

## Summary of Catalog Revisions

The following changes have been made to the previous Undergraduate Catalog, last revised on 3/1/16:

## Effective Spring 2017

Grading Policies: Institutional Grade Point Average Page 65

## Previous Policy:

Native Grade Point Average: The cumulative grade point average (GPA) at The University of Texas Rio Grande Valley is calculated on the basis of courses taken at the university and excludes transferred grades.

## Revised Policy:

Institutional Grade Point Average: The cumulative grade point average (GPA) at The University of Texas Rio Grande Valley is calculated on the basis of courses taken at the university and excludes transferred grades. Coursework transferred from the University of Texas at Brownsville/Texas Southmost College for students enrolled at UTRGV prior to Fall 2017 will be included in the calculation of the Institutional GPA.

## University Requirement: Residency Page 85

## Previous Policy:

The student must complete and receive credit in residence for: (a) a total of at least 25 percent of the credit hours of coursework counted toward the degree, and (b) 24 of the last 30 credit hours, and (c) six credit hours of advanced work in the major. (Clinical Laboratory Sciences Majors: The last 30 hours of college work must be completed at UTRGV; they must include at least eight hours of biology or chemistry, and a minimum of six advanced hours.)

## Revised Policy:

At least 25 percent of the credit hours required for the degree must be earned through instruction offered by UTRGV. Transfer students may be required to complete additional hours above those on their degree plan to meet this requirement. In this situation, students will work with the Academic Advising Center to select hours that support the student's academic and professional goals.

## Effective Fall 2016

## Texas Common Course Numbering System Page 31

## Revised Policy:

## The following TCCNS course titles were removed:

- ARAB 1311 Beginning Arabic I
- ARAB 1312 Beginning Arabic II
- BIO 2428 Vertebrate Zoology
- CHEM 2101 Analytical Chemistry Laboratory I
- CHEM 2301 Analytical Chemistry I
- CHIN 1311 General Chemistry I
- CHIN 1312 General Chemistry II
- COSC 1336 Programming Fundamentals I
- DANC 1228 Ballroom I
- DANC 1245 Modern Dance I
- DANC 1246 Modern Dance II
- DANC 1249 Ballet Folklórico I
- DANC 1250 Ballet Folklórico II
- DANC 1253 Spanish Ballet I
- DANC 1254 Spanish Ballet II
- ENGL 2314 Technical \& Business Writing I
- ENGL 2315 Technical \& Business Writing II
- ENGR 1101 Introduction to Engineering I
- ENGR 1204 Engineering Graphics I
- ENGR 2301 Engineering Mechanics - Statics
- ENGR 2302 Engineering Mechanics - Dynamics
- ENGR 2305 Linear Circuits
- FREN 1311 Intermediate French I
- FREN 1312 Intermediate French II
- GERM 1311 Beginning German I
- GERM 1312 Beginning German II
- GOVT 2301 American Government I
- GOVT 2302 American Government II
- ITAL 1311 Beginning Italian I
- ITAL 1312 Beginning Italian II
- JAPN 1311 Beginning Japanese I
- JAPN 1312 Beginning Japanese II
- MUSI 1157 Opera Workshop I
- MUSI 1162 Voice Diction I
- MUSI 1165 [No course title]
- MUSI 1166 Woodwind Class I
- MUSI 1167 Woodwind Class II
- MUSI 1178 Brass Class I
- MUSI 1179 Brass Class II
- MUSI 1195 Strings Class I
- MUSI 1196 Strings Class II
- MUSI 2114 Piano Class for Music Majors III
- MUSI 2116 Sight Singing and Ear Training III
- MUSI 2117 Sight Singing and Ear Training IV
- MUSI 2211 Music Theory III
- MUSI 2212 Music Theory IV
- PORT 1311 Beginning Portuguese I
- PORT 1312 Beginning Portuguese II
- SPAN 1311 Beginning Spanish I
- SPAN 1312 Beginning Spanish II
- THTF 1336 Television Production


## The following TCCCN course titles were added:

- GOVT 1305 American Government I
- GOVT 2302 American Government II
- MUSI 1157 Opera Workshop I


## Satisfactory Academic Progress Page 49

## Previous Policy:

## Introduction

Federal Title IV financial aid regulations require students receiving federal student financial aid to maintain Satisfactory Academic Progress (SAP) at the university in order to remain eligible for this aid. Satisfactory Academic Progress standards are also required for some state and institutional financial aid programs. The Financial Aid Office evaluates SAP at the end of each semester, once grades are posted. There are three components of SAP: a qualitative standard (i.e., GPA), pace of progression (number of credits attempted and earned for each year of study), and a maximum time frame to complete the degree or program. All semesters of enrollment including summer must be considered in the determination of SAP. SAP standards, including grade point average, pace, and maximum time frame, begin anew for students seeking a graduate or professional degree after completing an undergraduate degree.

## Qualitative or Grade Point Average (GPA)

The student must maintain at least a 2.0 institutional grade point average (GPA), which is consistent with the University's academic requirements. All UTRGV courses with a grade of $A, B, C, D$, and $F$ are counted in the calculation of GPA. Satisfactory Academic Progress cannot be determined until all grades of I or IP (incomplete) are resolved. Transfer grades that are accepted by the university are not counted in the determination of GPA because they are not part of the Institutional or native GPA (effective fall 2010). However, the credits from all attempts accepted by UTRGV are counted in the calculation of pace and the maximum time frame requirement. If a student repeats a course, only the most recent grade is counted in the calculation of GPA. However, the credits from all attempts are counted in the calculation of pace and the maximum time frame requirement. Remedial courses are not counted in the calculation of GPA, pace, or the maximum time frame requirement. Audited courses do not count toward the GPA, pace, or maximum time frame requirements. Credit is not granted for audited courses.

## PACE (Progression Requirements)

The student must be progressing toward graduation requirements by completing the courses for which they enroll each semester. Courses or classes are measured in credit hours. Students must complete at least 75 percent of all credits attempted. For example, a sophomore who has attempted 60 credit hours and has satisfactorily completed 48 of those credit hours would have completed 80 percent of attempted credits. Credits attempted are all course credit hours for which the student is enrolled as of the semester census date, which is the 12th day of class in a semester for regular fall and spring and 4th class day for regular summer sessions (for terms shorter in length please check for census date), whether they have received a grade yet or not. Once grades are assigned, attempted credits include grades of $A, B, C, D, F, P, N P, S, U, C R, N C, I P, I, D R$, or $W$.

Grades of DROPPED are counted as hours attempted if the student is enrolled in the class and charged for it as of the semester census date. Credits satisfactorily completed are classes for which the student receives a grade of $A, B, C, D, P, S, C R$ or $P$.

## Maximum Time Frame Requirements

Students must complete undergraduate degree requirements in a maximum time period according to federal regulation. Maximum time frame will be measured by the number of credit hours attempted. Students are allowed a maximum of 180 attempted credit hours in order to complete bachelor's degree requirements. Students attempting a second bachelor's degree are allowed 90 attempted credit hours.

Attempted credit hours, for purposes of calculating maximum time frame, include all courses with grades of $A, B, C, D, F, P, N P, S, U, C R, N C, D R, W$ or I and IP courses for which grades have not yet been assigned. Transfer credits, AP credits, or CLEP credits accepted for the student's academic program or degree is also counted when measuring the maximum time frame to complete the degree or program.

## Revised Policy:

## Introduction

Federal Title IV financial aid regulations require students receiving federal student financial aid to maintain Satisfactory Academic Progress (SAP) at the university in order to remain eligible for this aid. Satisfactory Academic Progress standards are also required for some state and institutional financial aid
programs. The Financial Aid Office evaluates SAP at the end of each semester, once grades are posted. There are three components of SAP: a qualitative standard (i.e., GPA), pace of progression (number of credits attempted and earned), and a maximum time frame to complete the degree or program. All semesters of enrollment including summer must be considered in the determination of SAP. SAP standards, including grade point average, pace, and maximum time frame, begin anew for students seeking a graduate or professional degree after completing an undergraduate degree.

## Qualitative or Grade Point Average (GPA)

The student must maintain at least a 2.0 institutional grade point average (GPA), which is consistent with the University's academic requirements. All UTRGV courses with a grade of $A, B, C, D, F, R A, R B, R C$, RD, and RF are counted in the calculation of GPA. Satisfactory Academic Progress cannot be determined until all grades of I or IP (incomplete) are resolved. Transfer grades that are accepted by the university are not counted in the determination of GPA because they are not part of the Institutional GPA.

However, the credits from all attempts accepted by UTRGV are counted in the calculation of pace and the maximum time frame requirement. If a student repeats a course, only the most recent grade is counted in the calculation of GPA. Remedial courses are included in the calculation of GPA. Audited courses do not count toward the GPA, pace, or maximum time frame requirements. Credit is not granted for audited courses.

## PACE (Progression Requirements)

The student must be progressing toward graduation requirements by completing the courses for which they enroll each semester. Courses or classes are measured in credit hours. Students must complete at least 75 percent of all credits attempted. For example, a sophomore who has attempted 60 credit hours and has satisfactorily completed 48 of those credit hours would have completed 80 percent of attempted credits.

Credits attempted are all course credit hours for which the student is enrolled as of the semester census date, which is the 12th day of class in a semester for regular fall and spring and 4 th class day for regular summer sessions (for terms shorter in length please check for census date), whether they have received a grade yet or not. Once grades are assigned, attempted credits include grades of A, B, C, D, F, P, NP, S, U, CR, NC, IP, I, DR, or W. Grades of DROPPED are counted as hours attempted if the student is enrolled in the class and charged for it as of the semester census date. Credits satisfactorily completed are classes for which the student receives a grade of $A, B, C, D, P, S, C R$ or $P$. Remedial courses are not included in the calculation of pace.

## Maximum Time Frame Requirements

The student must complete undergraduate degree requirements in a maximum time period according to federal regulation. Maximum time frame will be measured by the number of credit hours attempted. Students are allowed a maximum of 180 attempted credit hours in order to complete bachelor's degree requirements. Students attempting a second bachelor's degree are allowed 90 attempted credit hours. Attempted credit hours, for purposes of calculating maximum time frame, include all courses with grades of A, B, C, D, F, P, NP, S, U, CR, NC, DR, W or I and IP courses for which grades have not yet been assigned. Transfer credits, AP credits, or CLEP credits accepted for the student's academic program or
degree are also counted when measuring the maximum time frame to complete the degree or program. Remedial courses are not included in the calculation of maximum time frame requirement.

## University Requirement: UNIV 1301 Learning Framework Course Page 84

## Previous Policy:

University Requirement: As part of UTRGV's retention and graduation initiatives, entering freshmen and transfer students with fewer than 30 credit hours of college coursework will enroll in the UNIV1301 - Learning Framework course during their first year as follows:

- Provisional Status: Entering Freshmen (EF) will not be required to enroll during their first full term (fall for Fall EFs and spring for Spring EFs) if they are admitted with an ACT composite score of 19 or higher or SAT total equivalent, and are in the top $25 \%$ of their graduating class. If a student does not have a high school rank percentage, the test scores (ACT or SAT) will be the sole criteria. Otherwise, both criteria must be met.
- Continued Provisional Status: Provisional status will be evaluated after the completion of the first full term (fall or spring). A student who earns 12 credit hours and a 2.5 first-term GPA during the first full term will not need to take the UNIV 1301 during the next full term. Students who do not complete 12 credit hours and a 2.5 GPA during their first full term will need to enroll in the course during the next full term (or summer term) and/or before the end of the first year of enrollment.
All students with Provisional Status will be re-evaluated at the end of the second full term. A student who has earned 24 credit hours and a cumulative 2.5 GPA during the first two full terms will not need to take the course.
- A student may choose to take the course at his/her discretion, even though he/she is required to do so.
Part-Time Students: The same criteria will apply to part-time students, with the following exception:
- The student must earn the same number of credit hours as attempted, rather than 12 credit hours required of full-time students.
A student who does not have a Provisional Status or does not meet the criteria and fails to enroll in the UNIV1301 course in their first year will receive a registration hold for the beginning of their second year. Faculty and Academic Advising Center (AAC) advisors will work closely with all freshmen students to ensure their successful progress to the second year and completion of their baccalaureate degree.


## Revised Policy:

University Requirement - UNIV 1301 Learning Framework course: As part of UTRGV's retention and graduation initiatives, entering freshmen and transfer students with fewer than 30 credit hours of college coursework will enroll in the UNIV1301 - Learning Framework course during their first year as follows:

- Mandatory Status: Entering Freshmen (EF) with ACT score (or SAT equivalent) below 19 or a HS class rank below the top $25 \%$ will enroll in UNIV 1301 Learning Framework during the fall or spring semester of their first year at UTRGV.
- Provisional Status: Entering Freshmen (EF) will not be required to enroll in UNIV 1301 during their first full term (fall for Fall EFs and spring for Spring EFs) if they are admitted with an ACT composite score of 19 or higher or SAT total equivalent, and are in the top $25 \%$ of their graduating class. If a student does not have a high school rank percentage, the test scores (ACT or SAT) will be the sole criteria. Otherwise, both criteria must be met.
- Continued Provisional Status: Provisional status will be evaluated after the completion of the first full term (fall or spring). A student who earns 12+ credit hours and a 2.5 GPA during the first full term will not need to take UNIV 1301 during the next full term. Students who do not complete 12 credit hours and a 2.5 GPA during their first full term will need to enroll in the course during the next full term (or summer term) and/or before the end of the first year of enrollment.
- Wavier: All students with Provisional Status will be re-evaluated at the end of the second full term. A student who has earned 24 credit hours and a cumulative 2.5 GPA during the first two full terms will not need to take UNIV 1301.
- Part-Time Students: The same criteria will apply to part-time students, with the following exception:
0 The student must earn the same number of credit hours as attempted, rather than 12 credit hours required of full-time students.
- Transfer Students: If a transfer student has 15-30 college credit hours and does not have an ACT score and HS class rank available, then the transfer GPA must be a 2.5 or higher in order to be placed on provisional status and to be evaluated as described above. If the transfer GPA is below 2.5 then the student is considered "mandatory status" and will enroll in UNIV 1301 during the fall or spring semester of their first year at UTRGV.

A student who does not have a Provisional Status or does not meet the criteria and fails to enroll in the UNIV1301 course in their first year will receive a registration hold for the beginning of their second year. Faculty and Academic Advising Center (AAC) advisors will work closely with all freshmen students to ensure their successful progress to the second year and completion of their baccalaureate degree.

## Substitutions/Waivers Page 86

## Previous Policy:

A Substitution Form, initiated at the departmental level, is required for any deviation from the degree plan and University requirements. Appeals for substitutions and/or waivers that involve the core curriculum (general education) require approval from the student's major college, from the college of the core curriculum area, if different, and from the provost/vice president for academic affairs or his designee. Appeals for substitutions/waivers for general graduation requirements, such as total number of credit hours, grade point average and number of advanced credit hours, require approval from within the student's major college and from the provost/vice president for academic affairs or his designee only. Appeals for substitution of courses within the major, minor or elective areas of a student's degree plan require the approval of the department chair and the dean of the college only. Content of substituted courses must be consistent with approved degree/program requirements.

## Revised Policy:

A substitution or waiver form, initiated by the student with the help of an advisor, is required for any deviation from the degree plan and university requirements. Appeals for substitutions and/or waivers that involve the core curriculum (general education) require approval from the student's major department chair/school director, the dean of the college, and the Associate Vice President for Student Academic Success/Dean of the University College or designee. Appeals for substitutions/waivers for general graduation requirements, such as total number of credit hours, grade point average and number of advanced credit hours, require approval from within the student's major department chair/school director, dean, and deputy provost or designee. Appeals for substitution of courses within the major, minor or elective areas of a student's degree plan require the approval of the department chair/school director and the dean of the college only. Content of substituted courses must be consistent with approved degree/program requirements.

## Undergraduate Academic Programs Page 128

Added: For updated curriculum, please visit the Undergraduate Programs Website

## General Education Core Curriculum Page 131

Added: General Education Core Curriculum 2016-2017

## Effective Fall 2015

Pursuing a Double Major Page 86
New Policy:

An undergraduate student may elect to pursue two majors by simultaneously completing the prescribed requirements for two majors. A student pursuing a double major must:

1) Complete all requirements for the primary major including all general education requirements, major requirements, and specified elective or support courses on the degree plan (sometimes listed as support courses, technical electives, restricted electives, or designated electives).
2) Complete all requirements for the second major, including prerequisites, and associated specified elective or support courses. Note that a course may not be used to satisfy a requirement for both majors unless otherwise specified in a formal double-major degree plan. However if the primary major requires a minor or free electives, those hours can be satisfied with course requirements from a second major.
3) Comply with all other requirements for graduation listed in the Undergraduate Catalog.

The student will indicate one of the majors as a "primary" major and will receive the degree associated with that major. The student's diploma will list both majors. For example, a student who indicates that his or her primary major is Biology who elects to also complete a second major in Art will receive a single diploma listing a B.S. in Biology with a second major in Art. Students are not permitted to pursue more than two majors. The student will receive one diploma.

Students wishing to pursue a double major must submit a Change of Major/Minor/Catalog Term form to declare the second major. Upon graduation, a student with a double major will be scheduled for the commencement ceremony corresponding with the student's primary major.

## UNDERGRADUATE CATALOG

Students at The University of Texas Rio Grande Valley must complete the degree requirements of the catalog in effect at the time of their enrollment or a subsequent catalog. Each catalog is valid for a period of seven years from its effective date. Students enrolled beyond the applicability of their catalog of enrollment must meet the requirements of a subsequent catalog, per the recommendation of their academic advisor. This recommendation will be made based on the catalog most likely to facilitate timely graduation. Students who are not enrolled for more than two long semesters will re-enroll under the new catalog in effect at the time of re-enrollment. The University reserves the right to make changes to curriculum and co-curricular requirements, courses, fees, calendar, graduation procedures, and graduation requirements at any time in order to comply with federal, state, UT System, or UT Board of Regents rules and regulations.

It is the responsibility of the students to be familiar with degree requirements stated in their catalog. UTRGV will publish its academic catalog annually in undergraduate and graduate editions, respectively, on the university's website under the address www.utrgv.edu/catalog. Hard copies of the academic catalog will not be made available.

The University of Texas Rio Grande Valley operates subject to the Rules and Regulations of the Board of Regents of The University of Texas System. This catalog is a general information publication. It is not intended to nor does it contain all regulations that relate to students. The provisions of this catalog do not constitute a contract, express or implied, between any applicant, student or faculty member of The University of Texas Rio Grande Valley or The University of Texas System.

