklahoma State University
1973 M.A., University of North Dakota
1978 M.A., State University of New York
1975 D.A., University of North Dakota

Lori Cole 1999
Assistant Professor *History*
Ph.D., Carnegie-Mellon University

Harriett D. Joseph 1976
Professor *History*
1967 B.A., Southern Methodist University
1971 M.A., 1976 Ph.D., North Texas State University

Milo Kearney 1970
Professor *History*
1962 B.S., University of Texas at Austin
1966 M.A., 1970 Ph.D., University of California at Berkeley

Philip W. Kendall 1992
Professor *History*
1957 B.A., De Pauw University
1960 M.A., 1968 Ph.D., Boston University

Anthony K. Knopp 1976
Professor *History*
1963 B.A., M.A.T., College of St. Thomas
1966 M.A., University of Minnesota
1973 Ph.D., Texas Tech University

Manuel F. Medrano 1972
Professor *History*
1970 B.S., 1971 M.A., Texas A&I University
1985 Ed.D., University of Houston

James B. Sullivan 1973
Professor *History*
1967 B.A., 1972 M.A., 1985 Ph.D., University of Houston

College of Science, Mathematics & Technology

Dimitrios Sotiropoulos, Ph.D., Dean

Biological Sciences Department

Alfredo Muñoz, Chair

Allison J. Abell 1999
Assistant Professor *Biological Sciences*
1988 B.A., Yale University
1992 M.S., 1996 Ph.D., University of Chicago

Luis Colom, 2001

Associate Professor *Biological Sciences*
1979 M.D. Universidad de la Republica Oriental del Uruguay
1989 Ph.D. University of Calgary, Alberta Canada

Leticia Cabrera, 1999
Assistant Professor *Biological Sciences*
B.S. 1985
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Gregg Dieringer 1999
Lecturer *Biological Sciences*
1979 B.S. University of Akron
1980 M.S. University of Akron
1988 Ph.D. University of Texas

Javier Gonzalez 1997
Lecturer *Biological Sciences*
1977 B.S., Autonomous University of Nuevo Leon, Mexico
1983 M.S., 1987 Ph.D., Cornell University

Lawrence Lof 1975
Director, Rancho Del Cielo Biological Sciences
1969 A.A., Texas Southmost College
1971 B.A., University of Texas at Austin
1979 M.S., Pan American University

Genaro Lopez 1976
Professor *Biological Sciences*
1970 B.S., Texas Tech University
1975 Ph.D., Cornell University

Gail R. McClain 1988
Associate Professor *Biological Sciences*
1962 A.A., Freed-Hardeman Jr. College
1965 B.S., 1967 M.S., Memphis State University
1973 Ed.D., University of Tennessee

David L. McNeely 1990
Professor *Biological Sciences*
1967 B.A., University of Texas at Arlington
1972 M.S., North Texas State University
1982 Ph.D., Oklahoma State University

Alfredo Muñoz 1976
Assistant Professor *Biological Sciences*
1971 B.S., 1975 M.S., Pan American University

Gerson Peltz 2001
Visiting Professor *Biological Sciences*
1983 M.D. Fundacao Tecnico Educacional Sousa Marques, Rio de Janeiro, Brazil

Eli Eric Peña 1974
Associate Professor Biological Sciences/Director Academic Advising Center
1972 B.S., 1974 M.S., Pan American University
1990 Ph.D., University of Texas at Austin

Norman L. Richard 1969
Associate Professor Emeritus, Retired *Biological Sciences*
1957 B.S., Illinois State University
1969 M.S., Sam Houston State University

Alfred T. Richardson 1976
Professor Emeritus, Retired *Biological Sciences*
1969 B.A., 1970 M.A., 1975 Ph.D., University of Texas at Austin

James R. Sullivan 1969
Assistant Professor *Biological Sciences*
1966 B.A., 1969 M.S., Stephen F. Austin State University

Computer Sciences/Computer Information Systems Department

Domingo Molina III, M.S., Chair

Katherine T. De la Vega 1999
Lecturer *Computer Sciences*
1978 B.S., Texas A&M University
1980 M.B.A., Instituto de Estudios Superiores de Empresa, University of Navarra, Barcelona

Fitratullah Khan 1992
Associate Professor *Computer Sciences*
1980 B.S., 1983 M.S., 1987 Ph.D., University of Texas at Arlington
1991 M.S., University of Kansas

Blanca E. Lozano 1984
Assistant Professor *Computer Information Systems*
1978 B.S., Instituto Tecnologico de Mexico
1984 M.B.A., Pan American University

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Assistant Professor *Computer Sciences*
1973 B.S., 1975 M.Ed., Pan American University
1987 M.S., Corpus Christi State University

Bari Siddique 1985
Assistant Professor *Computer Sciences*
1975 B.S., 1977 M.S., Univ. of Rajshahi (Bangladesh)
1984 M.S., 1985 M.S., Marquette University

Mahmoud K. Quweider 2000
Assistant Professor *Computer Sciences*
1985 B.S., University of Toledo
1989, 1991, 1997 M.S., University of Toledo
1995 Ph.D., University of Toledo