## Accreditation

The University of Texas Rio Grande Valley (UTRGV) is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award bachelor's, masters' and doctorate degrees. Contact the Southern Association of Colleges and Schools Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4500 for questions about the accreditation of The University of Texas Rio Grande Valley.

In addition, these programs are separately accredited or approved by the:

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Accreditation Council for Education in Nutrition and Dietetics (ACEND)
Accreditation Council for Occupational Therapy Education (ACOTE)
Accreditation Council for Pharmacy Education (ACPE)
Accreditation Council for Pharmacy Education (ACPE)
American Occupational Therapy Association, Accreditation Review Commission on Education for the
Physician Assistant (ARC-PA)
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American Speech-Language-Hearing Association (ASHA) ${ }^{1}$
The Association to Advance Collegiate Schools of Business (AACSB International)
Board of Nurse Examiners for the State of Texas
Computing Accreditation Commission (CAC) of ABET
Council for Accreditation of Counseling and Related Education Programs (CACREP)
Council for Accreditation of Educator Preparation (CAEP)
The Council on Rehabilitation Education (CORE)
The Council on Social Work Education (CSWE)
Engineering Accreditation Commission (EAC) of the Accreditation Board for Engineering and
Technology (ABET)
National Accrediting Agency for Clinical Laboratory Sciences (NAACLS)
National Association of Schools of Music (NASM)
National Association of Schools of Theatre (NAST)
State Board for Educator Certification (SBEC)
State Board for Educator Certification (SBEC)
Texas Board of Nursing

The University of Texas Rio Grande Valley is a member of:
American Association of Colleges for Teacher Education
American Association of State Colleges and Universities
American Council on Education
Association for Continuing Higher Education
Council for Advancement and Support of Education
Council of Graduate Schools
Hispanic Association of Colleges and Universities

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## Public Use of Facilities

The property, buildings or facilities owned or controlled by The University of Texas Rio Grande Valley are not open for assembly, speech or other activities as are the public streets, sidewalks and parks. The responsibility of the UT System Board of Regents to operate and maintain an effective and efficient system of institutions of higher education requires that the time, place and manner of assembly, speech and other activities on the grounds and in the buildings and facilities of the UT System or component institutions be regulated.

No person, organization, group, association or corporation may use property, buildings or facilities owned or controlled by The University of Texas Rio Grande Valley for any purpose other than in the course of the regular programs or activities related to the role and mission of the university, unless authorized by the Regents Rules and Regulations and/or the UTRGV Handbook of Operating Procedures. Any authorized use must be conducted in compliance with the provisions of the Regents Rules and Regulations, UTRGV Handbook of Operating Procedures, and applicable federal, state and local laws and regulations.

Anyone from outside the university who is seeking information about scheduling and use of University Special Use Facilities should contact the Office of Auxiliary Services at 956-665-2224 or email aux@utrgv.edu. For more information, consult the Regents Rules and Regulations Rule 80101 and UTRGV Handbook of Operating Procedures.

## Non-Discrimination Policy Statement

The University of Texas Rio Grande Valley (UTRGV) declares and reaffirms a policy of administering all of its educational programs and related supporting services and benefits in a manner that does not discriminate because of a student's or prospective student's race, color, religion, sex, national origin, age, veteran status, disability, sexual orientation, gender identity, or gender expression, or other characteristics that lawfully cannot be the basis for provision of such services. These programs, services and benefits include, but are not limited to, admission, class assignments, scholarships and other financial and employment assistance, counseling, physical education and recreational services, and the membership practices of registered student organizations. Pursuant to this policy statement, UTRGV will undertake a continuing program of compliance with all federal, state and local laws relating to equal educational opportunity and affirmative action, specifically those addressing the obligations of the institution under Title VI and VII of the Civil Rights Act of 1964 as amended, Title IX of the Educational Amendments of 1972, Sections 503 and 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990, as amended. UTRGV has designated the following individuals to direct inquiries or complaints to:

- The immediate supervisor;
- Director of the Office of Institutional Equity: 956-665-2103;
- Office of Student Rights and Responsibilities: 956-665-5375 UTRGV Edinburg Campus or 956-882-5034 UTRGV Brownsville Campus;
- Office of Disability Services: 956-665-7005 UTRGV Edinburg Campus or 956-882-7374 UTRGV Brownsville Campus; or
- Office of Human Resources and Talent Development: 956-665-3020.


## Notice of Non-Discrimination

Title IX of the U.S. Department of Education's Education Amendments of 1972 ("Title IX") prohibits discrimination on the basis of sex/gender in any aspect of a federally funded education program or activity. Such discrimination includes, but is not limited to: sexual harassment, sexual violence, sex or gender-based bullying, hazing, stalking, domestic violence, dating violence, and failure to provide equal opportunity in admissions, activities, employment and/or athletics.

As a recipient of federal funds, UTRGV complies with Title IX and has designated a Title IX Coordinator to oversee all complaints of sex discrimination. The Title IX Coordinator is responsible for identifying and addressing any patterns or systemic problems that arise during the review of such complaints. Additionally, other responsibilities include the coordination of training, education, and communications regarding Title IX procedures for the university community. UTRGV has designated the following individual to serve as the Title IX Coordinator:

## Ms. Alicia G. Morley

Director of the Office of Institutional Equity alicia.morley@utrgv.edu Phone: 956-665-2103

A students, staff, faculty member, or an applicants for admission or employment who believes that he or she has been discriminated against on the basis of sex, may file a complaint with the Title IX Coordinator or a responsible employee as provided by UTRGV policy. The Title IX Coordinator will ensure that action is taken to resolve the complaint in a prompt and equitable manner.

## Sexual Violence

To file a complaint of sexual violence, please contact the Title IX Coordinator. In addition, you may also contact:

## University Police Department

Emergency: 911
Non-Emergency: 956-665-7151 (UTRGV Edinburg Campus) or 956-882-8232 (UTRGV Brownsville Campus)

## Inquiries

Inquiries about Title IX and UTRGV's compliance may also be directed to:

| U.S. Department of Education - Office of Civil Rights |  |
| :--- | :--- |
| 400 Maryland Avenue, SW |  |
| Washington, D.C. 20202 | OCR@ed.gov |

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## ACADEMIC CALENDAR 2015-2017

Additional term dates for accelerated programs and non-standard classes may be found online at www.utrgv.edu.

| Fall 2015 |  |
| :--- | :--- |
| Aug. 31 | Classes Begin |
| Sept. 7 | Labor Day Holiday $^{2}$ |
| Sept. 16 | Census Day |
| Nov. 18 | Drop/Withdrawal Deadline |
| Nov. 26-27 | Thanksgiving Holiday ${ }^{2}$ |
| Dec. 10 | Study Day $^{2}$ |
| Dec. 11-17 | Final Exams |
| Dec. 19 | Commencement |

## Spring 2016

| Jan. 18 | MLK Day |
| :--- | :--- |
| Jan. 19 | Classes Begin |
| Feb. 3 | Census Day |
| Mar. 14-18 | Spring Break $^{2}$ |
| Mar. 25-26 | Easter Holiday $^{2}$ |
| Apr. 13 | Drop/Withdrawal Deadline |
| May 5 | Study Day ${ }^{2}$ |
| May 6-12 | Final Exams |
| May 13 \& 14 | Commencement |

Summer 2016
May $16 \quad$ Mini-Term Begins ${ }^{3}$
May 17 Mini-Term Census Day
May $30 \quad$ Memorial Day Holiday ${ }^{2}$
June 3 Mini-Term Final Exams
June 6 Summer 1 Begins
June 9 Summer 1 Census Day
July 1 Summer 1 Drop/Withdrawal Deadline

July 12 Summer 1 Final Exams
July 14 Summer 2 Begins
July 19 Summer 2 Census Day
Aug. 10 Summer 2 Drop/Withdrawal Deadline
Aug. 19 Summer 2 Final Exams

Fall 2016
Aug. 29 Classes Begin
Sept. 5 Labor Day Holiday ${ }^{2}$
Sept. 14 Census Day
Nov. 16 Drop/Withdrawal Deadline
Nov. 24-25 Thanksgiving Holiday ${ }^{2}$
Dec. $8 \quad$ Study Day ${ }^{2}$
Dec. 9-15 Final Exams
Dec. 17 Commencement

## Spring 2017

Jan. 16
MLK Day Holiday
Jan. 17 Classes Begin
Feb. 1 Census Day
Mar. 13-17
Apr. 12
Apr. 14-15
May 4
May 5-11
May 13
Summer 2017
May $15 \quad$ Mini-Term Begins ${ }^{3}$
May $16 \quad$ Mini-Term Census
May 29 Memorial Day Holiday ${ }^{2}$
June 2 Mini-Term Final Exams
June 5 Summer 1 Begins
June $8 \quad$ Summer 1 Census Day
June 30 Summer 1 Drop/Withdrawal
Deadline
July 11 Summer 1 Final Exams
July 13 Summer 2 Begins
July 18 Summer 2 Census Day
Aug. 9 Summer 2 Drop/Withdrawal
Deadline
Summer 2 Final Exams

[^1]
## UNIVERSITY OVERVIEW AND QUICK FACTS

## Overview

The University of Texas Rio Grande Valley is a new university for the 21st century formed from the strengths of two legacy institutions and a new medical school. The university is a distributed campus located in South Texas, with facilities along the Rio Grande Valley and near the Gulf of Mexico.

## Mission

The University of Texas Rio Grande Valley provides a high quality, innovative, and affordable education to the students of South Texas, Texas, the United States and the world. The University will transform Texas and the nation through student success, research, healthcare, and commercialization.

## Vision

The University of Texas Rio Grande Valley, organized around student success, strives to become a research institution and reach emerging research status within seven years. UTRGV also aims to become a catalyst for improved health care in the Rio Grande Valley.

## Values

We value ethical conduct based on honesty, integrity and mutual respect in all interactions and relationships.

We value student access to higher education, recognizing their diversity and needs.
We value student success fostered through the commitment of faculty and staff.
We value a diversity of perspectives, experiences and traditions as essential components of a quality education.

We value curiosity, exploration, inquiry, innovation, creativity, and an entrepreneurial spirit.
We value collaboration with internal and external constituent groups.
We value active involvement in shared governance, consensus building, teamwork, and open communication.

We value our relationship as a united community of scholars, students, and staff enriching each other's work and lives through our commitment to the advancement of UTRGV.

## Goals

- To be a university for the entire Rio Grande Valley
- To focus on the success of RGV students
- To expand educational opportunity for RGV students
- To integrate general academic with medical education
- To become a research university
- To conduct research on problems that affect the RGV and the state of Texas
- To be a catalyst for improved health care in the RGV
- To be a bicultural, biliterate, and bilingual institution


## University History

The University of Texas Rio Grande Valley (UTRGV) was created by the Texas Legislature in 2013 as the first major public university of the 21st century in Texas. This transformative initiative provided the opportunity to expand educational opportunities in the Rio Grande Valley, including a new School of Medicine, and made it possible for residents of the region to benefit from the Permanent University Fund - a public endowment contributing support to the University of Texas System and other institutions.

UTRGV has campuses and off-campus research and teaching sites throughout the Rio Grande Valley including in Boca Chica Beach, Brownsville (formerly The University of Texas at Brownsville campus), Edinburg (formerly The University of Texas-Pan American campus), Harlingen, McAllen, Port Isabel, Rio Grande City, and South Padre Island. UTRGV, a comprehensive academic institution, enrolled its first class in the fall of 2015, and the School of Medicine welcomed its first class in the summer of 2016.

## DEGREES AND PROGRAMS

The University of Texas Rio Grande Valley's eleven academic colleges and schools - College of Business and Entrepreneurship, College of Education and P-16 Integration, College of Engineering and Computer Science, College of Fine Arts, College of Health Affairs, College of Liberal Arts, College of Sciences, Honors College, Graduate College, University College and School of Medicine - offer a wide range of degree options encompassing a comprehensive series of academic concentrations and selected areas of professional study. See Graduate Catalog for graduate curriculum.

## Undergraduate Curriculum

## Bachelor's Degrees

College of Business and Entrepreneurship

Accounting (BBA)
Economics (BA, BBA)
Finance (BBA)
Information Systems (BBA)
College of Education and P16-Integration
Early Care and Early Childhood Studies (BS)

College of Engineering and Computer Science
Civil Engineering (BS)
Computational Science (BS)
Computer Engineering (BSCE)
Computer Information Systems
Technology (BAT)
Computer Science (BSCS)
College of Fine Arts
Art (BFA, BA)
Dance (BA)
Music (BM)
College of Health Affairs
Biomedical Sciences (BS)
Clinical Laboratory Science (BS)
Communication Sciences and Disorders (BS)
Dietetics (BS)
Exercise Science (BS)
Health (BS)

## College of Liberal Arts

Anthropology (BA)
Applied Arts and Sciences (BAAS)
Communication Studies (BA)

International Business (BBA)
Management (BBA)
Marketing (BBA)
Materials Management and Logistics (BS)

Interdisciplinary Studies (BIS) Elementary School Preparation

Electrical Engineering (BSEE)
Engineering Physics (BS)
Engineering Technology (BS)
Manufacturing Engineering (BSMSFGE)
Mechanical Engineering (BSME)

Performance (BM)
Theatre (BA)

Health Services Technology (BAT)
Kinesiology (BS)
Nursing (BSN)
Rehabilitation Services (BS)
Rehabilitation Services - Deaf Studies (BS)
Social Work (BSW)

Criminal Justice (BSCJ)
Criminology and Criminal Justice (BSCJ)
English (BA)

History (BA)
Mass Communication (BA)
Mexican American Studies (BA)
Multidisciplinary Studies (BMS)
Philosophy (BA)
Political Science (BA)
College of Sciences
Biology (BS)
Chemistry (BS)
Environmental Science (BS)
Marine Biology (BS)
Mathematics (BS)

## Minors

College of Business and Entrepreneurship
Business Administration
Economics
Human Resources Management Information Systems
College of Education and P16-Integration
Educational Technology
Special Education
College of Engineering and Computer Science
Computer Engineering
Computer Science
Electrical Engineering
College of Fine Arts
Art History
Art
Dance
College of Health Affairs
Addiction Studies
Health

## College of Liberal Arts

Anthropology
Communication Studies
Communication
Criminal Justice
English as a Second Language Instruction
English
Environmental Studies

Psychology (BA, BS)
Social Studies Composite (BA)
Sociology (BA)
Spanish (BA)
Spanish Translation and Interpreting (BA)

Interdisciplinary Studies (BIS)
Middle School Preparation
Life Science
Physical Science (BS)
Physics (BS)

Management
Marketing
Sustainable Supply Chain Management

Technology Education and Corporate Training

Engineering Physics
Manufacturing Engineering
Mechanical Engineering

Graphic Design
Music
Theatre

Kinesiology
Rehabilitation

Film Studies
Folklore
French Language, Literature, and Culture
French Teaching, Translation, and Culture
Gender and Women's Studies
Global Security Studies

History
Latin American Studies
Legal Studies
Mass Communication
Medical Humanities
Medical Spanish
Mexican American Studies
Military Science

## College of Sciences

Applied Mathematics
Astronomy
Biochemistry
Biology
Chemistry
Environmental Science
Geographic Information Systems
Geology and Earth Science
Honors College
Honors (Track 1, Track 2, Track 3)

## Certificates

## College of Fine Arts

Performance (Mariachi)

## Graduate Degrees

## Doctoral Degrees

College of Business and Entrepreneurship
Business Administration (Ph.D.)
College of Education and P-16 Integration
Curriculum and Instruction (Ed.D.) Educational Leadership (Ed.D.)
College of Health Affairs
Pharmacy (Pharm.D.) in cooperation Rehabilitation Counseling (Ph.D.) with The University of Texas at Austin

Philosophy
Political Science
Psychology
Public Administration
Religious Studies
Sociology
Spanish Translation
Spanish

Middle School Mathematics
Nanotechnology
Physical Science
Physics
Pure Mathematics
Secondary School Mathematics
Statistics

College of Education and P-16 Integration
Bilingual Education (M.Ed.)
Counseling and Guidance (M.Ed.)
Curriculum and Instruction (M.Ed.)
Early Childhood (M.Ed.)
Early Childhood Special Education (M.Ed.)
Educational Diagnostician (M.Ed.)
College of Engineering and Computer Science
Computer Science (MS)
Electrical Engineering (MSE)
Engineering Management (MS)
College of Fine Arts
Art (MFA)
Creative Writing (MFA)
College of Health Affairs
Communication Sciences and Disorders (MS)
Exercise Science (MS)
Family Nurse Practitioner (MSN)
Health Sciences (MS)
Kinesiology (MS)
Nursing Administration (MSN)
Nursing Education (MSN)
College of Liberal Arts
Criminal Justice (MS)
Communication (MA)
Clinical Psychology (MA)
English (MA)
Experimental Psychology (MA)
English as a $2^{\text {nd }}$ Language (MA)
History (MA)

Educational Leadership (M.Ed.)
Educational Technology (M.Ed.)
Reading and Literacy (M.Ed.)
School Psychology (MA)
Special Education (M.Ed.)

Information Technology (MS)
Mechanical Engineering (MSE)
Manufacturing Engineering (MSE)

Music (MM)

Occupational Therapy (MS)
Physician Assistant Studies (MPAS)
Physician Assistant Studies - Bridge
Program (MPAS)
Rehabilitation Counseling (MS)
Social Work (MSSW)

Interdisciplinary Studies (MAIS)
Art History
Anthropology
Mexican American Studies
English
History
Public Affairs (MPA)
Sociology (MS)
Spanish (MA)
Spanish Translation and Interpreting (MA)

Interdisciplinary Studies (MSIS)
Physics Education
Mathematics (MS)
Physics (MS)

## College of Sciences

Biology (MS)
Chemistry (MS)

## Certification Programs

College of Education and P-16 Integration
Teacher Certification (Principal or Superintendent)

## Certificate Programs

## College of Business and Entrepreneurship

Advanced Business Administration
Health Care Administration Leadership
College of Education and P-16 Integration
Digital Literacy Leader
E -Learning
English as a Second Language
Gender and Women's Studies
College of Engineering and Computer Science Materials
Mechanics and Design
College of Fine Arts
Design

## College of Liberal Arts

Advanced Placement Spanish Literature Board Certified Behavioral Analyst
Communication Training and Consulting
Court Interpreting
Media Relations and Strategic Communication

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## UNDERGRADUATE ADMISSION POLICIES

## General Information

The University of Texas Rio Grande Valley is an equal opportunity educational institution. Under this philosophy, students are admitted to the university without regard to race, creed, color, sex, ethnic origin, religion, age, veteran status or disability.

Admission is only for the semester requested. Students who apply but do not attend must submit an updated application at www.applytexas.org for admission to enroll for a later semester.

Students are admitted to The University of Texas Rio Grande Valley through the Office of Undergraduate Admissions, which is responsible for administering admission policies. Students who wish to attend the university must meet all admission requirements by the published deadline date for the semester for which they are applying. Failure to have applications with supporting documents on file by these dates will result in restrictive admission or denial of admission at that time. Documents must be sent to:

## Office of Student Enrollment

 One West University Blvd. The Tower, Main, Rm. 1.101 Brownsville, TX 785201201 West University Dr. Visitors Center, Rm. 1.113
Edinburg, TX 78539

Required high school and/or college transcripts must be requested from each individual institution attended. The official transcripts must be sent by the institution directly to the above address or may be hand delivered as long as they are in a sealed envelope from the institution. Information regarding how test scores may be requested may be obtained by contacting Testing Services at 956-882-8875 for the UTRGV Brownsville Campus or 956-665-7570 for the UTRGV Edinburg Campus.

## ApplyTexas Application

In accordance with Sections 51.762 and 51.763 of the Texas Education Code, students have the opportunity to apply to any public institution in the state of Texas through a common application process. Please check with the Office of Undergraduate Admissions for full details. The application is available online at www.applytexas.org.

## Application Deadlines

There are two admission application deadlines for each semester and summer session at the university. The first deadline is usually the first workday in February for both summer sessions and the fall semester or the first workday in November for the spring semester.

The second application deadline is for late registration. Specific deadline dates for each semester are listed in the Schedule of Classes and in the University Calendar.

## Academic Fresh Start

For Undergraduate Programs, an applicant for admission who is a Texas resident may seek to enter this institution pursuant to the "Academic Fresh Start" statute, Texas Education Code, Section 51.931. When the applicant informs the Office of the Registrar in writing of the election, the institution, for admissions purposes, 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 credit for courses taken 10 or more years prior to enrollment.

## Criminal Background Checks

Certain programs require students to submit to and satisfactorily complete a criminal background check review as a condition of admission and/or participation in education experiences. Students who refuse to submit to a background check or who do not pass the background check may be dismissed from the program. See UTRGV Handbook of Operating Procedures for more information.

Additionally, many Texas school districts require applicants for student teaching or field experiences to undergo a criminal history background check prior to placement in the school district. School districts may deny placement of students with a criminal background. If a school district denies a placement for this reason, the UTRGV Office of Student Teaching and Field Experiences may attempt to assist the student in obtaining a placement in an alternate district. Students should be aware, however, that if they are unable to obtain a placement they will not meet UTRGV's requirements for a teaching degree or teacher certification. Additionally, The Texas State Board for Educator Certification (SBEC) regulates the certification of educators to teach Texas public school children. Before an individual can be certified, SBEC must conduct a criminal history background check to ensure an applicant's suitability to interact with children. Working with the Texas Department of Public Safety (DPS), the agency conducts statewide criminal history background checks on all applicants for educator certification. Students pursuing educator preparation should be aware that some criminal histories may lead to the denial of certification as a teacher. Students may obtain additional information from SBEC.

## Undergraduate Admission Process

## Freshman Admission

Applicants who have not attended a college or university after graduating from high school, may seek admission as a freshman.

## Admission Documents Required

1. Application for Admission. The application is available at www.applytexas.org.
2. ACT or SAT scores sent directly from the testing agency. The UTRGV school code is ACT 6991 and SAT 6568.
3. A high school transcript that indicates diploma type, class rank, class size and GPA.
4. Official college transcripts from all colleges and universities attended. Transcripts must be sent directly from the institution(s) attended or may be hand delivered as long as the document is in a sealed envelope from the institution. Students who are currently enrolled at another institution should request a transcript to be sent with the coursework completed to date, followed by a final transcript to be sent upon completion of the current semester. Only coursework or degrees earned at an institution accredited by a regional accrediting association will be recognized.
5. Advancement placement scores if applicable.
6. Texas Success Initiative (TSI) approved test scores or proof of exemption for students who plan to enroll in college-level coursework. Test scores from approved TSI exams or TSI exemption will
not be used as a basis for admission, but will be used to determine placement. Refer to p .79 for further information.

## Admission Requirements

A profile will be created from all of the information submitted and admissions decisions will be based on that profile and their accomplishments in high school.

Factors will review will include:

- Class Rank
- Prior college hours
- College Entrance Exams (ACT/SAT)
- Leadership Experience
- Community Involvement
- Career Goals
- Rigor of High School Courses Completed

Top 10 Percent Applicants from Texas High Schools ${ }^{4}$ - Applicants who graduate from recognized public or private high schools in Texas with a class rank in the top 10 percent of their high school graduating class and have successfully completed the distinguished level of achievement under the Foundation, Recommended, or Advanced High School Program from a Texas public high school will be automatically admitted to The University of Texas Rio Grande Valley.

International Baccalaureate Diploma Program Recipients - Applicants who receive an International Baccalaureate Diploma will be automatically admitted to The University of Texas Rio Grande Valley.

## State of Texas Uniform Admission Standards

A student scheduled to graduate from a Texas private high school may be considered for admission to a Texas public university if the student has completed the Minimum, Recommended High School Program, or its equivalent, the Distinguished Achievement Program (also known as the Advanced High School Program), or its equivalent, or has achieved college readiness scores on the ACT or SAT entrance exams. Students of Texas private high schools who have completed only a portion of the Minimum, Recommended or Distinguished Achievement Program because the courses are not available to the student may still be eligible for admission to a Texas public university.

Students who do not complete a college preparatory high school program may also gain regular admission if they satisfy the ACT's College Readiness Benchmarks (new scores as of September 2013) on the ACT assessment, or earn a score of at least a $\mathbf{1 5 5 0}$ on the SAT assessment which does include the writing component.

| ACT College Readiness Benchmarks Section | 18 |
| :--- | :--- |
| English | 22 |
| Math | 22 |
| Reading | 23 |
| Science |  |

Non-accredited High School, Home School, and GED Students
Students who attended a non-accredited high school or home school and those who received a GED may be admitted by scoring a minimum of 1550 on the SAT (including the writing component) or by meeting the College Readiness Benchmarks on the ACT Assessment.

[^2]Students graduating from private high schools in Texas or out-of-state high schools can be documented by the students' high school using one of the forms found at www.utrgv.edu/en-us/admissions/how-toapply:

- TPHSC-Form 1: Students who graduated in 2010 or before from Texas private schools, Texas public schools and out-of-state schools.
- TPHSC-Form 2: Students who will graduate in 2011 or after from Texas private schools, Texas public schools and out-of-state schools.
- TPHSC-Form 3: For students graduating under the Foundation High School program in 201-2015 or later
- UAP Out of State: For students attending a non-Texas high school.


## GENERAL EDUCATION DEVELOPMENT (GED) APPLICANT

Applicants who did not graduate from an accredited high school but who have successfully passed all five-subject tests and received a GED certificate may be considered for admission to UTRGV.

The State of Texas Uniform Admissions Policy also applies to GED graduates. Since a GED graduate cannot provide curriculum information, either the ACT College Readiness Benchmarks or the required SAT assessment scores must have been achieved for admittance to a Texas general academic teaching institution. Therefore, the application will not be processed without the SAT or ACT scores to consider.

## Transfer Admission

Applicants who last attended an accredited college or university other than The University of Texas Rio Grande Valley may seek admission as a transfer student by submitting their application at www.applytexas.org. Official transcripts, from each institution attended, must also be provided to The Office of Undergraduate Admissions. A cumulative GPA of 2.0 (on a 4.0 scale) is required on all academic transfer coursework attempted. Students who are currently enrolled at another institution at the time of application will have their admission decision based on work completed at the time of application. In addition, the applicant must be in good academic standing at the transferring institution. Applicants transferring less than 24 hours must also meet Freshman Admission requirements (see p. 17).

## Admission Documents Required

Applicants seeking admission as a transfer student are required to submit the following documents by the published deadline date to be considered for admission. Transfer applicants have already graduated from high school or home school and have enrolled in a college or university after high school graduation and have earned 0-23 college hours from the college or university. Applications received after the published deadline date will automatically be processed for the next available semester.

1. Application for Admission. The application is available at www.applytexas.org.
2. Official college transcripts from all colleges and universities attended. Transcripts must be sent directly from the institution(s) attended or may be hand delivered as long as the document is in a sealed envelope from the institution. Students who are currently enrolled at another institution should request a transcript to be sent with the coursework completed to date, followed by a final transcript to be sent upon completion of the current semester. Only coursework or degrees earned at an institution accredited by a regional accrediting association will be recognized.
3. Texas Success Initiative (TSI) approved test scores or proof of exemption for students who plan to enroll in college-level coursework. Test scores from approved TSI exams or TSI exemption will not be used as a basis for admission, but will be used to determine placement. Refer to p. 79 for further information.

Transfer students who have fewer than 24 college-level hours must also submit:

1. ACT or SAT scores.

High school transcript showing the units completed, grades earned, date of graduation, graduation program type and rank in class. In accordance with Texas Education Code, Section 51.803(e), an applicant is entitled to automatic admission if he/she meets the UTRGV minimum requirements and is a child of certain public servants who were killed or sustained fatal injury in the line of duty.

The Office of Undergraduate Admissions will make every effort to inform applicants of incomplete files. If incomplete applications are received within one month of the application deadline, there will not be sufficient time to notify applicants. Applicants will be issued a UTRGV ID number to be used as a student identification number. Students may use the UTRGV ID or their social security number when requesting information regarding their records.

All documents submitted become the property of The University of Texas Rio Grande Valley. Admission documents submitted will remain on file for one year, if the student does not attend, or for five years if the student attends The University of Texas Rio Grande Valley. Documents will not be returned.

## Admission Requirements

Assured admission is in place for transfer applicants who have earned an associate's degree from an accredited college. For applicants with 24 college-level hours or more a minimum GPA of 2.0 is required. For applicants with less than 24 college-level hours, the entering freshman admission requirements must be followed in addition to a minimum college GPA of 2.0.

Selected applicants who do not qualify for admission will be allowed the opportunity to appeal the decision. For more information contact the Office of Undergraduate Admissions.

## Notification of Admission Decisions

Admission decisions are made throughout the application period and announced as soon as possible. The decision may be to accept, accept conditionally pending completion of high school or current college enrollment, or to deny the application. Applicants who were accepted conditionally are required to submit final transcripts when that institution has transcribed all coursework and final grade calculations. New applicants accepted for admission are required to attend New Student Orientation prior to enrolling for courses.

## Suspected Fraudulent Admission Applications

Applicants for admission to The University of Texas Rio Grande Valley should be aware that the information submitted will be relied upon by University officials to determine their status for admission and residency for tuition purposes. Failure to submit a complete and correct application, including all transcripts, is grounds for rejection of application, withdrawal of an offer of acceptance or, after enrollment, any disciplinary action including expulsion. Any applicant, whether a new student or a former student at the university, who has attended another collegiate institution is not at liberty to
disregard any part of the collegiate records and apply for admission to The University of Texas Rio Grande Valley on the basis of the high school record or a partial record of his or her college work, but is subject without exception to the regulations given above. Students who have course credit or grades earned 10 or more years ago may elect to be readmitted under the Academic Fresh Start program. See p. 16 for more information.

## Outreach to Prospective Transfer Students

In an effort to help facilitate the transfer process from two-year and four-year institutions to UTRGV, several programs and resources have been established to assist transfer students.

UTRGV provides a host of transfer resources such as the Transfer Course Equivalency Guide found under the "Student Services" tab at my.utrgv.edu can assist transfer students in evaluating how their existing course credits might satisfy the requirements of a UTRGV degree plan.

Finally, UTRGV provides a transfer center with transfer specialists to assist prospective transfer students from two-year and four-year institutions. Transfer specialists provide admission requirements and basic academic advisement to all prospective transfer students.

For more information on transferring to UTRGV, please visit the Undergraduate Admissions website at www.utrgv.edu/admissions or call 956-665-7442.

## Transfer of Undergraduate Credits

Transfer of regular academic credit to or recognition of degrees from another institution by The University of Texas Rio Grande Valley involves at least three considerations:

1. The educational quality of the institution from which the student transfers.
2. The comparability of the nature, content and level of credit earned to that offered by UTRGV.
3. The appropriateness and applicability of credit earned to the programs offered by UTRGV, in light of the student's educational Goals.

## Course Transferability

Academic courses that are comparable in content to those offered at UTRGV are transferable. There will be exceptions to this rule in the case of the Bachelor of Applied Arts and Sciences (BAAS) and the Bachelor of Applied Technology (BAT) degrees.

Only transfer courses with grades of C or better are applicable towards the student's degree at UTRGV. The exception to this rule is for core courses when a student is transferring in as core complete.

Transfer admission applicants with foreign educational coursework must have their transcripts evaluated from one of the approved agencies. See the Office of Undergraduate Admissions for details about contact information for these agencies.

## Transfer Credit Guidelines

The grading policies of The University of Texas Rio Grande Valley will be applied to all coursework transferring from other institutions. Some special circumstances regarding the transfer or non-transfer of credit to The University of Texas Rio Grande Valley are listed as follows:

1. Bible Coursework: Exegetical or doctrinal courses in religion are not transferable. Courses in Bible of a historical or literary nature (but non-doctrinal) are transferable up to a maximum of 12 credit hours of lower-division credit.
2. Incomplete Grades: Incomplete grades are kept as incomplete until a letter grade has been posted by the transferring institution.
3. Life Experience: Normally, no credit will be awarded for life experience. Exception to this rule may include those cases where the credit has been validated either by another regionally accredited institution of higher education, or by a test administered by an academic department and approved by the Office of the Provost.
4. Remedial Courses: Courses such as remedial or developmental reading and math, speed reading, remedial science and orientation are not transferable for credit.
5. Terminal Courses: Terminal courses offered at many junior colleges are not offered for the purpose of transfer to senior colleges and usually are clearly labeled in the college catalog as being non-transferable. Examples of terminal courses are auto mechanics, machine shop, electricity, data processing and welding.
6. Vocational/Technical Courses: Drill or skill courses such as filing methods and vocational or technical training courses such as shop courses, welding, carpentry, plumbing and masonry are not transferable.
7. Second Undergraduate Degrees: Transfer students entering with a bachelor's degree who seek a second undergraduate degree from The University of Texas Rio Grande Valley must officially request that an evaluation of credits be completed by The Office of Undergraduate Admissions by filling out a "Second Degree Evaluation Form." This form can be picked up at the Admissions office located in UCentral. Completion of a baccalaureate degree at another accredited institution will fulfill The University of Texas Rio Grande Valley's general education (core curriculum) requirements exclusive of any state specified coursework. Students will be required to complete the Texas state-mandated coursework in U.S. history and political science if this has not already been completed as part of their first degree. Students must also complete an additional minimum of 30 hours of credit in The University of Texas Rio Grande Valley courses and any other University and departmental requirements for the second degree as stipulated in the catalog.

## Disputes for Lower Division Courses

The following policy was developed for students transferring to The University of Texas Rio Grande Valley from other Texas public institutions:

1. The transfer of curricula shall be as prescribed by the current issue of the Texas Higher Education Coordinating Board's guide to Transfer Curricula and Transfer of Credit. Current guidelines can be reviewed at the Office of Undergraduate Admissions.
2. The following procedures shall be followed by public institutions of higher education in the resolution of transfer disputes involving lower division courses:
a. If an institution of higher education does not accept a course credit earned by a student at another Texas public institution of higher education, that institution shall give written notice to the student and the other institution that the transfer of the course credit is denied.
b. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Coordinating Board rules and/or guidelines.
c. If the transfer dispute is not resolved to the satisfaction of the student or the institution at which the credit was earned within 45 days after the date the student received written notice of the denial, the institution that denies the transfer of the course credit shall notify the commissioner of higher education of its denial and the reason for the denial.
3. The commissioner 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.
4. All Texas public institutions of higher education shall furnish data to the Coordinating Board on reported transfer disputes as the board may require in accordance with its statutory responsibilities under Section 61.826(e) of the Texas Education Code.

## Readmission

There are three types of student that we consider for re-admissions. (1) Continuing students who are returning after leave of a semester, (2) returning transfers, and (3) returning re-admits who are coming back after leave of more than a year.

1. Students who last attended The University of Texas Rio Grande Valley are considered continuing students after an absence of at least one regular semester. These students will remain active in the system and will be allowed to re-enroll as long as they are in good academic standing or have served his or her period of suspension (students will be readmitted on academic probation). Continuing students must also clear any academic or financial holds before enrollment will be permitted.
2. If students seeking readmission were enrolled at other colleges or universities after last attending UTRGV. Official transcripts must also be provided to the Office of Undergraduate Admissions.
3. If students seeking readmission have been absent from UTRGV for more than one year, a "readmit" admission application must be submitted at www.applytexas.org.

Students who are returning after an extended absence are required to meet with an academic advisor.
Returning students who are not TSI exempt or who have not passed all sections of a TSI approved exam, must seek advising at the Academic Advising Center (AAC).

## Honors College

Students of all majors at UTRGV have the opportunity to enhance their primary areas of study by joining the Honors College. The College offers talented and ambitious students an enhanced academic experience by providing smaller classes led by outstanding faculty who emphasize active experimentation, research, and/or artistic expression. Honors students take on more intensive challenges while working more closely with their professors and other excellent students. Beyond the classroom, the College offers students special opportunities for experiential learning and study abroad. Honors students graduate with a competitive diploma and a strong foundation for life-long learning and personal growth.

## Admission Eligibility Requirements

Students may be admitted to the program at any time during the year; however, they are not considered active until they are enrolled at UTRGV. Students who meet one or more of the following minimum criteria are eligible to apply:

Entering Freshmen:

- ACT Composite of 24 or higher
- SAT of 1110 or higher (Math and Reading)
- SAT of 1670 or higher (Math, Reading, and Writing)
- Graduate in the upper $10 \%$ of high school class

Currently Enrolled/Transfer Students:

- A minimum cumulative GPA of 3.5 at UTRGV
- 12 earned/credit hours at UTRGV or previous college/university
(Please note: These are minimum requirements and are not guarantees for admission.)
Students must apply directly to the Honors College by submitting an online application, letters of recommendation, transcripts, and test scores. Although students may apply at any point in their academic career, they are encouraged to apply as early as possible, preferably as freshmen. Once admitted, students must maintain a minimum GPA of 3.5. To apply, please visit www.utrgv.edu/honors.