Engineering Technology Department

Mario C. Diaz, Ph.D., Chair

Jose Amieva 1995
Instructor *Electronics*
1993 B.S.E.E., M.S.IE.E., Texas A&I University

Nadia A. Basaly 1997
Associate Professor *Engineering Technology*
1977 B.S., University of Helwan
1990 M.S., 1993 Ph.D., University of Connecticut

Thomas E. Bell 1998
Instructor *Machine Shop*
1978 B.S., Texas A & M University

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Associate Professor *Engineering Technology*
1965 B.E., Stevens Institute of Technology
1989 Ph.D., University of Massachusetts-Lowell

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1977 B.S., University of Helwan
1982 M.S., 1985 Ph.D., Washington State University

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1971 B.S., Monterrey Institute of Technology
1978 M.S., London Imperial College
1983 M.E., 1981 M.S., 1984 Ph.D., Rensselaer Polytechnic Institute

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Associate Master Technical Instructor *Drafting*
1974 B.A., University of Puget Sound
1983 M.S., Corpus Christi State University

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Professor *Engineering Technology*
1964 B.S., Mississippi State University
1970 M.S., 1970 Ph.D., University of Wisconsin

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Assistant Professor *Engineering Technology*
1975 B.S., University of Guadalajara
1975 M.S., University of Electrocommunications of Tokyo
1979 Ph.D., Swiss Federal Institute of Technology (EPFL)

Wayne E. Wells 1996
Professor *Engineering Technology*
1962 B.S., University of Cincinnati
1972 M.B.A., Eastern Michigan University
1986 M.S., 1993 Ph.D., Wayne State University

Industrial Technology Department

Jesus Galvan, Interim Chair

Pablo Coronado 2000
Lecturer *Air Conditioning*
1973 A.A.S. ,Texas Southmost College

1974 Teacher Certificate, South West Texas University

Jesus Galvan 1984
Technical Instructor *Air Conditioning & Refrigeration*
1984 Certificate, Texas Southmost College
Specialized Vocational Training
1984 Licensed Texas A.C. Contractor

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Assistant Master Technical Instructor *Building Trades*
1983 B.S.I.A., South West Texas University
1984 Electrical License

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Assistant Master Technical Instructor *Building Trades*
1991 A.A.S., Texas Southmost College
1978 Specialized Vocational Training

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Assistant Master Technical Instructor *Automotive Technology*
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Associate 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

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Mathematics Department

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Steven C. Benton 1980
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1970 B.S., Central Missouri State University
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1969 B.S., 1973 M.A., Texas A&M University-Kingsville

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1970 B.S., University of Karachi, Pakistan
1986 M.S., East Texas State University

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1976 B.A., Pan American University
1983 M.S., University of New Hampshire

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1995 M.S., Texas A&M-Kingsville

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1972 B.S., 1974 M. Ed., Southwest Texas State University
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1972 Magister – Warsaw University, Poland
1979 Ph.D., Polish Academy of Science

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1976 B.A., Texas Lutheran College
1983 B.B.A., 1977 M.Ed., East Texas State University
1995 Ed.D., University of Houston

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1969 B.S., Loyola University, Chicago
1972 M.S., 1995 Ph.D., Northeastern University, Boston

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1967 M.S., U.S. Naval Postgraduate School

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1993 M.Sc., 1996 Ph.D., The University of Guelph
1991 B.Sc., University of Western Ontario

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Associate Professor — *Physics*
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1980 B.S., Pan American University
1983 M.S., Texas A&I University
1995 Ed.D., Texas Tech University

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1977 A.A., Texas Southmost College
1981 B.S., 1987 Ph.D., University of Houston

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1967 B.A., Penn State University
1970 M.A., 1976 PhD., University of Arizona

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1975 B.S., 1977 M.S., Sam Houston State University

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1985 B.S., 1987 M.S., 1991 Ph.D., Syracuse University

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1982 B.S., State University of New York, Empire State College
1986 M.S., Rochester Institute of Technology
1999 Ph. D., University of Arkansas
1988 C. P. A., New York

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1996 M.A.A.C., University of Arkansas
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1971 C.P.A., State of Texas

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1966 A. B., 1971 Ph.D., University of California at Los Angeles
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1995 L.L.M. in Taxation, Temple University School of Law

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1994 M.A.C.C., Texas A&M at Corpus Christi

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1973 C.P.A., State of Oklahoma
1978 C.P.A., State of New Mexico

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1989 J.D., Regent University School of Law

Business Administration Department

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Gaurango Banerjee 1997
Assistant Professor — *Economics*
1991 B.S., BITS, Pilani India
1997 Ph.D., University of Alabama

Betsy V. Boze 1994
Professor — *Marketing*
1974 B.S., 1975 M.B.A., Southern Methodist University
1984 Ph.D., University of Arkansas

Anthony J. Daboub 1997
Assistant Professor — *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

Joselito Estrada
Assistant Professor — *Economics*
1985 B.A., Ateneo De Manila
1988 M.A., Fordham University
1992 Ph.D., Mississippi State

Edith Galy 1997
Lecturer — *Management Information Systems*
1984 B.S., St. Mary's University
1998 M.B.A., University of Texas at Brownsville

Fernando Angel Garza 1998
Lecturer — *Management Information Systems*
1998 M.B.A., University of Texas Pan American

Suzanne Hardebeck 1994
Associate Professor — *Management*
1965 B.S., 1967 M.S., Oklahoma State University
1980 Ph.D, -University of North Texas

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

Karl Kampschroeder 1997
Assistant Professor *Marketing*
1971 B.A., University of Missouri-Columbia
1991 M.B.A., Southwest Texas State University
1998 Ph.D., University of Houston

George Kozmetsky 1999
Visiting Professor *Business Administration*
1938 B.A., University of Washington
1947 M.B.A., Harvard University
1957 D.C.S., Harvard University

Charles Lackey 1995
Associate Professor *Production &Operations Management*
1969 B.A., University of Texas at Arlington
1975 M.S., Baylor University
1984 Ph.D., University of South Carolina

Marvin G. Lovett 1988
Associate Professor *Business Administration*
1978 A.A., Southwest Community College
1981 B.S., 1982 M.B.A., Northwest Missouri State University
1997 Ed.D., University of Houston

Steven R. Lovett 2000
Assistant Professor *Management/International Business*
1985 B.S., Southwest Missouri State University
1986 M.B.A., Arizona State University
1997 Ph.D., The University of Texas at Arlington

Jason B. MacDonald 1998
Lecturer *Marketing*
1992 B.B.A., University of Brunswick, Canada
1994 M.B.A., University of Brunswick, Canada

Patricia McIntyre
Assistant Professor *Psychology/Marketing*
1975 B.S., Thomas Jefferson University
1980 M.A., University of El Paso
1989 Ph. D., Kansas State University

Rafael Otero 1997
Assistant Professor *Business Administration*
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 D.B.A., 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
C.P.S., International

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 Technologico de Estudios Superios de Monterrey
1989 Ph.D., University of Texas at Austin

Charles Patton 1978
Professor *Emeritus*
B.A., Cornell University
M.S., Stanford University

Ronald E. Utecht
Professor *Emeritus*
B.B.A., Baylor University
M.B.A., Ph.D., Arizona State University

Louie W. Walter
Professor *Emeritus*
B.S., M.S., University of Arkansas
Ph.D., University of Texas at Austin

Kenneth Zantow 1999
Assistant Professor *Management*
1975 B.A., Southern Illinois University
1993 M.B.A., Pittsburg State University
1999 Ph.D., University of Arkansas (expected completion)

Maosen Zhong 1999
Assistant Professor *Finance*
1995 B.A., Zhongshan University, China
1997 M.B.A., Lousiana Tech University
1999 D.B.A, ~~(Expected)~~ Lousiana Tech University

Business Technology Department

Mary Sullivan, M.A., Chair

Dianna Blankenship 2000
Assistant Professor *Business Technology*
1975 B.S. Texas Christian University
1977 M.S. Texas Woman's University
1982 Ph.D. Texas Woman's University
1995 J.D. Texas Wesleyan University School of Law

Beatriz Castillo 1984
Assistant Master Technical Instructor *Business Technology*
1976 A.A., Texas Southmost College
1980 B.B.A., 1984 M.Ed., Pan American University

James Defenbach 1996
Senior Lecturer *Accounting Technology*
1949 B.S., 1955 M.S., University of Idaho

Irma Saenz Jones 1977
Associate 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

Marvin G. Lovett 1988
Associate Professor *International Business Management*
1978 A.A., Southwest Community College
1981 B.S., 1982 M.B.A., Northwest Missouri State University
1997 Ed.D., University of Houston

Angela Kaye Monroe 1998
Assistant Master Technical Instructor *Business Technology*
1994 B.S., Fairmont State College

Sharon Smith 1973
Associate Master Technical Instructor *Accounting Technology*
1967 B.S., 1969 M.A., Northern Arizona University
1998 M.P.A., Texas A&M-Kingsville

Mary M. Sullivan 1971
Associate Professor *Business Technology*
1966 B.A., 1969 M.A., Stephen F. Austin State University

School of Education

Sylvia C. Peña, Ed.D., Dean

Curriculum and Instruction Department

Vacancy, Chair

Chuey Abrego 2001
Field Base Teaching SpecialistElementary/Secondary Education
1990 B.S. Biology UT-Pan American
1997 M.Ed. Southwest Texas State University

Michelle Abrego 2001
Field Base Teaching SpecialistElementary/Secondary Education
1981 B.S. Michigan State University
1982 M.A. Michigan State University
1990 M.Ed. Texas A&M University-Corpus Christi
1996 Ed.D. University of Texas at Austin

Iliana Alanís 1999
Assistant Professor *Curriculum & Instruction*
1989 B.B.A, University of Texas at Austin
1995 M.Ed., University of Texas Pan American
1998 Ph.D., University of Texas at Austin

Javier Ayala 1991
Associate Professor *Reading*
1972 B.A., Pan American University
1977 M.Ed., Pan American University
1984 Ph.D., University of Wisconsin-Madison\

Joanne E. Beriswill 2000
Senior Lecturer *Education Technology*
1988 B.S. University of South Florida
1995 M.Ed. University of South Florida
1999 M.A. Indiana University

Doris (Lynn) Ballenger 1996
Specialist *Curriculum and Instruction*
1976 B.S., East Texas State University
1978 M.Ed., East Texas State University