## Honors Courses

Honors classes are small and generally limited to 20 students or fewer, which allows for more personal attention and interaction with professors. Honors classes:

- Emphasize critical thinking, participation, and discussion rather than traditional lectures and textbooks.
- Provide a chance to work with academically gifted students from a variety of backgrounds.
- Provide cultural enrichment as well as experiential learning.
- Afford students the opportunity to conduct independent research or engage in artistic expression under the guidance of experienced faculty mentors.
- Offer students the opportunity to study abroad.


## Scholarships

The Honors College offers its students the chance to apply for an Honors Merit Scholarship through the University's Excellence Scholarship program. Scholarship opportunities for study abroad are available as well. For more information, please contact the Office of Recruitment and Scholarships.

## Graduation Requirements

To fulfill Honors College requirements and graduate with honors, students may choose to follow one of three different coursework tracks during their time in the program (for details about these tracks, please visit the Honors College website at www.utrgv.edu/honors). The Honors College strives to allow students to move through the program by taking as few courses outside their major degree plans as possible. Honors courses are specifically designed to provide Honors students with opportunities to fulfill university core requirements within the Honors College. Finally, Honors College graduates must have a cumulative GPA of 3.5 or higher and must successfully complete all requirements of their chosen track.

Students who graduate as Honors Scholars will have this designation recorded on their diplomas, as well as their transcripts. They will also have the distinction of wearing an Honors Medallion at graduation.

## Contact

For an application or additional information about the UTRGV Honors College, please contact:

| Honors College |  |  |
| :--- | :--- | ---: |
| One West University Blvd. | 1201 West University Dr. |  |
| Main, Rm. 1.432 | Student Academic Center, Rm. 2.101 | honors@utrgv.edu |
| Brownsville, TX 78520 | Edinburg, TX 78539 | Phone: $956-665-3386$ |
|  |  | Fax: 956-665-7211 |

## Concurrent Enrollment Program for High School Students

The University of Texas Rio Grande Valley provides an opportunity for high school students to earn college credit while still in high school. The program is designed to give eligible high school juniors and seniors an opportunity to earn college credit in a University learning environment. Concurrent Enrollment students are graded in the same manner as are other college students and are awarded college credit upon completion of their courses and graduation from high school. Students who wish to receive dual credit (high school and college credit) must receive approval from their school districts for high school credit to be awarded.

Students who receive Concurrent Enrollment credit at The University of Texas Rio Grande Valley may be eligible for the University Scholars Scholarship Program upon regular admission to the university. For more information contact the Office of Recruitment and Scholarship at 956-665-2935.

## On-Campus Attendance or Distance Learning

Interested students are encouraged to apply for this program through their high schools or school districts.

Admission Criteria for the High School to University Program:

1. Student must be classified as high school junior or senior graduating under the Recommended or Distinguished graduation plan.
2. Must meet one of the following criteria:
a. Be ranked in the Top $10 \%$ of their class OR
b. Have a 90 GPA or higher (GPA must be on a 100-point scale) OR
c. Meet one of the following composite scores: ACT of 22 or higher, or SAT of 1030 (using only the Critical Reading and Math sections)
3. Complete the Concurrent Enrollment application process
4. Meet deadlines for Concurrent Enrollment admissions

## On-Campus Attendance

Outstanding high school students may apply on an individual basis to take University courses. High school counselors are usually available to assist individual students in preparing their applications for admission to Concurrent Enrollment.

Admission Criteria for the Independent Student Program:

1. Student must be classified as high school junior or senior graduating under the Recommended or Distinguished graduation plan.
2. Must have an ACT composite of 22 or SAT composite of 1030 , (critical reading and math only).
3. Rank in the top $10 \%$ of graduating class OR have a 90 or above GPA in academic courses ${ }^{5}$
4. Meet deadlines for Concurrent Enrollment admissions.

## Application for Concurrent Enrollment Admission

To be admitted to Concurrent Enrollment, students must submit the following documents by the published deadline for the semester for which they are applying:

- Concurrent Enrollment Authorization Form
- High school transcript that includes graduation date, graduation plan type, class ranking and GPA (on a 100-point scale)
- ACT or SAT scores
- For all students under 30 years of age, submit proof of Bacterial Meningitis Vaccination
- Placement test scores fulfilling the Texas Success Initiative (TSI) and/or course pre-requisites. Students will not be permitted to register or will be dropped if TSI requirements are not met.

All admission documents for Concurrent Enrollment must be submitted to:

## Office of Student Enrollment

1201 West University Dr.
Visitors Center, Rm. 1.113
Edinburg, TX 78539
Phone: 956-665-7575
Fax: 956-665-2687

It is recommended that all documents be sent at one time. All documents submitted become the property of The University of Texas Rio Grande Valley.

Students must also meet the prerequisites for the course(s) in which they plan to enroll, if any exist. To continue participating in Concurrent Enrollment, participants must earn a grade of C or higher in each University course taken.

Upon graduation from high school, Concurrent Enrollment students must submit a final high school transcript indicating:

1. The student's graduation date and graduation plan type.
2. The student has earned all the credits required for high school graduation.
3. The student's class rank and grade point average (on 100-point scale).

Concurrent Enrollment students who wish to continue their studies at The University of Texas Rio Grande Valley after high school graduation will be readmitted as Entering Freshmen and will be invited to attend Freshman Orientation.

[^3]
## Concurrent Enrollment Program

Summer Housing Program
During the summer, the Concurrent Enrollment Program has a limited Room \& Board Housing Scholarship for qualified students who may have difficulty traveling to the UTRGV campus to attend class. There is a separate application process for this limited CE Summer Housing Scholarship which is highly competitive due to the limited number of scholarships available. Call the Office of Undergraduate Admissions at 956-665-2999 or email at ce@utrgv.edu for more details.

## International Admission

An applicant is considered an international student if the applicant is not a citizen of the United States or does not hold permanent resident alien status. All required application documents must be on file in the Office of Undergraduate Admissions by the designated date.

## Application Deadlines

International students submit all application documents by the respective deadline:

- Fall Priority Admissions Deadline:
- Fall Late Admissions Deadline (Overseas Applicants):
- Fall Late Admissions Deadline (Mexican Nationals):
- Spring Admission:
- Summer I Admission:
- Summer II Admission:

February 1, 2015
June 1, 2015
July 1, 2015
December 1, 2015
May 1, 2016
June 1, 2016

## Application Documents

1. International Student Application for Admission (applytexas.org).
2. $\$ 50.00$ International Application fee; nonrefundable.
3. Test of English as a Foreign Language (TOEFL) scores or IELTS. Students from countries whose native language is not English are required to take the TOEFL or the IELTS. TOEFL or IELTS scores must be sent directly from the educational testing service UTRGV will not accept residual TOEFL exams taken at another institution. The minimum scores for the tests are as follow: TOEFL IBT 61, TOEFL PB 500, TOEFL CBT 173, and IELTS 6.
4. The ACT Assessment and the SAT are designed to assess high school students' general educational development and their ability to complete college-level work. The tests cover four skill areas: English, mathematics, reading and science.
5. The Texas Success Initiative (TSI) requires students to be assessed in reading, writing and math skills prior to enrolling in college, and to be advised on course placement based on the results of that assessment. The approved TSI testing instruments is the TSI Assessment exam. TSI is mandatory in order to register for classes. The test is administered in the following locations:

| Testing Center |  |  |
| :--- | :--- | :--- |
| 1601 Price Rd., Suite E | 1407 East Freddy Gonzalez Dr. | testing@utrgv.edu |
| Resaca Village | CESS Building |  |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |
| Phone: $956-882-8875$ | Phone: 956-665-7570 |  |

6. English translation and evaluation of educational records from either World Education Services (WES) or Foreign Credential Services of America. In addition to the official transcripts required
for admission, certified English translation must be included to allow for accurate interpretations.

| Foreign Credential Services of America (FCSA) |  |
| :--- | :--- |
| 1910 Justin Ln., Austin, TX 78757-2411 (USA) | info@fcsa.biz |
| Phone: 512-459-8428; Fax: 512-459-4565 | www.fcsa.biz |

Students who have not yet graduated from high school must have their fifth semester transcript evaluated by one of the agencies mentioned above. After graduation, students must submit an official high school transcript to the same agency for a final evaluation.
Procedure after Admission - Issuance of I-20
Once the international student has received an acceptance letter from the Office of Undergraduate Admissions, the student must turn in the following documents to the Office of International Admissions and Student Services:

- Provide a copy of your valid passport.
- Submit a notarized Affidavit of Financial Support form.
- Submit a bank statement showing sufficient financial support for one year of study and living. See tables for required amounts.
- If applicable, please submit your Mexican Tuition Waiver form (Mexican students only).

The student must submit all documents mentioned above to one of the following locations:

| International Admissions and Student Services |  |  |
| :---: | :---: | :---: |
| One West University Blvd. | 1201 West University Dr. | international@utrgv.edu |
| Main, Rm. 1.308 | Student Academic Center, Rm. 3.128 |  |
| Brownsville, TX 78520 | Edinburg, TX 78539 | Hours: |
| Phone: 956-882-7092 | Phone 956-665-2922 | Mon.-Fri., 8:00am-5:00pm |
| Fax: 956-882-6817 | Fax: 956-665-2281 |  |

Upon completion of the application process, admitted students will be issued a Certificate of Eligibility for Non-immigrant F1 Student (I-20 form) by the International Student Specialist/Advisor, who is the Designated School Official (DSO) to report the status of international students to the U.S. Department of Homeland Security through the Student Exchange Visitor Information System (SEVIS). Students then will present the I-20 from to the American Consulate or embassy in their home country to obtain a student visa ( $\mathrm{F}-1$ ) and enter the U.S.

- Duration of Status: A non-immigrant student may be admitted for a "duration of status" (D/S). This means that the student is authorized to stay in the United States for the entire length of time during which the student is enrolled full-time or part-time in an educational program and any period of authorized practical training plus 60 days. While in the United States, the student must maintain a valid $\mathrm{I}-20$, visa (unless exempt from visa requirements), and a valid foreign passport.
- Student on a Visa: For initial admission, the student must attend the school specified on the I20 form. If for some reason the student decides to transfer to another school, the student needs to contact immediately the International Student Specialist/Advisor to make the appropriate changes on the $\mathrm{I}-20$ form through SEVIS.
- Re-entry: A non-immigrant student may be readmitted to the university after a temporary absence of five months or less from the United States, if the student is admissible. The students may be readmitted by presenting a valid foreign passport, a valid visa and either a new Form I20 or a properly $\mathrm{I}-20$ endorsed for re-entry if the information on the $\mathrm{I}-20$ form is current.
- Travel Endorsement: All international students must obtain a travel endorsement on the third page of the I-20 from the International Student Specialist/Advisor every year. Please request a travel endorsement at least seven days before the departure date.
- Transfer: A non-immigrant student is permitted to transfer to a different school provided that the transfer procedure is followed in SEVIS. To transfer to a different school, the student should first notify the Office of International Admissions and Student Services to obtain a SEVIS release form and provide an acceptance letter from the new school. Transfer will be in effect only if the student submits the SEVIS release form signed by the DSO of the new school and an acceptance letter from the new school to the International Student Specialist/Advisor within 15 days of beginning attendance.
- Extension of Stay: If the student cannot complete the educational program for the anticipated length of the program, the student must apply for an extension of stay. An application for extension of stay is obtained at The Office of International Admissions and Student Services. The application must be submitted to the International Student Specialist/Advisor at least 30 days but no more than 60 days before the expiration of the student's stay.
- Change of Major: If a student decides to change a major or program of study, they will need to contact the International Student Specialist/Advisor before so he or she can make the appropriate changes to the I-20 form. This would include changing from language studies to a bachelor's program, from a bachelor's program to master's or doctoral program, from an Optional Practical Training (OPT) program to a new degree program, and from one level of degree program to one of the same level (e.g., master's to a second master's). Once the International Student Specialist/Advisor has reviewed the case, the student will need to go to the Graduate College to make the official change and provide appropriate documentation to our office.
- On-campus Employment: On-campus employment requires authorization from the International Student Specialist/Advisor. Students must be in good academic and immigration standing to qualify for this benefit. Students are allowed to work on campus; if they work without proper authorization off campus, the student may fall out of status and will not be able to be reinstated into the school. On-campus employment is limited to part time (20 hours or less per week) during the fall and spring semesters. It may be full time (more than 20 hours per week) during the summer and official school breaks.
- Distance Education: An F-1 student, is permitted to enroll in classes for credit or classroom hours, no more than the equivalent of one class or three credit hours per session, term, semester, trimester or quarter may be counted toward their full course-of-study requirements if the class is taken online or through distance education and does not require physical attendance for classes, examination or other purposes integral to completion of the class. An online or distance-education course is a course that is offered principally through the use of television, audio or computer transmission, including open broadcast, closed circuit, cable, microwave, satellite, audio conferencing or computer conferencing. There are special
considerations for hybrid classes, for more information, students must contact their International Student Specialist/Advisor.
- Student Reinstatement: Students who have violated their F-1 student status (i.e. by not obtaining appropriate employment authorization prior to working, not enrolling full-time in the program of study, forgetting to extend I-20 prior to expiration date, not being eligible for extension but needing additional time to complete program, or otherwise failing to maintain status) should schedule an appointment to meet with an International Student Specialist/Advisor as soon as possible to discuss their situation.
Federal regulations that govern your stay in the U.S. can change very rapidly. To stay up-to-date regularly, visit the International Admissions and Student Services website often or make an appointment at your convenience to see an International Student Specialist/Advisor. International students are required to report any changes on their non-immigrant status immediately to the office.
- Medical Insurance Requirement for International Students: As required by Regents' Rule 50402, students holding nonimmigrant visas are required to maintain approved comprehensive health insurance or coverage while enrolled. Medical insurance is required each semester of attendance with minimum coverage as follows: Major Medical, \$50,000; Medical Evacuation, $\$ 10,000$; and Repatriation of Remains, $\$ 7,500$. Deductible has to be $\$ 500$ or less. Medical insurance will be automatically billed at the beginning of each semester and must be maintained throughout your time at our University unless proof of adequate insurance is provided to the international student advisor by the official census date for the semester (refer to the University Calendar for published census dates). Refunds will not be generated for students who obtain or submit proof of insurance after the census date.


## Graduate Non-Degree Seeking Students

Students wanting to take graduate coursework for professional improvement must submit a graduate application online, pay the required fees and submit an official transcript showing the awarding of a bachelor's or higher degree. This must be sent to the UTRGV Graduate School directly from the awarding institution. Non-degree seeking students applying for certification related to education are required to have transcripts sent from all institutions attended.

Registration as a non-degree seeking student in a master's course requires the permission of the graduate program director or the department chair. Registration in doctoral courses requires acceptance to a doctoral program and/or approval of the vice provost for graduate studies and may require additional documentation.

## Reservation of Work by Undergraduates for Graduate Credit

It is possible for undergraduate students to enroll in graduate courses in their last semester under the following conditions:

- The undergraduate student must lack no more than 12 hours to complete all requirements for his or her first bachelor's degree.
- These 12 hours (or less) must be completed in the same semester, or in two consecutive summer sessions, in which the student is taking the graduate courses.
- Total enrollment, including undergraduate and graduate courses, must not exceed 15 hours in a regular semester, or 12 hours in two consecutive summer sessions.
- The student has a minimum Graduate Admission GPA Calculation of 2.5 (on a 4.0 scale) on all work completed to date. (For information on the Graduate Admission GPA Calculation, see Graduate Catalog.)
- The application for such graduate work is submitted to the Graduate School. Undergraduates cannot count their work in graduate courses toward the bachelor's degree. Such work will be reserved for credit toward a graduate degree.


## Distance Learning

## UT Online Consortium

An agreement exists between UTRGV and other UT institutions to award eligible student Title IV aid when taking courses at two or more of those institutions. This agreement, entered into between each of the named institutions, hereinafter referred to as Home or Host Institutions, is intended to provide the basis for the Home Institution to pay and/or certify federal/state and institutional student financial assistance to UT Online Consortium students matriculated at a Home Institution and also studying at a Host Institution.

- Home: The UT component institution at which a student is fully admitted and enrolled in a degree or certificate program. The Home Institution will award the student's degree or certificate.
- Host: The UT component institution at which a student may enroll and take courses applicable to the degree or certificate program at his/her Home Institution.

A student wishing to enroll in a distance-learning course can refer to the following websites for additional information: www.utcoursesonline.org.

## Participating Institutions

- The University of Texas at Arlington
- The University of Texas at Austin
- The University of Texas at Dallas
- The University of Texas at El Paso
- The University of Texas at Permian Basin
- The University of Texas at San Antonio
- The University of Texas Health Science Center at San Antonio
- The University of Texas Medical Branch at Galveston
- The University of Texas Rio Grande Valley


## Texas Common Course Numbering System

The Texas Common Course Numbering System (TCCNS) has been designed to aid students in the transfer of general academic courses between colleges and universities throughout Texas. Common courses are freshman and sophomore academic credit courses that have been identified as common by institutions that are members of the TCCNS. The system ensures that if the student takes courses that the receiving institution has designated as common, then the courses will be accepted in transfer.

The table below lists the courses The University of Texas Rio Grande Valley has identified as common and their TCCNS equivalents. Before using this table, students should make sure the institution they attend employs the TCCNS. Course availability varies from institution to institution.

Only courses that have direct equivalents are shown. Courses at other TCCNS institutions that do not have a direct UTRGV equivalent will be evaluated for transferability on a case-by-case basis. Students wishing to transfer a course to The University of Texas Rio Grande Valley that is not listed in this guide should obtain approval from Office of Undergraduate Admissions prior to taking the course.

The Office of Undergraduate Admissions at The University of Texas Rio Grande Valley must receive an official transcript directly from the registrar's office of the institution attended before credit can be transferred. (See section on Transfer Admissions on p. 19 for complete transfer of course credit regulations.)