Gayle L. Brogdon 1978
Associate Professor *Kinesiology*
1965 B.S., East Texas State University
1966 M.Ed., East Texas State University
Ed.D., North Texas State University

Kathy Bussert-Webb 2000
Assistant Professor *Reading*
1984 B.A. Indiana University
1989 M.A. Indiana University
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

Leo A. Coronado 1979
Associate Professor *Curriculum and Instruction*
1969 B.S., Pan American University
1975 M.Ed., 1979 Ph.D., University of Texas at Austin

Jane Davick Fry 1999
Assistant Professor *Reading*
1979 B.A., Florida Atlantic University
1982 M.Ed., Nova Southeastern University
1996 Ed.D., Florida International University

Anita Davila 2001
Lecturer *Elementary/Secondary Teacher Education*
1986 BBA Pan American University
1997 M.Ed. Baylor University

Georgianna Marie Duarte 1994
Associate Professor *Early Childhood*
1980 B.A., Georgia State University
1982 M.A., Edinoboro State University
1986 Ph.D., Pennsylvania State University

Verónica Galván-Carlan 1999
Assistant Professor *Early Childhood Education*
1975 B.S., University of Texas at Pan American
1980 M.Ed., University of Texas at Pan American
2000 Ed.D. University of Houston

Nancy Garcia 1999
Field Base Teaching SpecialistElementary/Secondary Teacher Education
1992 B.A. Southwest Texas University
1999 M.Ed. University of Texas at Brownsville

Jaime Garcia 1998
Assistant Professor *Curriculum & Instruction*
1980 B.A., San Jose State University
1990 M.Ed., University of Texas Austin
1995 Ph.D, University of Georgia

Juan Hinojosa 2000
Field Base Teaching Specialist *Educational Technology*
1992 B.S. Texas A&I University – Kingsville
2000 M.Ed. University of Texas at Brownsville

Dianne Layton Johnson 1977
Professor *Reading*
1967 B.S., Sam Houston State University
1971 M. Ed., Sam Houston State University
1993 Ed.D., University of Houston

Elva G. Laurel 1993
Associate Professor *Secondary & Educational Administration*
1969 B.S., Pan American University
1973 M.A., Incarnate Word College
1986 Ph.D., University of Texas at Austin

Bobbette M. Morgan 2000
Assistant Professor *Secondary Education*
1972 B.S. Ferris State University
1981 M.A. Central Michigan University
1987 Ed.D. University of Southern California

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

Reynaldo Ramirez, Jr. 1996
Assistant Professor *Secondary and Science Education*
1973 B.S., Pan American University
1986 M.S., Pan American University
1996 Ed.D., University of Houston

Raymond J. Rodrigues
Professor *Education*
A.B., M.Ed., Rutgers University
Ph.D., University of New Mexico

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
Senior Lecturer *Reading*
1976 B.J., University of Missouri
1986 M.A., New Mexico State University

Cheryl Strauser 1998
Lecturer *Reading*
1989 B.A., Mansfield University
1997 M.Ed., University of Texas at Brownsville

Michael J. Sullivan 1996
Assistant Professor *Educational Technology*
1973 B.A., University of San Francisco
1975 M.Ed., University of Texas-El Paso
1993 Ph.D., University of Texas-Austin

James Telese 1995
Associate Professor *Secondary & Mathematics Education*
1982 B.S., Texas A&M University
M.S., Corpus Christi State University
1994 Ph.D., Texas A&M University

Rene Torres 1979
Assistant Professor *Secondary Education*
1971 B.S., Pan American University
1976 M.Ed., Pan American University

School Specialties Department

Charles Comeaux, Ed.D., Chair

Mozelle Barron 1998
Lecturer *Counseling and Guidance*
1997 B.S., Pan American University
1980 M.Ed., Pan American University

Cindy L. Bradford 1997
Associate Professor *Educational Administration*
1972 B.A., Baylor University
1976 M.Ed., University of North Texas
1987 Ph.D., University of North Texas

Steven Chamberlain 1999
Assistant Professor *Special Education*
1985 B.A. University of Texas at Austin
1989 M.Ed. University of Texas at Austin
1999 Ph.D. University of Texas at Austin

Charles Comeaux 1988
Professor *Counseling and Guidance*
1960 B.S., Louisiana State University
1964 M.Ed., Louisiana State University
1969 Ed.D., University of Arizona
College Management Program, Carnegie Mellon University

Joseph R. Corbeil 1998
Lecturer *Educational Technology*
1982 B.S., University of Texas Pan American
1997 M.Ed., University of Texas at Brownsville

Mary Grace Curtis 1994
Assistant Professor *Special Education*
1979 B.S., Southern Illinois University
1980 M.A., Southern Illinois University
Ph.D., University of Illinois

Peter Gawenda 1983
Professor *Educational Administration*
1960 Certificate Interpreter (II) FRG
1974 BS University of Maryland
1977 MS, Troy State University
1978 Diploma, Fuehrungsakademie, Hamburg
1986 Ed.D, University of Houston

Georgianna Marie Duarte 1994
Associate Professor *Early Childhood, Curriculum and Instruction*
1980 B.A., Georgia State University
1982 M.A., Edinoboro State University
1986 Ph.D., Pennsylvania State University

Veronica Galvan-Carlan 1999
Senior Lecturer *Early Childhood Education*
1975 B.S., University of Texas at Pan American
1980 M.Ed., University of Texas at Pan American

Ralph M. Hausman 1997
Professor *Special Education*
1962 B.A., 1963 M.A., University of Texas, Austin
1967 M.Ed., University of Hawaii, Honolulu
1972 Ph.D., G. Peabody College, Nashville
1985-87 Certificate, University of Texas, Permian Basin

Walter R. Howard 1993
Associate Professor *Educational Administration*
1951 B.A., University of Texas at Austin
1958 M.Ed., University of Texas at Austin
1971 Ph.D., University of Texas at Austin

Elva G. Laurel 1993
Associate Professor *Education*
1969 B.S., Pan American University
1973 M.A., Incarnate Word College
Ph.D., University of Texas at Austin

Alma G. Leal 1988
Associate Professor *Counseling and Guidance*
1973 B.S., Pan American University
1974 M.Ed., Pan American University
1980 Ed.D., East Texas State University

Sylvia C. Peña 1996
Professor *Curriculum and Instruction*
1963 B.A., Texas A&I University
1970, M.A., 1976 Ed.D., University of Houston

Elva C. 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

Olivia Rivas 1979
Professor *Counseling and Guidance*
1970 B.A., 1974 M.Ed., Pan American University
Ed.D., East Texas State University

Hugo Rodriguez 1978
Professor *Curriculum and Instruction*
1963 B.B.A., University of Texas at Austin
1967 M.P.A., University of Missouri at Kansas City
Ph.D., University of Texas at Austin

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

Gordon Stein 1996
Senior Lecturer *Counseling and Guidance*
1949 B.A., University of Kansas
1971 M.Ed., University of Wisconsin-Green Bay
1976 Ph.D., Fielding Institute-Santa Barbara

Michael J. Sullivan 1996
Assistant Professor *Educational Technology*
1973 B.A., University of San Francisco
1975 M.Ed., University of Texas-El Paso
1993 Ph.D., University of Texas-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

Child Care and Development Program

Vacancy, Program Director

Leticia Diaz 1984
Associate Master Technical Instructor *Child Care and Development*
1981 A.A.S., Texas Southmost College
1985 B.S., Corpus Christi State University

Kinesiology Department

Zelma D. Mata, Ed.D., Chair

Marcia J. Barrett 1980
Field Base Teaching Specialist *Kinesiology*
1973 B.S., Eastern Michigan University
1977 M.Ed., Pan American University
1982 Ps.D., Neotarian College of Philosophy

Jack L. Loff 1985
Assistant Professor *Kinesiology*
1970 B.S., Pan American University
1974 M.Ed., Pan American University
1982 M.S., Pan American University

Zelma D. Mata 1978
Associate Professor */ChairKinesiology*
1977 B.S., Pan American University
1978 M.Ed., Pan American University
1993 Ed.D., University of Houston

Judith D. Walton 1969
Professor *Kinesiology*
1965 B.A., University of Northern Iowa
1969 M.A., Texas Woman's University
1985 Ph.D., Michigan State University

School of Health Sciences

Eldon L. Nelson, Ph.D., Dean

Allied Health Department

John L. McCabe, Ph.D., Chair

Elizabeth Chavez 2000
Technical Instructor *Emergency Medical Technology*
1996 A.A.S., University of Texas at Brownsville/Texas Southmost College

Betty Chong-Menard, CRTT, RRT, RN 2000
Lecturer *Health Core Courses*
1987 A.A.S., Texas Southmost College
1990 A.A.S., University of Texas at Brownsville/Texas Southmost College

Shamina Davis, M.T. ASCP 1988
Associate Master Technical Instructor *Medical Laboratory Technology*
1981 B.S., Pan American University
1995 M.S., Texas A&M University-Corpus Christi

Luis M. Garcia, M.D.
Medical DirectorMedical Laboratory Technology
M.D., Universidad Autonoma de Nuevo Leon

Manuel Gavito, R.T. ARRT, CMRT 1975
Associate Master Technical Instructor *Radiologic Technology*
1988 B.S., Pan American University

John L. McCabe, R.R.T., CPFT 1991
Associate Professor *Respiratory Therapy*
1979 B.S., 1981 M.A., 1987 Ph.D., University of Iowa

William McKinney, M.D.
Medical Advisor *Radiologic Technology*
B.S., M.D., University of OklahomaBoard Certified General Radiology

Kim Morris-Garcia, R.R.T., CRTT 1996
Assistant Master Technical Instructor *Respiratory Therapy*
1996 B.S., Southwest Texas State University

Eldon L. Nelson 2000
M.A., B.S., B.A. East Carolina University
Ph.D., College of Medicine, University of Florida

Justin Oakerson 2001
Technical Instructor *Emergency Medical Technology*
2000 A.A.S., University of Texas at Brownsville/Texas Southmost College

Eusebio Ortiz, R.T., ARRT, CMRT 1993
Assistant Master Technical Instructor *Radiologic Technology*
A.A.S., Texas Southmost College
1994 B.S., University of Texas at Brownsville