Texas Common Course Numbering System 2015

| Texas Common Course Number | UTRGV Course Number |  |  |
| :--- | :--- | :--- | :--- |
| ACCT 2301 | Principles of Financial <br> Accounting | ACCT 2301 | Introduction To Financial <br> Accounting |
| ACCT 2302 | Principles of Managerial <br> Accounting | ACCT 2302 | Introduction To Managerial <br> Accounting |
| ANTH 2302 | Introduction to Archeology | ANTH 2302 | Introduction to Archeology |
| ANTH 2351 | Cultural Anthropology | ANTH 2351 | Introduction to Cultural <br> Anthropology |
| ANTH 2401 | Physical Anthropology | ANTH 2401 | Basic Statistics for <br> Anthropologists |
| ARTS 1301 | Art Appreciation | ARTS 1301 | Art Appreciation |
| ARTS 1303 | Art History I | ARTS 1303 | Art History I, Prehistoric to the <br> 14th-Century |
| ARTS 1304 | Art History II | ARTS 1304 | Art History II, 14th-Century to <br> the Present |
| ARTS 1311 | Design I (2-dimensional) | ARTS 1311 | Design I |
| ARTS 1312 | Design II (3-dimensional) | ARTS 1312 | Design II |
| ARTS 1316 | Drawing I | ARTS 1316 | Drawing I |
| ARTS 1317 | Drawing II | ARTS 1317 | Drawing II |
| ARTS 2313 | Design Communications I | ARTS 2313 | Design Communications I |
| ARTS 2314 | Design Communications II | ARTS 2314 | Design Communications II |
| ARTS 2316 | Painting I | ARTS 2316 | Painting I |
| ARTS 2317 | Painting II | ARTS 2317 | Painting II |
| ARTS 2326 | Sculpture I | ARTS 2326 | Sculpture I |
| ARTS 2327 | Sculpture II | ARTS 2327 | Sculpture II |
| ARTS 2333 | Printmaking I | ARTS 2333 | Printmaking I |
| ARTS 2334 | Printmaking II | ARTS 2334 | Printmaking II |
| ARTS 2341 | Art Metals I | ARTS 2346 | Beginning <br> Jewelry/Metalworking |
| Ceramics I |  |  |  |
| ARTS 2346 | Ceramics I | ARTS 2347 | Ceramics II |
| ARTS 2347 | Ceramics II | ARTS 2348 | Digital Media |
| ARTS 2348 | Digital Art I |  |  |
|  |  |  |  |


| Texas Common Course Number |  | UTRGV Course Number |  |
| :---: | :---: | :---: | :---: |
| ARTS 2356 | Photography I (fine arts emphasis) | ARTS 2356 | Photography I |
| ARTS 2357 | Photography II (fine arts emphasis) | ARTS 2357 | Photography II |
| BCIS 1305 | Business Computer Applications | INFS 1301 | Computer Information Systems |
| BIOL 1108 | Biology for Non-Science Majors I Laboratory | BIOL 1108 | Biological Concepts I Lab |
| BIOL 1109 | BIOL 1109 Biology for NonScience Majors II Laboratory | BIOL 1109 | Biological Concepts II Lab |
| BIOL 1308 | Biology for Non-Science Majors I | BIOL 1308 | Biological Concepts I for NonMajors |
| BIOL 1309 | Biology for Non-Science Majors II | BIOL 1309 | Biological Concepts II for NonMajors |
| BIOL 1322 | Nutrition \& Diet Therapy | BIOL 1322 | Human Nutrition |
| BIOL 1406 | Biology for Science Majors I | BIOL 1406 | General Biology I |
| BIOL 1407 | Biology for Science Majors II | BIOL 1407 | General Biology II |
| BIOL 2401 | Anatomy \& Physiology I | BIOL 2401 | Anatomy and Physiology I |
| BIOL 2402 | Anatomy \& Physiology II | BIOL 2402 | Anatomy and Physiology II |
| BIOL 2406 | Environmental Biology | BIOL 2406 | Environmental Biology |
| BUSI 1301 | Business Principles | MGMT 1301 | Introduction to Business |
| CHEM 1111 | General Chemistry I Lab | CHEM 1111 | General Chemistry I Lab |
| CHEM 1112 | General Chemistry II Lab | CHEM 1112 | General Chemistry II Lab |
| CHEM 1307 | Introductory Chemistry II | CHEM 1307 | Chemistry for Engineers |
| CHEM 1311 | General Chemistry I | CHEM 1311 | General Chemistry I |
| CHEM 1312 | General Chemistry II | CHEM 1312 | General Chemistry II |
| CHEM 1405 | Introductory Chemistry I | CHEM 1405 | Introductory Chemistry I |
| CHEM 2123 | Organic Chemistry I Laboratory | CHEM 2123 | Organic Chemistry I Lab |
| CHEM 2125 | Organic Chemistry II Laboratory | CHEM 2125 | Organic Chemistry II Lab |
| CHEM 2323 | Organic Chemistry I | CHEM 2323 | Organic Chemistry I |
| CHEM 2325 | Organic Chemistry II | CHEM 2325 | Organic Chemistry II |
| COMM 1307 | Introduction to Mass Communication | COMM 1307 | Introduction to Mass Communication |
| COMM 1336 | Introduction to Electronic Media COMM 1336 Video Production I | COMM 1336 | Television Production |
| COMM 1336 | Video Production I | THTF 1336 | Television Production |
| COMM 2310 | News Editing \& Copy Reading II | COMM 2310 | Video and Film Editing I |
| COMM 2331 | Radio/Television Announcing | COMM 2331 | Radio/Television Announcing |
| COMM 2366 | Introduction to Cinema | THTF 2366 | Cinema Appreciation |
| COSC 1301 | Introduction to Computing | CSCI 1301 | Introduction to Computing |
| COSC 1336 | Programming Fundamentals I | CMPE 1370 | Engineering Computer Science I |
| COSC 2325 | Computer Organization | CSCI 2333 | Computer Organization and Assembly Language |
| COSC 2336 | Programming Fundamentals III | CSCI 2380 | Computer Science II |
| CRIJ 1301 | Introduction to Criminal Justice | CRIJ 1301 | Introduction to the Criminal Justice System |


| Texas Common Course Number |  | UTRGV Course Number |  |
| :---: | :---: | :---: | :---: |
| CRIJ 1306 | Court Systems \& Practices | CRIJ 1306 | Court Systems and Practices |
| CRIJ 1307 | Crime in America | CRIJ 1307 | Crime in America |
| CRIJ 1313 | Juvenile Justice System | CRIJ 1313 | Juvenile Justice System |
| CRIJ 2313 | Correctional Systems \& Practices | CRIJ 2313 | Correctional Systems and Practices |
| CRIJ 2328 | Police Systems \& Practices | CRIJ 2328 | Police Systems and Practices |
| DANC 1222 | Folk I | DANC 1222 | Folk and Square Dance |
| DANC 1241 | Ballet I | DANC 1241 | Introduction to Ballet Technique I |
| DANC 1242 | Ballet II | DANC 1242 | Introduction to Ballet Technique II |
| DANC 1351 | Dance Performance I | DANC 1351 | Introduction to Dance |
| DANC 2303 | Dance Appreciation I | DANC 2323 | Dance Appreciation |
| DRAM 1310 | Introduction to Theater | THTF 1310 | Theatre Appreciation |
| DRAM 1341 | Makeup | THTF 1341 | Makeup |
| DRAM 1351 | Acting I | THTF 1351 | Acting I |
| DRAM 1352 | Acting II | THTF 1352 | Acting II |
| ECON 1301 | Introduction to Economics | ECON 1301 | Introduction to Economics |
| ECON 2301 | Principles of Macroeconomics | ECON 2301 | Principles of Macroeconomics |
| ECON 2302 | Principles of Microeconomics | ECON 2302 | Principles of Microeconomics |
| EDUC 1301 | Introduction to the Teaching Profession | EDUC 1301 | Introduction to the Teaching Profession |
| ENGL 1301 | Composition I | ENGL 1301 | Rhetoric and Composition I |
| ENGL 1302 | Composition II | ENGL 1302 | Rhetoric And Composition II |
| ENGL 2308 | Creative Writing II | ENGL 2308 | Readings in Special Topics in Literature |
| ENGL 2321 | British Literature | ENGL 2321 | Introduction to British Literature |
| ENGL 2326 | American Literature | ENGL 2326 | Introduction to American Literature |
| ENGL 2331 | World Literature | ENGL 2331 | Introduction to World Literature |
| ENGL 2341 | Forms of Literature | ENGL 2341 | Introduction to Literature |
| ENGL 2351 | Mexican-American Literature | ENGL 2351 | Introduction to Mexican American Literature |
| ENGR 1201 | Introduction to Engineering | ENGR 1201 | Introduction to Engineering |
| ENGR 1204 | Engineering Graphics I | MECE 1221 | Engineering Graphics |
| ENGR 1304 | Engineering Graphics I | ENGR 1304 | Engineering Graphics I |
| ENGR 2105 | Electrical Circuits I Laboratory | ENGR 2105 | Linear Circuits Lab |
| ENGR 2301 | Engineering Mechanics - Statics | MECE 2301 | Statics |
| ENGR 2302 | Engineering Mechanics Dynamics | MECE 2302 | Dynamics |
| ENGR 2305 | Electrical Circuits I | ELEE 2305 | Electric Circuits I |
| ENGR 2308 | Engineering Economics | ENGR 2308 | Engineering Economics |
| ENGR 2332 | Mechanics of Materials | ENGR 2332 | Mechanics of Materials |
| ENGT 2307 | Engineering Materials I for Engineering Technology | ENGT 2307 | Engineering Materials I for Engineering Technology |


| Texas Common Course Number |  | UTRGV Course Number |  |
| :---: | :---: | :---: | :---: |
| ENGT 2310 | Introduction to Manufacturing Processes | ENGT 2310 | Introduction to Manufacturing Processes |
| ENVR 1401 | Environmental Science I | ENVR 1401 | Introduction to Environmental Science I |
| ENVR 1402 | Environmental Science II | ENVR 1402 | Introduction to Environmental Science II |
| FREN 2311 | Intermediate French I | FREN 2311 | Intermediate French I |
| FREN 2312 | Intermediate French II | FREN 2312 | Intermediate French II |
| GEOG 1301 | Physical Geography | GEOG 1301 | Physical Geography |
| GEOG 1303 | World Regional Geography | GEOG 1303 | World Regional Geography |
| GEOL 1401 | Earth Sciences for Non-Science Majors I | GEOL 1401 | Earth Sciences I |
| GEOL 1403 | Physical Geology | GEOL 1403 | Physical Geology |
| GEOL 1404 | Historical Geology | GEOL 1404 | Historical Geology |
| GERM 2311 | Intermediate German I | GERM 2311 | Intermediate German I |
| GERM 2312 | Intermediate German II | GERM 2312 | Intermediate German II |
| GOVT 2305 | American Government I (Combined Fed \& State/inc Const) | POLS 2305 | U.S. \& Texas Government \& Politics 1 |
| GOVT 2306 | American Government II (Combined Fed \& State) | POLS 2306 | U.S. \& Texas Government \& Politics II |
| HIST 1301 | United States History I | HIST 1301 | U.S. History I |
| HIST 1302 | United States History II | HIST 1302 | U.S. History II |
| HIST 2321 | World Civilizations I | HIST 2321 | World History I |
| HIST 2322 | World Civilizations II | HIST 2322 | World History II |
| MATH 1314 | College Algebra | MATH 1314 | College Algebra |
| MATH 1324 | Mathematics for Business \& Social Sciences | MATH 1324 | Mathematics for Business and Social Sciences |
| MATH 1325 | Calculus for Business \& Social Sciences | MATH 1325 | Calculus for Business and Social Sciences |
| MATH 1332 | Contemporary Mathematics I | MATH 1332 | Contemporary Mathematics |
| MATH 1333 | Contemporary Mathematics II | MATH 1333 | Mathematics for Art and Music |
| MATH 1342 | Elementary Statistical Methods | MATH 1342 | Elementary Statistical Methods |
| MATH 1350 | Fundamentals of Mathematics I | MATH 1350 | Fundamentals of Mathematics I |
| MATH 1351 | Fundamentals of Mathematics II | MATH 1351 | Fundamentals of Mathematics II |
| MATH 1414 | College Algebra | MATH 1414 | College Algebra |
| MATH 2305 | Discrete Mathematics | MATH 2305 | Discrete Mathematics |
| MATH 2318 | Linear Algebra | MATH 2318 | Linear Algebra |
| MATH 2321 | Differential Equations and Linear Algebra | MATH 2321 | Differential Equations and Linear Algebra |
| MATH 2412 | Pre-Calculus Math | MATH 2412 | Precalculus |
| MATH 2413 | Calculus I | MATH 2413 | Calculus I |
| MATH 2414 | Calculus II | MATH 2414 | Calculus II |
| MATH 2415 | Calculus III | MATH 2415 | Calculus III |
| MUSI 1114 | Piano Class for Music Majors I | MUSI 1114 | Piano for Music Majors I |


| Texas Common Course Number |  | UTRGV Course Number |  |
| :---: | :---: | :---: | :---: |
| MUSI 1115 | Piano Class for Music Majors II | MUSI 1115 | Piano for Music Majors II |
| MUSI 1116 | Sight Singing \& Ear Training I | MUSI 1116 | Sight Singing and Ear Training I |
| MUSI 1117 | Sight Singing \& Ear Training II | MUSI 1117 | Sight Singing and Ear Training II |
| MUSI 1157 | Opera Workshop I | MUEN 1143 | Opera Workshop |
| MUSI 1162 | Voice Diction I | MUSI 1160 | Diction I |
| MUSI 1163 | Jazz Improvisation I | MUSI 1163 | Movement and Vocal Improvisation |
| MUSI 1165 |  | MUSI 1161 | Diction II |
| MUSI 1166 | Woodwind Class I | MUSI 1166 | Woodwind Methods I |
| MUSI 1167 | Woodwind Class II | MUSI 1167 | Woodwind Methods II |
| MUSI 1178 | Brass Class I | MUSI 1178 | High Brass Methods |
| MUSI 1179 | Brass Class II | MUSI 1179 | Low Brass Methods |
| MUSI 1183 | Voice Class I | MUSI 1183 | Vocal Methods |
| MUSI 1188 | Percussion Class I | MUSI 1188 | Percussion Methods |
| MUSI 1192 | Guitar Class I | MUSI 1192 | Guitar Methods |
| MUSI 1195 | Strings Class I | MUSI 1195 | High String Methods |
| MUSI 1196 | Strings Class II | MUSI 1196 | Low String Methods |
| MUSI 1211 | Music Theory I | MUSI 1211 | Music Theory I |
| MUSI 1212 | Music Theory II | MUSI 1212 | Music Theory II |
| MUSI 1301 | Fundamentals of Music I | MUSI 1301 | Fundamentals of Music |
| MUSI 1304 | Foundations of Music | MUSI 1313 | Teaching Music in the Elementary School |
| MUSI 1306 | Music Appreciation | MUSI 1306 | Music Appreciation |
| MUSI 1308 | Music Literature I | MUSI 1308 | Music History and Literature I |
| MUSI 1309 | Music Literature II | MUSI 1309 | World Music Cultures |
| MUSI 1310 | American Music | MUSI 1310 | History of Rock |
| MUSI 2114 | Piano Class for Music Majors III | MUSI 2114 | Piano for Music Majors III |
| MUSI 2116 | Sight Singing \& Ear Training III | MUSI 2116 | Sight Singing and Ear Training III |
| MUSI 2117 | Sight Singing \& Ear Training IV | MUSI 2117 | Sight Singing and Ear Training IV |
| MUSI 2211 | Music Theory III | MUSI 2211 | Music Theory III |
| MUSI 2212 | Music Theory IV | MUSI 2212 | Music Theory IV |
| PHED 1164 | Introduction to Physical Fitness \& Wellness | KINE 1164 | Introduction to Fitness and Sport |
| PHED 1301 | Foundations of Kinesiology | KINE 1351 | Introduction to Sports and Exercise Science |
| PHED 1306 | First Aid | KINE 1306 | First Aid and First Responder |
| PHIL 1301 | Introduction to Philosophy | PHIL 1301 | Introduction to Philosophy |
| PHYS 1401 | College Physics I | PHYS 1401 | General Physics I |
| PHYS 1402 | College Physics II | PHYS 1402 | General Physics II |
| PHYS 1405 | Elementary Physics I | PHYS 1405 | Elementary Physics and Acoustics I |
| PHYS 1407 | Elementary Physics II | PHYS 1407 | Elementary Physics and Acoustics II |
| PHYS 1410 | Elementary Physics | PHYS 1410 | Elementary Physics Through Video Games |


| Texas Common Course Number |  | UTRGV Course Number |  |
| :---: | :---: | :---: | :---: |
| PHYS 1415 | Physical Science I | PSCI 1421 | Physical Science I |
| PHYS 1417 | Physical Science II | PSCI 1422 | Physical Science II |
| PHYS 2425 | University Physics I | PHYS 2425 | Physics for Scientists and Engineers I |
| PHYS 2426 | University Physics II | PHYS 2426 | Physics for Scientists and Engineers II |
| PORT 1311 | Beginning Portuguese I | PORT 1311 | Beginning Portuguese I |
| PORT 1312 | Beginning Portuguese II | PORT 1312 | Beginning Portuguese II |
| PSYC 2301 | General Psychology | PSYC 2301 | General Psychology |
| PSYC 2317 | Statistical Methods in Psychology | PSYC 2401 | Basic Statistics for Psychologists |
| SGNL 1301 | Beginning American Sign Language I | SGNL 1301 | Beginning American Sign Language I |
| SGNL 1302 | Beginning American Sign Language II | SGNL 1302 | Beginning American Sign Language II |
| SOCI 1301 | Introduction to Sociology | SOCI 1301 | Introduction to Sociology |
| SOCI 1306 | Social Problems | SOCI 1323 | Social Problems |
| SOCW 2361 | Introduction to Social Work | SOCW 2361 | Introduction to the Social Work Profession |
| SOCW 2362 | Social Welfare as a Social Institution | SOCW 2362 | The Social Welfare Institution |
| SPAN 1311 | Beginning Spanish I | SPAN 1311 | Spanish for Non-Native Speakers I |
| SPAN 1312 | Beginning Spanish II | SPAN 1312 | Spanish for Non-Native Speakers II |
| SPAN 2311 | Intermediate Spanish I | SPAN 2311 | Intermediate Spanish I for NonNative Speakers |
| SPAN 2312 | Intermediate Spanish II | SPAN 2312 | Intermediate Spanish II for NonNative Speakers |
| SPAN 2313 | Spanish for Native/Heritage Speakers I | SPAN 2313 | Spanish for Native/Heritage Speakers I |
| SPAN 2315 | Spanish for Native/Heritage Speakers II | SPAN 2315 | Spanish for Native/Heritage Speakers II |
| SPAN 2389 | Academic Cooperative | SPAN 2389 | Academic Cooperative- English to Spanish Translation |
| SPCH 1311 | Introduction to Speech Communication | COMM 1311 | Introduction to Communication |
| SPCH 1315 | Public Speaking | COMM 1315 | Public Speaking |
| SPCH 1318 | Interpersonal Communication | COMM 1318 | Interpersonal Communication |
| SPCH 2333 | Discussion \& Small Group Communication | COMM 2333 | Small Group Communication |
| SPCH 2335 | Argumentation \& Debate | COMM 2335 | Argumentation and Debate |

## FISCAL POLICIES

The cost of attending The University of Texas Rio Grande Valley is relatively low - approximately $\$ 3,248.87$ per semester in 2015-2016 for nine hours of required tuition and fees for a graduate student who is a resident of Texas. A student financial aid program offering part-time employment, scholarships, grants, and loans helps students at The University of Rio Grande Valley meet the costs of attending college. For more information on financial aid, see the Financial Assistance section on p. 47 of this catalog.

## Financial Responsibility

State universities cannot extend credit. Students are expected to meet financial obligations to the University within the designated time allowed. Tuition and fees are payable at the time of registration, and students are not entitled to enter class or laboratory until all these charges have been paid (Exception: See Payment by Installment on p. 41.)

Other charges are due within 10 days after a bill is rendered by the university, or according to the special payment instructions that may be printed on the bill. Failure to pay the amount owed in the allotted time can result in withdrawal from classes; the withholding of registration privileges, official transcripts, grades and degrees, university disciplinary action, and other penalties and actions authorized by law.

A student is only registered in the university and entitled to university privileges after he or she has paid all required tuition and fees. A hold against reentry is imposed on a student who fails to pay a debt owed to the university.

Initial payment of tuition and fees may be made by personal check, money order payable to The University of Texas Rio Grande Valley, credit card (Visa, MasterCard, and Discover only), or cash. Students are advised to exercise care in paying charges by check. When a bad check for tuition and fees is returned to the university, a $\$ 25$ returned check service charge is assessed, and the student is given 10 days from receipt of notice to make full payment by cash, cashier's check, or money order. Failure to comply will result in the penalties described above.

## Student Tuition and Fee Bill

Tuition and fees bill statements are available at my.utrgv.edu through ASSIST two weeks prior to the first tuition due date. Students are responsible for verifying their student account before every tuition due date in order to make sure there is no outstanding balance. UTRGV is required to set aside a portion of a student's designated tuition to provide financial assistance. Effective Spring 2010, notice of the specific amount required to be set aside will be included with the student's tuition bill (Texas Education Code, Section 56.014).

## Residency Classification for Tuition Purposes

The Office of the Registrar is responsible for determining residence status of students for purposes of tuition. The office is guided by the Texas Education Code, Section 54.052, et seq., the Rules and Regulations for Determining Residence Status of the Texas Higher Education Coordinating Board, and University Regulations. Under the state statutes and regulations, for tuition purposes, a student or
prospective student is classified either as a resident of Texas, nonresident (U.S. citizens from another state) or students who are citizens from another country.

- A resident of the state of Texas for tuition purposes is an individual or dependent who has physically resided (or whose parent has physically resided) in the state of Texas for a period of 12 continuous months prior to enrollment, or is an individual who graduated from a Texas high school and has maintained a residence in Texas continuously for at least three years prior to the date of that graduation and one year prior to enrollment. Individuals seeking to establish resident status under the second definition, and who are not citizens or permanent residents, must provide an affidavit stating that the individual will file an application to become a permanent resident at the earliest opportunity of eligibility. Students are required to complete the Core Residency Questionnaire as part of the application process. Residency for tuition purposes will be based on this questionnaire and other information/ documents submitted by the student.
- A nonresident for tuition purposes is a U.S. citizen or permanent resident alien who has not lived and worked in the state of Texas for a period of 12 months prior to enrollment.
- A foreign student is a person who is a citizen of another country.

Residency for tuition purposes for a dependent is established on the residency of the parents or legal guardian.

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 of residing and gainful employment in Texas prior to enrollment. Individuals classified as a nonresident or foreign student may qualify for resident tuition rates and other charges while continuing to be classified as a nonresident or a foreign student under the following exceptions:

- Students who receive academic competitive scholarships
- Teaching or research assistants
- Faculty employment
- Special types of visas
- Military

Additional information on residency, reclassification, tuition exceptions and waivers is available at:

| Office of the Registrar |  |  |
| :---: | :---: | :---: |
| One West University Blvd. The Tower, Main, Rm. 1.101 Brownsville, TX 78520 | 1201 West University Dr. <br> Student Services Bldg., $1^{\text {st }}$ Floor Edinburg, TX 78539 | registrar@utrgv.edu <br> Phone: 956-665-2201 |

Students are required to sign an oath of residency as part of the application process. Residency for tuition purposes will be based on this oath and other information/documents submitted by the student.

## Excess Credit Hours

As authorized by state law, a student who pays resident tuition rates and who attempts hours that exceed a designated limit will be charged an additional $\$ 50$ per credit hour. The designated limit for a student who initially enrolled in an institution of higher education in Fall 1999 through Summer 2006 is

45 credit hours beyond the required hours for the student's declared degree program. The designated limit for a student who initially enrolled in an institution of higher education in Fall 2006 or later is 30 credit hours beyond the hours required for completion of the student's degree program.

The following credit hours are not included in the calculation:

- Credit hours earned by the student 10 or more years before the date the student begins the new degree program under the Academic Fresh Start Program of the Texas Education Code, § 51.931.
- Hours earned by the student before receiving a baccalaureate degree that has previously been awarded to the student.
- Hours earned by the student by examination or similar method without registering for a course.
- Hours from remedial and developmental courses, workforce education courses, or other courses that would not generate academic credit that could be applied to a degree at the institution if the course work is within the 27-hour limit at two-year colleges and the 18-hour limit at general academic institutions.
- Hours earned by the student at a private institution or an out-of-state institution.
- Hours not eligible for formula funding.
- Semester credit hours earned by the student before graduating from high school and used to satisfy high school graduation requirements.

Students who wish to appeal the charges due to extenuating circumstances, should submit a written letter of appeal with supporting documentation to the Office of Student Enrollment. For questions about tuition and fees under this policy, contact the Office of Student Accounting Services at 956-6652713 or 956-665-7824.

## Tuition for Same or Substantively Identical Courses

Students enrolling in a course that is the same as or substantively identical to a course previously attempted will be charged an additional $\$ 150$ per credit hour for the repeated course(s) beginning with the third attempt. The "three-attempt rule" applies to all undergraduate students paying in-state tuition, including those non-resident students receiving waivers to pay in-state tuition. Any courses taken at the institution Fall 2002 or later will be considered in calculation of this fee with the exception of courses defined as exempt from this rule by the Texas Higher Education Coordinating Board in Title 19 of the Texas Administrative Code section 13.106. ${ }^{6}$

Students in their final semester prior to graduation, who must repeat one or more previously completed courses for the third or greater time in order to meet graduation requirements will be exempt from paying the higher tuition for the repeated course(s) for one semester. Students who wish to apply for this exemption, or other students who wish to appeal the charges due to extenuating circumstances, should submit a written letter of appeal with supporting documentation to the Office of Student Enrollment. For questions about tuition and fees under this policy, contact the Office of Student Accounting Services at 956-665-2713 or 956-665-7824.

[^4]
## Excessive Developmental Credit hours

Students may enroll in 18 hours of developmental courses (MATH 1300, 1334; ENG 1310, 1320) without penalty. Students enrolling in more than 18 hours of developmental courses will, in addition to resident tuition and permitted by state law (Texas Education Code, Section 54.014), be assessed an additional Excessive Developmental Course Hour fee of $\$ 100$ per credit hour for these courses.

The credit hours counted toward the Excessive Developmental Course calculation include all developmental hours attempted by the student except:

- Courses dropped prior to the official census date for the semester.
- Courses taken at institutions other than UTRGV.

For questions about tuition and fees under this policy, contact the Office of Student Accounting Services at 956-665-2713 or 956-665-7824.

Students with academic questions are encouraged to contact the Academic Advising Center at 956-6657120 or 956-882-7362

## Tuition and Mandatory Fees

Tuition, fees and charges are assessed to students based on credit hours, at a fixed rate per semester, by course or for specific services. Tuition and fees are subject to change by legislative or regental action and become effective on the date enacted. The Texas Legislature, except for basic tuition, does not set the specific amount for any particular student fee. The student fees assessed are authorized by state statute; however, the University Administration and The University of Texas System Board of Regents make the specific fee amounts and the determination to increase fees in accordance with state law.

Tuition and mandatory fees are the academic costs required of all students for general enrollment. Included are fees charged to support the student union, recreation center, medical services, student services, and university services.

Rates are guaranteed to not increase for up to 4 years. Undergraduates are given a guarantee tuition between 1 and 4 years. Masters students will receive a 2 year guarantee and doctoral students (except medical students) will receive a 4 year guarantee.

In addition, resident tuition, and mandatory fees are capped at 12 semester credit hours.
Review UTRGV's tuition and mandatory fee charges at www.utrgv.edu/tuition-fees.

## Payment by Installment

Section 54.007 of the Texas Education Code provides for payment by installment of tuition and mandatory fees in the fall and spring semesters. Students electing to use the installment plan must be enrolled for a minimum of seven semester hours and must apply on ASSIST online at my.utrgv.edu.

Eligible students have the following Installment payment option during fall and spring registration:

- One-fourth payment on the first tuition due date.
- One-fourth payment on the first business day of the month after the fifth class week.
- One-fourth payment on the first business day of the month after the tenth class week.
- The final one-fourth payment on the first business day of the month before the last class day.

Once the Installment Payment option has been selected, it may not be changed; however, advance payments will be accepted.

Students electing to sign up for an Installment Plan must sign/acknowledge a promissory note via ASSIST. A nonrefundable Tuition Installment Incidental Charge of $\$ 30$ will be collected to defray the cost to the university of providing this delayed payment service.

The second and any subsequent installment must be made before the class week indicated above. Late installments will be accepted during the first three class days of the class week indicated above, but a nonrefundable late payment charge of $\$ 5$ will be assessed in addition to the installment amount.

After the first three class days of the class week indicated above, late installments will still be accepted, but a nonrefundable reinstatement fee of $\$ 25$ will be assessed in addition to the installment amount.

A student who fails to provide full payment of tuition and fees, including assessed late fees, to the university when the payments are due is subject to one or more of the following actions at the university's option:
a. Being withdrawn from the university.
b. Being barred from readmission to the institution.
c. The withholding of the student's grades, degree, and official transcript.
d. All penalties and actions authorized by law.

## Refund of Registration Fees

To officially withdraw from the university or drop a course, a student must go to the Office of the Registrar. A student withdrawing officially and completely during a fall or spring semester will receive a refund of total tuition and fees (excluding nonrefundable fees) according to the following scale (Section 54.006, Texas Education Code):

- 100 percent before the first day of classes.
- 80 percent during the first five class days.
- 70 percent during the second five class days.
- 50 percent during the third five class days.
- 25 percent during the fourth five class days.
- No refund after the fourth five class day period.

Refund of total tuition and fees (excluding nonrefundable fees) during a summer term to students withdrawing officially and completely will be made according to the following scale:

- 100 percent before the first day of classes.
- 80 percent during the first three class days.
- 50 percent during the fourth, fifth and sixth class days.
- No refund after the sixth class day.

NOTE: The term "class days" refers to days the university schedules classes, not the individual student's schedule. Students officially dropping courses but remaining enrolled at the university receive a full
refund of tuition and mandatory fees actually paid for the dropped classes through the 12th class day (official census day) during a fall or spring semester or the fourth class day (official census day) during a summer term, minus a nonrefundable $\$ 5$ course drop fee and other nonrefundable fees assessed for each course dropped beginning with the first day of classes. Students will not receive refunds for classes dropped after these dates. Additionally, per the Texas Higher Education Coordinating Board rules and regulations, students may not enroll in a course after the official census date (Ch. 9, Subchapter B, 9.31a).

Refund checks will be mailed within 45 days to the student's billing address on file at the Office of the Registrar (within 30 days if the student did not receive some form of financial assistance through the university). Refunds for a student under the installment plan will be first applied to the student's unpaid balance.

Students who do not officially withdraw through the Office of the Registrar will be responsible for tuition, fees and any circumstances arising from failure to withdraw.

* Texas Education Code, Section 54.504 - Incidental Fees and 55.16 Board Responsibility authorizes the governing board to fix and collect fees and charges. The averages are not given for college and course related fees (laboratory, incidental, supplemental/individual fees) since charges vary according to academic program and courses; actual fees are published in the institutional catalog and/or other publications.
**The Texas Legislature, except for basic tuition, does not set the specific amount for any particular student fee. The student fees assessed are authorized by state statute; however, the university administration and UT System Board of Regents determine specific fee amounts and make the decision to increase fees.
***House Bill 3015 authorizes the governing boards of institutions of higher education to charge any student Designated Tuition in any amount necessary for the effective operation of the institution effective Sept. 1, 2003. These amounts are approximate as additional charges for course or program related fees may be incurred.


## Withdrawal for Military Service

A student who withdraws as a result of being called to active military service may choose:

1. To receive a refund of tuition and fees for the semester;
2. If eligible, to be assigned an incomplete (I) in each course; or
3. At the instructor's discretion receive a final grade in courses where he or she has completed a substantial amount of coursework and has demonstrated sufficient mastery of the course material.

Policies affecting students who are absent for military service but do not withdraw are provided in the "Military Absences" on p. 76.

## Tuition Rebates

## Eligible Students

To qualify for a tuition rebate of $\$ 1,000$ upon graduation from UTRGV, students must meet all of the following criteria:

1. Student must have attempted no more than three hours in excess of the minimum number of credit hours required to complete the degree in the catalog under which they graduated. (See definition of Attempted Hours below.)
2. Student must have enrolled for the first time in an institution of higher education in the fall of 1997 semester or later.
3. Student must be requesting a rebate for work related purposes to a first baccalaureate degree received from at a Texas public university.
4. Student 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.

Definition: Attempted hours include transfer credits, course credit in excess of nine hours that were 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 exclusively by examination. 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 Rebates

1. 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 equal to the amount of undergraduate tuition paid by the student to the institution.
2. 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.
3. 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 Institutions

1. Institutions shall notify first-time freshmen of the tuition rebate program. A notice in this catalog is considered an acceptable form of notice.
2. If requested by potentially eligible students, public institutions of higher education are required to provide these students opportunities to enroll during each fall and spring semester in the equivalent of at least 12 credit hours that apply toward their degrees. Institutions are not
required to provide students with the opportunity to enroll in specific courses or specific sections. The requirement may be met by allowing substitutions for required courses or by allowing Concurrent Enrollment in courses from another institution, so long as the courses are taught on the student's home campus and the student incurs no financial penalty.
3. Texas public universities are required to provide students with appropriate forms and instructions for requesting tuition reimbursement at the time that students apply for baccalaureate degrees.
4. Institutions are required to provide tuition rebates to students who apply for them within 60 days after graduation or provide the student with a statement explaining the reason the student is ineligible for the rebate.
5. Institutions are required to provide a dispute resolution process to resolve disputes related to local administration of the program.
6. Disputes related to lower-division credit transfer should be resolved in accordance with Coordinating Board rules, Chapter 5, Section 5.393 of this title (relating to transfer of lower division course credit).
7. Institutions may adopt rules and regulations for administering the program.

## Responsibilities of Students

1. Students desiring to qualify for tuition rebates are responsible for complying with all University rules and regulations related to administration of the program.
2. Students desiring to qualify for tuition rebates are solely responsible for enrolling only in courses that will qualify them for the rebates.
3. 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.
4. Students must apply for rebates prior to receiving their baccalaureate degrees on forms provided by the institution's registrar's office and must keep the institution notified of their mailing address for at least 60 days after their graduation date.

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

When federal Title IV grant or loan assistance is disbursed and the recipient does not complete the enrollment period, the law requires that The University of Texas Rio Grande Valley calculate the amount that must be returned by the school and/or student to Title IV program accounts.

The date the student initiates the withdrawal is 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 percent point of the semester, the student has earned 100 percent of the Title IV funds.

If a student fails to earn a passing grade in at least one class, The University of Texas Rio Grande Valley is required to calculate the amount for Return of Title IV funds based on the last day of enrollment. If last day of attendance cannot be determined, UTRGV may use the midpoint of the period (in lieu of an official withdrawal date) as documentation of the student's last date of attendance. Unless the student
can provide acceptable documentation that shows the student was enrolled more than 60 percent of the semester, the student may owe a refund back to UTRGV and the federal government.

## Federal Financial Aid Policy when a Student Receives No Passing Grades

If a student receiving federal financial aid who began attendance and has not officially withdrawn fails to earn a passing grade in at least one course during the semester, UTRGV will assume, for Federal Title IV purposes, that the student has unofficially withdrawn, unless UTRGV can document that the student completed the semester. Federal regulations require the school to determine if the student earned the failing grades or if the student dropped out of school. If UTRGV is unable to determine that the student completed the semester, then it must assume that the student withdrew unofficially and must apply the Return of Title IV Funds Policy. The consequence of applying the Return of Title IV Funds Policy is that some financial aid funds may have to be returned to the federal aid accounts, causing the student to owe a balance to the school or to the federal government. The balance must be paid within 45 days or the student's account will be reported to the U.S. Department of Education for collections. The student will be notified of the responsibility to repay unearned funds to the appropriate program and/or to UTRGV.

## Academic Common Market

At the graduate level, Texas participates in the Academic Common Market of the Southern Regional Education Board that enables students to take advantage of graduate programs not offered in the student's home state. Nonresident students participating in programs that are offered through the Academic Common Market may be eligible to pay tuition at resident rates. Contact the Office of the Registrar for eligible programs and nonresident status.

For more information on residency classification for tuition purposes, see p. 38.

## FINANCIAL ASSISTANCE

## General Information

Financial aid plays a vital role at The University of Texas Rio Grande Valley where a large percentage of students receive some type of financial assistance.

Tuition and fees at UTRGV are significantly lower than private colleges and equal to, or lower than, most public colleges. This, together with the availability of financial aid funds, makes UTRGV an outstanding educational value.

There are several sources of graduate student aid, including federal, state, institutional and private funds. Financial assistance comes in the form of grants, scholarships, student loans, and work-study.

For more information about the various types of financial assistance, you may visit us at:

| Financial Aid |  |  |
| :---: | :---: | :---: |
| One West University Blvd. The Tower, Main, Rm. 1.101 Brownsville, TX 78520 | 1201 West University Dr. <br> Student Services Bldg., $1^{\text {st }}$ Floor <br> Edinburg, TX 78539 | utrgv.edu/finaid Phone: 1-888-882-4026 <br> Hours: <br> Mon.-Thurs., 8:00 am-6:00 pm Fri., 8:00 am - 5:00 pm |

To find out if the federal student financial aid application has been processed, or to see the information on the application, a student should call 1-800-433-3243 or visit the website at www.fafsa.gov.