1997 M.Ed., University of Texas at Brownsville

Lorenzo R. Pelly, M.D.
Medical Director *Respiratory Therapy*
B.A., Washington University
M.D., University Autonoma Estado de Monterrey

John A. Wells, M.D.
Medical Director *Emergency Medical Technology*
B.A., University of Texas at Austin
M.D., Texas Tech University School of Medicine

Carol Wilhelm, M.T., ASCP, NCA 1990
Associate Master Technical Instructor *Medical Laboratory Technology*
1986 B.S., Pan American University
1990 M.S., Texas A&M University-Corpus Christi

David C. Ybarra Sr., R.R.T. CRTT, CPFT, RPFT
Assistant Master Technical Instructor *Respiratory Therapy*
1984 A.A.S., Texas Southmost College
1994 B.A.A.S., The University of Texas at Brownsville

Nursing Department

Edna Garza-Escobedo, R.N., Ph.D., Chair

Sara Alvarez, R.N. 1997
Assistant Master Technical Instructor *Vocational Nursing*
1967 L.V.N., Valley Baptist Medical Center
1977 A.D.N., Pan American University

Eric Stoerm Anderson, R.N. 1993
Lecturer *Associate Degree Nursing*
1993 A.A.S., University of Texas at Brownsville/Texas Southmost College
1996 B.S.N., University State of New York
1998 M.S.N., University of Phoenix

Lydia Barton, M.S.N., R.N. 1983
Associate Professor *Associate Degree Nursing*
1962 B.S.N., Madison College
1979 M.Ed., Pan American University
1989 M.S.N., Corpus Christi State University

Sylvia Campbell, M.S.N., R.N. 1995
Assistant Professor *Associate Degree Nursing*
1975 B.S.N., University of Texas at Austin
1994 M.S.N., University of Texas Health Science Center-San Antonio

Margie Chavez, EdD.,R.N. 1994
Associate Professor *Associate Degree Nursing*
1993 B.S.N., 1993 M.S.N., University of Texas Health Science Center-San Antonio
2000 EdD.NOVA Southeastern

Sonia Cunningham, M.S., R.N. 1993
Assistant Professor *Associate Degree Nursing*
1974 B.S.N., Herbert Lehman College
1992 M.S., Corpus Christi State University

Katherine B. Dougherty, Ed.D, 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-San Antonio
1995 Ed.D., University of Houston

Marilyn L. Dyer, R.N. 1987
Associate Professor *Dean, School of Health Sciences*
1954 B.S.N., University of Cincinnati College of Nursing
1959 M.S.N., Ohio State University School of Nursing

Elizabeth Freeth, M.S.N., R.N. 1998
Instructor *Associate Degree Nursing*
1974 B.S.N, Trenton State College, N.J.
1998 M.S.N., University of Texas Health Science Center-San Antonio

Karen Fuss-Sommer, B.Ed, R.N 1995
Associate Master Technical Instructor *Vocational Nursing*
1981 Diploma, Ryerson Polytec Institute at Toronto
1997 B.Ed., Texas A&M Corpus Christi

Edna Garza-Escobedo, Ph.D R.N. 1990
Associate Professor *Associate Degree Nursing*
1961 B.S.N., 1973 M.S.N., Texas Woman's University
1992 Ph.D., The Ohio State University

Rosalinda Giffard, M.S.N., R.N. 1995
Associate Master Technical Instructor *Vocational Nursing*
1978 B.S.N., Far Eastern University
1996 M.S.N., University of Texas Health Science Center-San Antonio

Sharon M. Grudnicki, R.N. 1995
Assistant Professor *Associate Degree Nursing*
1971 A.D.N., Oakland Community College
1981 B.S.N., University of Michigan
1989 M.S.N., University of Texas Health Science Center, Houston

Sharon Helsley-McGinley, M.S.N., 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, Houston

Ella Herriage, RN, Ph.D. 2000
Associate Professor *Master Degree Nursing*
1962 BSPHN George Peabody/ Vanderbilt
1971 MPH Tulane University School of Public Health and Topical Medicine
1985 Ph.D. Oklahoma State University

Joe Lacher, M.S.N. R.N. 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, A.D.N., R.N. 1999
Assistant Master Technical Instructor *Vocational Nursing*
1977 L.V.N., Texas Southmost College
1982 A.D.N., Texas Southmost College

Linda MacDonald, MS, 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, B.S.N, R.N. 1997
Assistant Master Technical Instructor *Vocational Nursing*
1979 B.S.N., University of Texas at El Paso

Nancy McGowan,MSN, R.N. 1994
Assistant Professor *Associate Degree Nursing*
1975 B.A., Colorado State University
1981 B.S.N., 1992 M.S.N., George Mason University

Betty Menard-Chong, CRTT, RRT, RN 1999
Lecturer *Health Technology*
1987 A.A.S.,Texas Southmost College
1990 B.S.N., The University of Texas at Brownsville/Texas Southmost College

Ava S. Miller,EdD, R.N. 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
Lecturer *Health Technology*
1993 Associate Degree Nursing

Mahandran Rajasuriar, R.R.T. 1996
Lecturer *Health Technology*
1987 A.A.S., Texas Southmost College
1996 B.S., Texas A&M-Corpus Christi

Anne Rentfro, MSN, R.N. 1990
Associate Professor *Bachelor of Science in Nursing*
1974 B.S.N., University of Rochester
1982 MSN, University of Texas at Austin

Sally Roach, MSN, R.N. 1990
Associate Professor *Bachelor of Science in Nursing*
1979 A.A.S., 1986 B.S.N., Pan American University
1993 MSN, University of Texas Health Science Center-San Antonio

Gloria Spencer, B.S.N., R.N. 1994
Associate Master Technical Instructor *Vocational Nursing*
1972 L.V.N., Texas Southmost College
1975 A.D.N., Galveston College
1985 B.S.N., University of Texas Pan American

Wade Tyrrell, MSN, RN
Get Info!