## Application Process

The University of Texas Rio Grande Valley is an equal opportunity institution in the administration of its financial aid programs. In keeping with this policy, financial aid is extended to students without regard to race, creed, sex, national origin, veteran status, religion, age or disability. In order to qualify for federal financial assistance, an applicant must meet the following criteria:

1. Be a U.S. citizen or eligible non-citizen or be eligible to be classified as a Texas resident under Senate Bill Law 1528.
2. Be registered with Selective Service (Students subject to selective service registration will be required to file a statement that the student has registered or is exempt from selective service registration in order to be eligible to apply for federal financial aid.)
3. Have a high school diploma or its equivalent.
4. Have signed a statement of educational purpose certifying that any federal or state aid received will be used for educational purposes.
5. Be enrolled as a regular student working toward a degree in an eligible degree program.
6. Have not defaulted on any federal, state or institutional loan, and not owe a refund to any federal or state grant program.
7. Demonstrate financial need, except when applying for funds from a program that does not require financial need.
8. Be in satisfactory academic standing and making Satisfactory Academic Progress (as defined by the Satisfactory Academic Progress Policy described below) at the university.
9. Have completed a financial aid application and all required documentation is on file by the appropriate deadline.

## How to Apply for Financial Aid

File your FAFSA over the Internet at www.fafsa.gov; you will need to obtain an FSA ID (a username and password) to be able to access and sign your FAFSA.

You may visit us either at our Edinburg or Brownsville locations for one-on-one electronic FAFSA submittal assistance. All required documents must be submitted before any aid can be awarded. Some applications are selected for verification of information submitted on the application.

If you are classified as a Texas Resident under Senate Bill 1528 law, you must complete a TASFA application. The TASFA application can be obtained under the Financial Aid forms section at www.utrgv.edu/finaid.

## Additional Information on the Federal Verification Procedure

As stated above, some FAFSA applicants are selected for verification. Verification is the process in which the school's financial aid office requests documentation from students based on the information provided on the FAFSA application submitted to Department of Education. If an applicant has been selected for verification, we will notify them by mail and/or email and via their assist account. In most cases the documents used to verify information are the prior year's federal tax return transcript and a Verification Worksheet; additional documents may be requested depending upon the information to be verified. Applicants are asked to submit the requested information to the Financial Aid Office within two weeks. Dependent students must submit parental information as requested in addition to their own information. The financial aid application is considered incomplete until verification is completed; that is, no aid offer will be made until verification is complete.

If corrections must be made as a result of verification, corrections to the ISIR will be submitted to the federal processor. If an aid offer must be adjusted because of information submitted as part of the verification process, the applicant will be notified via email through a revised Financial Aid Notification.

The UTRGV School Code for the FAFSA is 003599.

## Application Deadlines

To ensure processing before registration, the recommended priority dates for submission of the FAFSA are as follows:

- Fall awards:
- Spring awards:
- Summer awards:

March 15
Sept. 15
Feb. 15

Final deadline to apply for financial aid is June 30 of the end of the award year. In order to award aid for an application submitted after the end of the spring semester, the student must be currently enrolled in a summer term. Aid is awarded on a funds-available basis, and priority is given to students that file by the March 15 priority deadline.

Students that did not apply for financial aid or submit required documents by the recommended priority dates may not have their aid awarded at the time payment is due. Arrangements will then need to be made by the student for an alternative method of payment.

## Benefits of Applying Early

- You increase your chance of receiving some of the state and/or local aid, which is in limited in funding.
- You get an award letter prior to the payment of tuition and fees.
- If your file needs corrections, these can be completed before the payment date of tuition and fees.


## The Disbursement Process

Students receiving financial aid can expect to receive their aid in any of the following methods:

1. When the student accepts his/her award, the award will be credited to the student's account to pay for educational expenses 10 days before the first day of classes
2. Stafford Loan funds will be credited to the student's account 10 days prior to the first class day for students who have successfully completed the required counseling session and master promissory note. If a student is a first-time freshman borrower, the funds will not be received until 30 calendar days after the first class day.
3. Financial aid cash disbursements: Any credit remaining in the student's account after all tuition/fees and all educational expenses have been paid will be disbursed during the week prior to the first class day. Direct deposit can be set up via the student's ASSIST account so that any disbursements are deposited into the student's bank account. If direct deposit has not been set up, any disbursements will be mailed to your mailing/billing address on the system. Changes of address can be made via ASSIST account.

NOTE: Changes in class schedule or enrollment status may cause an adjustment or cancellation of your awards, which will require you to pay a balance or return funds.

## Satisfactory Academic Progress

## Introduction

Federal Title IV financial aid regulations require students receiving federal student financial aid to maintain Satisfactory Academic Progress (SAP) at the university in order to remain eligible for this aid. Satisfactory Academic Progress standards are also required for some state and institutional financial aid programs. The Financial Aid Office evaluates SAP at the end of each semester, once grades are posted. There are three components of SAP: a qualitative standard (i.e., GPA), pace of progression (number of credits attempted and earned), and a maximum time frame to complete the degree or program. All semesters of enrollment including summer must be considered in the determination of SAP. SAP standards, including grade point average, pace, and maximum time frame, begin anew for students seeking a graduate or professional degree after completing an undergraduate degree.

## Qualitative or Grade Point Average (GPA)

The student must maintain at least a 2.0 institutional grade point average (GPA), which is consistent with the University's academic requirements. All UTRGV courses with a grade of A, B, C, D, F, RA, RB, RC, RD, and RF are counted in the calculation of GPA. Satisfactory Academic Progress cannot be determined until all grades of I or IP (incomplete) are resolved. Transfer grades that are accepted by the university are not counted in the determination of GPA because they are not part of the Institutional GPA.

However, the credits from all attempts accepted by UTRGV are counted in the calculation of pace and the maximum time frame requirement. If a student repeats a course, only the most recent grade is counted in the calculation of GPA. Remedial courses are included in the calculation of GPA. Audited courses do not count toward the GPA, pace, or maximum time frame requirements. Credit is not granted for audited courses.

## PACE (Progression Requirements)

The student must be progressing toward graduation requirements by completing the courses for which they enroll each semester. Courses or classes are measured in credit hours. Students must complete at least 75 percent of all credits attempted. For example, a sophomore who has attempted 60 credit hours and has satisfactorily completed 48 of those credit hours would have completed 80 percent of attempted credits.

Credits attempted are all course credit hours for which the student is enrolled as of the semester census date, which is the 12th day of class in a semester for regular fall and spring and 4th class day for regular summer sessions (for terms shorter in length please check for census date), whether they have received a grade yet or not. Once grades are assigned, attempted credits include grades of A, B, C, D, F, P, NP, S, U, CR, NC, IP, I, DR, or W. Grades of DROPPED are counted as hours attempted if the student is enrolled in the class and charged for it as of the semester census date. Credits satisfactorily completed are classes for which the student receives a grade of A, B, C, D, P, S, CR or P. Remedial courses are not included in the calculation of pace.

## Maximum Time Frame Requirements

The student must complete undergraduate degree requirements in a maximum time period according to federal regulation. Maximum time frame will be measured by the number of credit hours attempted. Students are allowed a maximum of 180 attempted credit hours in order to complete bachelor's degree requirements. Students attempting a second bachelor's degree are allowed 90 attempted credit hours. Attempted credit hours, for purposes of calculating maximum time frame, include all courses with grades of A, B, C, D, F, P, NP, S, U, CR, NC, DR, W or I and IP courses for which grades have not yet been assigned. Transfer credits, AP credits, or CLEP credits accepted for the student's academic program or degree are also counted when measuring the maximum time frame to complete the degree or program. Remedial courses are not included in the calculation of maximum time frame requirement.

## Warning Period

Students who fail to meet the minimum requirements, other than maximum time frame, will be allowed one warning semester to restore satisfactory standing. Financial aid will be processed for one semester only. Financial aid will be processed for one semester only. At the end of the warning semester, the student must have regained satisfactory SAP status in order to continue receiving financial aid. Students having reached the maximum time frame to complete a program cannot receive a warning semester.

## Financial Aid Suspension

Students who fail to earn the minimum requirements during the warning semester will be considered as not making SAP and all financial assistance will be terminated or suspended until the student regains minimum satisfactory academic progress standards. Students may re-establish eligibility for upcoming periods by achieving the satisfactory progress standards. After a student has re-established eligibility,
he/she may be considered for aid for upcoming periods but not for periods during which the standard had not been met.

## Appeals

A student who is denied aid because of a failure to meet satisfactory progress standards after the warning semester may appeal this determination to the Satisfactory Academic Progress Appeals Committee of the Financial Aid Office by completing a Financial Aid Appeal Form by published deadlines. An appeal must be based on significant mitigating circumstances, circumstances that seriously affected academic performance. Examples of possible mitigating circumstances are serious illness, severe injury, death of a family member, and other similar situations. The appeal must include an explanation of why the student failed to meet SAP standards, and what has changed that will now allow the student to regain satisfactory SAP status. Appeals can only be approved if it appears that the student can regain satisfactory SAP status after the end of the following semester of enrollment, or if the student can regain satisfactory SAP status by following an academic plan that will lead to timely completion of the degree program.

An appeal that is denied because the student is not able to regain satisfactory SAP status before reaching maximum time frame is not appealable. The Appeals Committee of the Financial Aid Office will review the appeal within 10 business days of receiving a completed appeal form and required documentation. Decisions are made after a careful evaluation of the student's unique circumstances, Federal Title IV regulations, and UTRGV guidelines. The student will be notified of the committee's decision via mail. During this time, the student is responsible for any tuition and fees (including late fees) that are charged to their account.

The appeals committee is composed of professional staff from the financial aid office that function in a student advisory or administrative capacity and are knowledgeable of federal, state, and institutional financial aid regulations and policies may include staff from other departments when deemed that their expertise may be necessary for a decision. Appeal decisions are final.

## Attendance Verification

UTRGV requires faculty to report students who did not attend any class meetings between the beginning of a semester and census day (official 12th class day). For online classes, attendance is defined as logging into the course website. Regulations state that a student must begin attending all classes for which he/she enrolls in order to establish financial aid eligibility (i.e. loans \& grants). A student who is reported as non-attending will have his/her financial aid reduced and the cost of attendance budget adjusted.

## Distance Learning

For students enrolling in Distance Learning who list UTRGV as their Home institution, financial aid funds will be disbursed to after the census date. Students are responsible for contacting their Host Institutions to make payment arrangements.

## Study Abroad Program

Enrollment in a program of study abroad approved for credit by UTRGV may be considered enrollment at UTRGV for the purpose of applying for federal student aid.

Students who apply for financial assistance for study abroad should apply in the same manner as if they were planning on being in residence at UTRGV. A study abroad student must file a FAFSA and must be participating in a program that is pre-approved to be a financial aid eligible program. This is determined by the agreements that are set up by the Office of International Programs and Partnerships for each specific program. Students should verify with both the Office of International Programs and Partnerships and the Financial Aid Office to determine if the program they are interested in is an eligible program for financial aid purposes.

To be considered for Title IV funds, the study abroad applicant is expected to meet all financial aid application priority deadlines, to adhere to other financial aid deadlines, to meet all the eligibility requirements for Title IV awards and be making Satisfactory Academic Progress and be enrolled half time (six hours) in the study abroad program.

The study abroad applicant should also note that if awarded an institutional or outside scholarship, these awards may result in a reduction or cancellation of financial aid.

NOTE: Financial aid funds will be disbursed the week before the first day of the program for the respective semester. As a result, students will need to contact their school to make payment arrangements with their respective study abroad programs.

## Federal Pell Grant

The study abroad applicant who is eligible for the Federal Pell Grant will have the award based on hours enrolled.

## Stafford Loans

Students who will be eligible for Federal Stafford loans, unsubsidized loans and/or Perkins loans should be aware that:

1. First-time borrowers will not receive loan proceeds until 30 days into the term.
2. Entrance loan counseling sessions will be required for all loan applicants and the required applications and promissory notes must be completed and approved.

NOTE: If a student is not automatically awarded a Stafford loan, he/she may submit an additional Financial Aid Request available online at www.utrgv.edu/finaid.

## Return of Title IV

Any time a student withdraws from the study abroad program, he or she will be responsible for repayment of federal financial aid funds, if applicable. Please refer to section on Return of Title IV in the catalog for additional information. The Office of International Programs and Partnerships can provide additional information on eligible study abroad.

## Types of Financial Assistance

## Grants

## Federal Pell Grant

This grant is available to qualifying students who complete a Free Application for Federal Student Aid (FAFSA), which is online at www.fafsa.gov. Pell eligible students may receive the Pell Grant for up to 12 full time semesters or its equivalent. Pell Grants are not available to students who have already received a bachelor's degree. The Pell grant eligibility for a student is determined based on the amounts set by U.S. Department of Education based on estimated family contribution.

## Federal Supplemental Educational Opportunity Grant (FSEOG)

The federal government established this program for students with high financial need. Graduate students or students who have already received a bachelor's degree are not eligible for FSEOG. The actual amount and qualification is determined after the FAFSA is submitted for processing. Awards from this program are based on the availability of funds.

## Texas Public Educational Grant (TPEG)

A Texas Public Educational Grant is a campus-based grant for undergraduate and graduate students with financial need. Unlike the Federal Pell Grant, there is no guarantee that a student is eligible to receive a TPEG. Awards from this program are based on the availability of funds.

## TEXAS Grant

The TEXAS (Towards EXcellence, Access and Success) Grant was created to provide a grant to enable well-prepared students to attend public and private nonprofit institutions of higher education in Texas. To qualify for TEXAS Grant, a student must:

- Be a Texas resident.
- Have not been convicted of a felony or crime involving a controlled substance.
- Complete the FAFSA and show financial need.
- Have an EFC less than or equal to 5080.
- Register for the Selective Service or are exempt from this requirement.
- Enroll in at least 3/4 time (nine hours or more) in an undergraduate program.

AND

- Be a graduate of an accredited high school in Texas not earlier than the 1998-99 school year.
- Complete the Recommended High School Program or Distinguished Achievement Program in high school. (See additional academic requirements below for students graduating from high school after May 1, 2013.)
- Enroll in a nonprofit public college or university in Texas within 16 months of graduation from a public or accredited private high school in Texas.
- Have accumulated no more than 30 credit hours, excluding those earned for dual or concurrent courses or awarded for credit by examination (AP, IB, or CLEP).

OR

- Have earned an associate's degree from a public technical, state or community college in Texas.
- Enroll in any public university in Texas no more than 12 months after receiving their associate's degree.

Initial eligibility for a person graduating from high school after May 1, 2013 must include meeting the following academic requirements:

Be a graduate of a public or accredited private high school in this state who completed the Recommended High School program or its equivalent and have accomplished any two or more of the following:

- Graduation under the Advanced High School Program, successful completion of the course requirements of the International Baccalaureate Diploma Program, or earning of the equivalent of at least 12 credit hours of college credit in high school;
- Satisfaction of the Texas Success Initiative (TSI) college readiness benchmarks or be TSI exempt;
- Graduation in the top one-third of the person's high school graduating class, or graduation from high school with a grade point average of at least 3.0 on a four-point scale or the equivalent; or
- Completion for high school credit of at least one advanced mathematics course following the successful completion of an Algebra II course
- If sufficient money is available, meet the academic eligibility criteria for students that graduated from high school before May 1, 2013.

Students entering the program from high school who continue in college and who meet program academic standards can receive awards for up to 150 credit hours, until they receive a bachelor's degree, or for five years if enrolled in a four-year degree plan or six years if enrolled in a five-year degree plan, whichever comes first.

Students entering the program based on acquisition of an associate's degree who continue in college and who meet program academic standards can receive awards for up to 90 credit hours, until they receive a bachelor's degree, or for three years if enrolled in a four-year degree plan or four years if enrolled in a five-year degree plan, whichever comes first.

Students must ensure that an official high school transcript is on record with the Office of Admissions before they can receive an award.

Receipt of a TEXAS Grant is not guaranteed and is dependent on yearly allocations from the state.

## Student Loans

Students who are eligible for Federal Direct Stafford Loans, and/or Perkins Loans should be aware that a completed entrance loan counseling session and master promissory note are required for all loan applicants. Freshmen students that were not offered a student loan, are required to meet for Freshman Loan Counseling. The Financial Aid Calendar with available dates is available at www.utrgv.edu/finaid under the Request Additional Aid section.

NOTE: A student already awarded a student loan that needs additional funds may submit the request for additional aid available online at www.utrgv.edu/finaid.

## The William D. Ford Federal Direct Loan (Stafford Direct Loans) Program

The Direct Loan Program is one of the federal student aid pro-grams offered by the Department of Education, which provides students with a simple, inexpensive way to borrow money to pay for education after high school. The Direct Loan program offers unsubsidized Stafford Loans for students pursuing graduate degrees. The first step in the application process is the completion of the FAFSA. After the student's FAFSA is processed, the Financial Aid Office will review the results and advise the student as to his or her loan eligibility. Before receiving any loan disbursements through the Direct Loan program, every student borrower will have to complete an entrance counseling session and an electronic master promissory note and must be enrolled for at least half-time (6 hours). Once these requirements are complete, the Financial Aid Office will receive electronic confirmation that the information has been completed and funds will be credited to the student's University account 10 days before the first day of class. When loans are awarded for one semester only the first half is credited first and the second half is credited approximately mid-semester.

## Federal Perkins Loan

UTRGV recognizes that loans are an increasingly important aspect of financing an education. Participating in the Federal Perkins Loan program allows funds to be made available with which a student may finance a substantial part of his or her education. When the borrower ceases to be enrolled at an accredited higher education institution at least half time or graduates, he/she has nine months after graduation or a break in enrollment before he/she begins repayment on their Federal Perkins Loan. Applicants are considered on the basis of financial need and demonstrated academic ability. Funds are limited and preference is given to renewal borrowers. Further information may be obtained from the Financial Aid Office.

## Texas B-On-Time Loan Program

The purpose of the Texas B-On-Time Loan Program is to provide eligible Texas students no-interest loans to attend colleges and universities in Texas. If the student meets specified goals, the entire loan amount can be forgiven upon graduation.

Eligibility Requirements:

- Be a Texas resident.
- Have graduated in the 2002-2003 academic year or later under the recommended high school program from public or accredited private high school in Texas or received an associate's degree from an eligible institution no earlier than May 1, 2005.
- Has not earned a bachelor's degree.
- Enrolled full-time in an undergraduate degree or certificate program at an eligible institution.
- Has completed a FAFSA and is eligible to receive federal financial aid.