Janet Williams, B.S.N., R.N. 1998
Lecturer *Vocational Nursing*
1975 A.D.N., Methodist Medical Center School of Nursing
1991 B.S.N., University of Texas Pan American

Librarians

Douglas Ferrier
Library Director
B.A., University of Texas at Austin
M.A., University of Texas at Arlington
M.L.S., University of North Texas

Gordon Grant
Librarian
B.A., University of South Florida
A.M.L.S., University of Michigan
Ph.D., Texas A&M University

Luisa Serna
Librarian
B.A., M.L.I.S., University of Illinois
M.Ed., Mid-Management Certificate, University of Texas at Brownsville

Mark Williams
Librarian
B.A., Wichita State University
M.L.I.S., University of Texas at Austin

Barret C. Havens
Librarian
B.A., University of Texas at Austin
M.L.I.S., University of Texas at Austin

John B. Hawthorne
Librarian
B.A., University of Texas at Austin
M.L.I.S., University of Texas at Austin

Mabel Hockaday
Librarian
B.A., University of Texas at Brownsville
M.L.S., University of North Texas

Luisa Serna
Librarian
B.A., M.L.I.S., University of Illinois
M.Ed., University of Texas at Brownsville

Kathleen Vanderslice
Librarian
B.A., M.L.I.S., University of Texas at Austin
University of Texas at Austin

Mark Williams
Librarian
B.A., Wichita State University
M.L.I.S., University of Texas at Austin

Counselors

Hilda Silva, L.P.C.
Director of Counseling
B.S., M.Ed., Pan American University

Andreina Galván
Counselor
B.S., M.Ed., Pan American University

Thelma Gonzalez-Sullivan
Counselor
B.A., University of Texas at Austin
M.A., Texas A&M University – Kingsville

Cindy Rodriguez
Counselor
B.S.W., University of Texas Pan American
M.Ed., University of Texas at Brownsville

Steve Wilder
Counselor
B.A., Kalamazoo College
M.S., National-Louis University
M.Ed., University of Texas at Brownsville

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 544-8951.

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 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 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 Enrollment Office for each student and will also be made available for inspection pursuant to this policy. If the institution discovers that a third party who has received student records from the institution has released or failed to destroy such records in violation of this policy, it will prohibit access to educational records for five years. Respective records no longer subject to audit nor presently under request for access may be purged according to regular schedules.

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 Enrollment Office 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 Enrollment Office.

Access to Files

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

A list of education records and those officials responsible for the records shall be maintained at the Enrollment Office. They include:

Academic Records

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

Student Service Records

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

Financial Records

- Business Office: Vice President of Business Affairs
- 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 Enrollment Office.

Complaints

Complaints regarding alleged failures to comply with the provisions of the FERPA may be submitted in writing to the Family Policy Compliance Office, U.S. Department of Education, 400 Maryland Avenue SW, Washington, 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 a delinquent financial obligation or financial "hold" at UTB/TSC.

Hazing Policy

Hazing in state educational institutions is prohibited by both state law (§51.936 and 37.151 et seq, Texas Education Code) and by the Regent's Rules and Regulations (Part One, Chapter VI, Section 3.28). Individuals or organizations engaging in hazing could be subject to fines and charged with criminal offenses. Additionally, the law does not affect or in any way restrict the right of the University to enforce its own rules against hazing.

Individuals

A person commits an offense if the person:

1. engages in hazing;
2. solicits, encourages, directs, aids or attempts to aid another engaging in hazing;

3. recklessly permits hazing to occur; or
4. has firsthand knowledge of the planning of a specific hazing incident involving a student in an educational institution, or has firsthand knowledge that a specific hazing incident has occurred, and knowingly fails to report that knowledge in writing to the Vice President for Student Affairs or other appropriate official of the institution.

Organizations

An organization commits an offense if the organization condones or encourages hazing or if an officer of any combination of members, pledges, or alumni of the organization commits or assists in the commission of hazing.

Definition

The term "hazing" is broadly defined by statute to mean any intentional, knowing, or reckless act, occurring on or off the campus of an educational institution, by one person alone or acting with others, directed against a student, that endangers the mental or physical health of safety or a student for the purpose of pledging, being initiated into, affiliating with, holding office in, or maintaining membership in an organization. Hazing includes, but is not limited to:

a. Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity;

b. any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, calisthenics, or other activity that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student;

c. any activity involving consumption of a food, liquid, alcoholic beverage, liquor, drug, or other substance which subjects the student to an unreasonable risk of harm or which adversely affects the mental or physical health or safety of the student;

d. any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame, or humiliation, or that adversely affects the mental health or dignity of the student or discourages the student from entering or remaining registered in an educational institution, or that may reasonably be expected to cause a student to leave the organization or the institution rather than submit to acts described in this subdivision; and

e. Any activity that induces, causes, or requires the student to perform a duty or task which involves a violation of the Penal Code. The fact that a person consented to or acquiesced in a hazing activity is not a defense to prosection.

Immunity

In an effort to encourage reporting of hazing incidents, the law grants immunity from civil or criminal liability to any person who reports a specific hazing event in good faith and without malice to the Vice President for Student Affairs or other appropriate official of the institution and immunizes that person for participation in any judicial proceeding resulting from that report. Additionally, a doctor or other medical practitioner who treats a student who may have been subjected to hazing may make a good faith report of the suspected hazing activities to police or other law enforcement officials and is immune from civil or other liability that might otherwise be imposed or incurred as a result of the report. The penalty for failure to report is a fine of up to $1,000, up to 180 days in jail, or both. Penalties for other hazing offenses vary according to the severity of the injury which results and include fines from $500 to $10,000 and/or confinement for up to two years.

Immunization Requirements

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

- Measles: proof of two doses of measles vaccine administered on or after the first birthday and at least 30 days apart or proof of immunity.
- Mumps: proof of one dose of mumps vaccine administered on or after the first birthday or proof of immunity.
- Rubella: proof of one dose administered on or after the first birthday or proof of immunity.
- Tetanus/diphtheria: proof of one "booster" dose of tetanus/diphtheria (within 10 years).
- Hepatitis B virus (HBV): proof of serologic immunity to HBV or certification of immunization with a complete series of Hepatitis B vaccine.

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

Illicit Drug Use and Alcohol Abuse Program and Policy

In compliance with the Drug Free Schools and Communities Act Amendment of 1989, Part One, Chapter VI, §3.21 of the Regents' Rules and Regulations provides for disciplinary action against any student who engages in conduct that is prohibited by state, federal, or local law. This includes those laws prohibiting the use, possession, or distribution of drugs and alcohol.

UTB and TSC will impose at least a minimum disciplinary penalty of suspension for a specified period of time or suspension or rights and privileges, or both, for conduct related to the use, possession, or distribution of drugs that are prohibited by state, federal, or local law. Other penalties that may be imposed for conduct related to the unlawful use, possession, or distribution of drugs or alcohol include disciplinary probation, payment for damage to or misappropriation of property, suspension of rights and privileges, suspension for a specified period of time, expulsion, or such other penalty as may be deemed appropriate under the circumstances.

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

Sexual Harassment Policy

UTB/TSC is committed to provide a professional working and learning environment free from sexual harassment. Sexual harassment has been declared a form of sex discrimination under Title VII of the Civil Rights

Act of 1964, and Title IX of the Civil Rights Act of 1972 and the Texas Commission on Human Rights Act. 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, page 1 of 2, 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

Part One, Chapter VI, §6.6 of the Regents' Rules and Regulations states that no solicitation shall be conducted on the grounds, sidewalks, or streets of the UTB/TSC campus, except by the agents, servants, or employees of this institution acting in the course and scope of their employment, or by the Student Government Association, or by a registered student, faculty, or staff organization of UTB/TSC. Such solicitation must adhere to the following rules:

- Academic or institutional programs being carried on in the buildings shall not be disturbed or interfered with.
- The free and unimpeded flow of pedestrian or vehicular traffic on sidewalks and streets and at places of ingress and egress to and from campus buildings shall not be interrupted.
- The person(s) being solicited shall not be harassed, embarrassed or intimidated.

Non-University groups, individuals or associations are not permitted to solicit, distribute, or circulate any petition, handbill, or other literature in University buildings or on the grounds.

Newspaper vending is permitted only in the areas designated in advance by the President or his delegate. Any request for other

newspapers or additional distribution areas should be directed in writing to the Vice President for Business Affairs.

Prior authorization to conduct solicitations or distribution of materials on campus by registered student organizations or by registered faculty or staff organizations must be obtained through the Office of the Vice President for Student Affairs (student organizations) or through the Office of the Vice President for Business Affairs (faculty or staff organizations). Persons desiring to conduct solicitations or to distribute materials strictly for personal reasons or for personal profit or gain will under no circumstances be granted permission to do so.

Any violation of the above policy should be reported to the Office of the Vice President for Business Affairs.

Student Right-to-Know Act and Campus Security Act

In compliance with the Student Right-to-Know and Campus Security Act (the Act) 20 U.S Sections 1092 (a), (e) and (f), as amended, the university collects specified information on campus crime statistics, campus security policies, and institutional completion or graduation rates. Pursuant to the

federal law, alleged victims of violent crime are entitled to know results of campus student disciplinary proceedings concerning the alleged perpetrators.

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

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

UTB/TSC will also publish the annual security report which includes its policy regarding sex-related offenses, sexual assault prevention programs, education programs to promote awareness of sex offenses, administrative disciplinary procedures and sanctions for offenders, and counseling and student affairs for victims.

Prior to the offer of 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.