Forgiveness Requirements: A Texas B-On-Time Loan shall be forgiven if the student receives an undergraduate degree or certificate from an eligible institution and the student either:

- Graduated with a cumulative GPA of at least a 3.0 on a 4.0 scale, within:
o Four calendar years after the date the student initially enrolled in an eligible institution,
o Five calendar years after the date the student initially enrolled in an eligible institution, if the degree is in architecture, engineering, or any other program determined by the board to require more than four years to complete,
o Two calendar years after the date the student initially enrolled in a public or private twoyear institution; or
- Graduated with a cumulative GPA of at least 3.0 on a 4.0 scale, with a total number of credit hours (including transfer hours and hours earned exclusively by examination) that is no more than six hours beyond what is required to complete the degree or certificate.

IRS regulations indicate that these loans must be reported as taxable income when they are forgiven. NOTE: Funds are limited and students will be selected based on priority guidelines determined by the Texas Higher Education Coordinating Board.

* Beginning 2015-2016 year, this program is only available to students that have received it before.


## Federal Work-Study Program (FWS)

The Federal Work-Study Program provides jobs for undergraduate and graduate students with financial need. This program allows the student to earn money to help pay educational expenses and also encourages community service work and work related to the student's course of study.

The FWS salary will be at least the current federal minimum wage. Students employed by UTRGV through the Federal Work-Study Program will be paid directly and once a month.

Work-study employment may be on campus or off campus. If off campus, the employer is usually a private nonprofit organization or public agency, and the work performed must be in the public interest. The amount a student receives in wages under work study cannot exceed the total FSW amount awarded.

The employer must consider the student's class schedule when preparing the work schedule. Funds are limited; therefore, funds are awarded at the discretion of the Financial Aid Office.

More information about work-study programs can be found at www.utrgv.edu/finaid.

## State Exemptions and Waivers

The Texas Education Coordinating Board administers various tuition assistance programs including programs for teachers and vocational nursing students. Further information about these programs may be obtained by visiting the Financial Aid website at www.utrgv.edu/finaid or visiting the Texas Higher Education Coordinating Board website at www.collegeforalltexans.com.

After initially qualifying for a mandatory or discretionary exemption or waiver from the payment of all or part of the tuition or other fees for enrollment during a semester, a student may continue to receive the exemption or waiver if the student maintains a GPA for making satisfactory academic progress, and if an undergraduate student, does not complete an excessive number of credit hours.

## Adopted Students Formerly in Foster or Other Residential Care

This program provides exemption of tuition and required fees for individuals who were adopted and were subject of an adoption assistance agreement under Subchapter D, Chapter 162, Family Code, that provided monthly payments and medical assistance benefits and was not limited to providing only for the reimbursement of nonrecurring expenses.

## Exemption for Students under Conservatorship of the Dept. of Family and Protective Services

 This program provides exemption of tuition and required fees for persons who were in foster care or other residential care under the conservatorship of the Department of Protective and Regulatory Services on or after the day preceding their 18th birthday, the day of the student's 14th birthday if the student was eligible for adoption on or after that day, or the day the student received a high school diploma or equivalent. In order to take advantage of this exemption the student must enroll as an undergraduate no later than the third anniversary of date of discharge from that care or the 25th birthday.
## Children of Disabled or Deceased Firefighters and Law Enforcement Officers

Exemption is for children under 21 years of age (or 22 if the student was eligible to participate in special education under Texas Education Code, Section 29.003) of disabled full-paid or volunteer firefighters, full-paid municipal, county, state peace officers, custodians of the Department of Criminal Justice, or game wardens. Disability/death must have occurred in the line of duty. Students are exempted from tuition and required fees, not to exceed 120 undergraduate credit hours or any semester begun after age 26 , whichever comes first.

## Exemption for Highest Ranking High School Graduate (Valedictorian Tuition Exemption)

 Valedictorians of each accredited Texas high school are exempted from tuition during the first two regular semesters immediately following their high school graduation. In order to qualify for this exemption, the student must submit a copy of his/her certificate to Financial Aid Office confirming the student was the highest-ranking student of his/her high school.
## Senior Citizen Exemption

Senior citizens may be exempt from payment of tuition for up to six credit hours per term on a spaceavailable basis. A senior citizen is defined as a student of age 65 or older.

## Exemption for Texas Veterans (Hazlewood Act)

The purpose of the Hazlewood Act (Section 54.203) is to encourage U.S. veterans to pursue higher education. To qualify for the Hazlewood Act the applicant must be a veteran who at the time of entry into the U.S armed forces:

- Be a Texas resident.
- Designated Texas as home of record.
- Entered the service in Texas.
- Have served at least 181 days of active military duty, as indicated as "net active service" (the sum of 12(c) and 12(d) on the DD 214).
- Have received an honorable discharge or separation or a general discharge under honorable conditions.
- Have no federal veterans education benefits or have federal veterans education benefits dedicated to the payment of tuition and fees only (such as Chapter 33 or 31; Pell and SEOG are not relevant) for term or semester enrolled that do not exceed the value of Hazlewood benefits.
- Are not in default on a student loan made or guaranteed by the state of Texas.
- Enroll in classes for which the college receives tax support (i.e., a course that does not depend solely on student tuition and fees to cover its costs), unless the college's governing board has ruled to let veterans receive the benefit while taking non-funded courses.

Students are entitled, not to exceed 150 credit hours, to an exemption from payment of all dues, fees, and charges (excluding only student property deposits, student service fees, books, lodging, board or clothing) that would otherwise be paid to attend UTRGV.

Hazlewood-Legacy Program (Transfer of Hazlewood Benefits)
Eligible veterans may assign unused hours of exemption eligibility to a child under certain conditions to be eligible, the child must:

- Be a Texas resident.
- Be the biological child, stepchild, adopted child, or claimed as a dependent in the current or previous tax year.
- Be 25 years or younger on the first day of the semester or term for which the exemption is claimed (unless granted an extension due to a qualifying illness or debilitating condition).
- Make satisfactory academic progress in a degree, certificate or continuing education program** as determined by the institution.

If the child to whom hours have been delegated fails to use all of the assigned hours, a veteran may assign the unused hours that are available to another dependent child.

Veteran's spouses are not eligible to receive a transfer of unused hours.
Students are entitled, not to exceed 150 credit hours, to an exemption of payment of tuition, fees (excluding student property deposit fees, student services fees, and any charges for lodging, board, or clothing) and other required charges, that would otherwise be paid to attend The University of Texas Rio Grande Valley.

## Hazlewood Exemption for Eligible Dependents (Children and Spouses)

This program is for the children or the spouse of members of the U.S. armed forces who were killed in action, who die or died while in service, who are missing in action, whose death is documented to be directly caused by illness or injury connected with service in the U.S. armed forces, or who become totally disabled for purpose of employability according to the Dept. of Veterans Affairs disability rating as a result of a service-related injury. Children or spouses of a veteran who at the time of entry into the U.S. armed forces.

- Be a Texas resident.
- Designated Texas as home of record.
- Entered the service in Texas.
- Have a parent or is the spouse of a veteran of the U.S. armed forces, Texas National Guard, or Texas Air National Guard who died as a result of service-related injuries or illness, is missing in action, or became totally disabled for purposes of employability as a result of service-related injury or illness.
- Have no federal veterans education benefits or have federal veterans education benefits dedicated to the payment of tuition and fees only (such as Chapter 33 or 31; Pell and SEOG Grants are not relevant) for the term or semester enrolled that do not exceed the value of Hazlewood benefits.
- Are residents of Texas as of the term or semester in which they enrolled.
- Provide proof from Dept. of Defense or from the VA regarding veteran parent's death or disability related to service.

Children and spouses are entitled, not to exceed 150 credit hours, to an exemption from payment of all dues, fees, and charges (excluding only student property deposits, student service fees, books, lodging, board or clothing) that would otherwise be paid to attend The University of Texas Rio Grande Valley.

## Tuition and Fee Exemption for Members of State Military Forces

Texas Education Code, Section 54.2155, provides an exemption for individuals certified by the adjunct general of the state military forces as having been awarded assistance for tuition and fees under Texas Government Code Section 431.090. Eligible students are exempt from tuition, not to exceed 12 credit hours charged at the Texas resident rate, and mandatory fees for any semester in which the tuition exemption is received.

## Children of U.S. Military who are Missing in Action or Prisoner of War (MIA/POWs)

To provide an education benefit to the children of persons listed as Missing in Action or Prisoners of War by the U.S. Department of Defense.

- Are Texas residents.
- Are 21 or younger or 25 or younger and receiving most of his/her support from a parent.
- Have documentation from the Department of Defense that a parent, who is classified as a Texas resident, is missing in action or a prisoner of war.
- Enroll in classes for which the college receives tax support (i.e., a course that does not depend solely on student tuition and fees to cover its costs).
- Exemption covers tuition, service fees, lab fees, building use fees, and all other fees except room, board or clothing fees, or deposits in the nature of security for the return or proper care of property. No funds may be used to pay tuition for continuing education classes for which the college receives no state tax support.

Exemption for the Surviving Spouse and Minor Children of Certain Deceased Public Servants (Employees)
This program is available for the surviving spouse or children of certain public peace officers, probation officers, parole officers, jailers, police reservists, fire fighters and emergency medical personnel (Texas Code 615.003). Death must have occurred in the line of duty as a result of a risk inherent in the duty. The student must enroll full-time and is exempted from tuition and fees, student housing and food costs not to exceed bachelor's degree or 200 hours.

## Exemption for Blind and Deaf Students

A blind disabled person or a person whose sense of hearing is nonfunctional and is a Texas resident may be eligible for exemption from payment of tuition and required fees if appropriately certified by a state vocational rehabilitation agency. Contact the Texas Department of Assistive and Rehabilitative Services for more information.

## Exemption Program for Children of Professional Nursing Program Faculty and Staff

 To provide an exemption of tuition to eligible students to encourage their parents to continue employment as professional nurse faculty or staff members in the state of Texas. Student must:- Be 25 years or younger.
- Be a Texas resident.
- Have not previously received a baccalaureate degree.
- Be enrolled at an institution that offers an undergraduate or graduate program of professional nursing.
- Be the child of an individual who:

0 At the beginning of the semester or other academic term for which an exemption is sought: (1) holds a master's or doctoral degree in nursing, and is employed full-time by an undergraduate or graduate professional nursing program offered by the institution that the child is attending and is employed as a member of the faculty or staff with duties that include teaching, performing research, serving as an administrator, or performing other professional services other than serving as a teaching assistant, or (2) holds a baccalaureate degree in nursing and is employed by a professional nursing program offered by the institution as a full-time teaching assistant, or
0 During all or part of the semester or other academic term for which an exemption is sought: (1) holds a master's or doctoral degree in nursing, and has contracted with an undergraduate or graduate professional nursing program in this state to serve as a fulltime member of its faculty or staff with duties that include teaching, performing research, serving as an administrator, or performing other professional services other than serving as a teaching assistant, or (2) holds a baccalaureate degree in nursing and has contracted with a professional nursing program offered by the institution to serve as a full-time teaching assistant.

- Register for the Selective Service or be exempt from this requirement.
- Have not previously received an exemption under this section for 10 semesters or summer sessions.

Students are exempted from tuition, which may be prorated if parent is not full-time.
Consideration for fee waivers will be determined prior to the 12th class day during a fall or spring semester or prior to the fourth class day during a summer term.

For additional information on any of these programs please go to:

| Financial Aid |  |  |
| :--- | :--- | ---: |
| One West University Blvd. | 1201 West University Dr. | utrgv.edu/finaid |
| The Tower, Main, Rm. 1.101 | Student Services Bldg., 1 ${ }^{\text {st }}$ Floor | Phone: 1-888-882-4026 |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |

Hours:

Fri., 8:00 am - 5:00 pm
Also visit the Texas Higher Education Coordinating Board website at www.collegeforalltexans.com.

## Scholarships

The University of Texas Rio Grande Valley a variety of scholarships through the University Scholarship Committee and departmental committees. These scholarships are based on various prerequisites and are intended to recognize students for their outstanding academic accomplishments and future potential. These awards are made possible through the generosity of local as well as national business firms, organizations, individuals and University endowed funds.

The majority of the scholarships are not automatically renewed. Students must apply each year for continued consideration. Although most awards are restricted to U.S. citizens and permanent residents of the United States, some are open to international students, who are encouraged to apply.

For a complete list of scholarships, visit www.utrgv.edu/finaid to view the available scholarships. To be considered for scholarships at UTRGV, students must complete the UTRGV Scholarship application online at www.utrgv.edu/applyscholarships. The scholarship process is very competitive, students are encouraged to apply early and make sure their applications are submitted and complete. Important: It is UTRGV's policy not to award institutional scholarships to students who have received aid (including institutional, state, federal and private sources) in excess of their cost of attendance. If your cost of attendance is exceeded, any UTRGV scholarship(s) may be reduced or cancelled.

## UTRGV Scholars Program

If you are an entering freshman who has earned college credit through Advanced Placement (AP) examinations and/or the Concurrent Enrollment (CE) program or are an International Baccalaureate Diploma recipient, and/or have very high ACT scores, and/or is ranked as top $10 \%$ of your graduating class you may be considered for a four-year renewable scholarship.

You may qualify to receive the UTRGV Scholars award valued at $\$ 20,000$.

## HOW TO APPLY

There is no formal application for the UTRGV Scholars Scholarship. The UTRGV Scholars Scholarship is awarded based on a holistic review and competitive basis. There are limited slots available; therefore, you are highly encouraged to do the following as early as possible to ensure you are considered for the scholarship:

- Fill out the UTRGV Admission Application at applytexas.org.
- Submit your ACT or SAT scores.
- Submit an official high school transcript to the UTRGV Office of Student Enrollment, which must include ACT or SAT scores, GPA (on a 100-point scale), and rank and class size (at time of application).
- Request your AP scores (if applicable) be sent directly to UTRGV as well as any college transcripts reflecting concurrent enrollment hours earned.
- You must be admitted to UTRGV by the priority admissions deadline of February 1st.


## Fifth-Year Accounting Student Scholarship Program

The Fifth-Year Accounting Student Scholarship Program was established to recognize and support outstanding scholars who plan to pursue careers in accounting and serve as Certified Public Accountants in the state of Texas.

The program can provide up to $\$ 10,000$ (lifetime maximum) to eligible students to assist with the cost of completing the educational requirements to sit for the CPA exam in Texas. In order to apply, students must:

- Be classified as residents of Texas.
- Be enrolled at least half time.
- Have completed at least 120 hours of college coursework (including at least 15 credit hours of accounting) at the beginning of the term in which the award is being made.
- Be making Satisfactory Academic Progress.
- Have not already taken the CPA exam, but plan to take the CPA examination in the state of Texas and are willing to sign a written statement confirming the intent to take the written examination conducted by the Texas State Board of Public Accounting for the purpose of being granted a certificate of Certified Public Accountant.
- Register for the Selective Service or be exempt from this requirement.
- Demonstrate financial need.
- Applications are available in mid-June at Financial Aid Office. Funding is limited; therefore, only complete applications will be considered.


## Outside Scholarships

Many agencies, employers, military and service organizations award funds to students. Receipt of these external awards may result in a reduction of your financial aid from UTRGV. Therefore, if you are a financial aid recipient, you must notify the Financial Aid Office of any scholarships you are awarded from sources other than UTRGV. To the extent possible, we will adjust loan awards before reducing grants.

It is also the student's responsibility to notify the Financial Aid Office of any special instructions or billing information regarding external scholarships. All checks for these awards should be made payable to The University of Texas Rio Grande Valley and sent to either of our locations:

| Financial Aid |  |  |
| :---: | :---: | :---: |
| One West University Blvd. <br> The Tower, Main, Rm. 1.101 Brownsville, TX 78520 | 1201 West University Dr. <br> Student Services Bldg., $1^{\text {st }}$ Floor <br> Edinburg, TX 78539 | utrgv.edu/finaid Phone: 1-888-882-4026 <br> Hours: <br> Mon.-Thurs., 8:00 am-6:00 pm Fri., 8:00 am - 5:00 pm |

No credit will be entered on your account before the check arrives. It is URGV's policy to equally divide external scholarships between fall and spring.

## Mexican Nationals

Citizens of Mexico may apply for a Nonresident Tuition Waiver. To be eligible, a student must have or obtain an F-1 student status, enroll full time and must apply before the required deadline dates. Students who have filed for permanent residency are not eligible. For information about this program, contact the Office of International Admissions and Student Services.

## Good Neighbor Scholarship

A limited number of Good Neighbor Scholarships (as prescribed by the Texas Higher Education Coordinating Board), which provide exemption of tuition, are available to native-born citizens and residents from nations of the Western Hemisphere other than the United States. Information is available from the Office of International Admissions and Student Services.

## Other payment options

## Short-Term Loans

Made possible through donations from a number of individuals and organizations, these funds are administered by the Financial Aid Office and are available to students for short-term loans. Loans are limited in funding and must be repaid within the semester for which they are borrowed. The loans are
designed to aid students who do not have sufficient funds to purchase books and supplies or to assist students when emergencies arise. A $\$ 5$ processing fee is assessed to each loan and funding is limited. Students interested in applying for short-term loans are advised to apply in person at the Financial Aid Office at the beginning of each semester.

## Emergency Tuition and Fee Loans

Emergency loans are available to UTRGV students needing assistance in paying registration costs. Emergency loans must be paid back to the university during the same semester in which they are borrowed. An applicant will be assessed a $1 \%$ processing fee per semester. Students may borrow up to the amount of tuition and applicable fees. For more information please contact the Emergency Loan Office.

## ENROLLMENT

## General Information

## Classification

Undergraduate students are classified according to the number of hours of college credit they have earned:

- Freshmen 0-29 earned hours
- Sophomores 30-59 earned hours
- Juniors 60-89 earned hours
- Seniors 90 or more earned hours

Post-baccalaureate students are those who hold a bachelor's degree or higher from an accredited institution and are not enrolled in a graduate program but are enrolled in undergraduate classes.

Degree-seeking graduate students are those who have earned a bachelor's degree and have been accepted to The University of Texas Rio Grande Valley for graduate study in Master's or Doctoral programs.

Non-degree seeking graduate students are those who have earned a bachelor's degree and are taking graduate courses for professional improvement.

## Course Information

Undergraduate classroom course information, including a list of courses to be offered each semester, syllabi (including textbook information) and faculty curriculum vita of each regular instructor, may be accessed through the ASSIST portal found at the my.utrgv.edu (Texas Education Code, Section 51.974). The information concerning the courses offered by each department (or college for interdisciplinary courses) will be found in the Course Descriptions section beginning on p. 692. The listing includes the following information:

- Student Learning Outcomes: Each degree program has identified learning outcomes that it expects its graduates to achieve by the end of the program. These student learning outcomes are reflected in the courses offered by the program.
- Course Number, Title and Contact Hours: If the course has defined weekly contact hours, these will be shown in brackets [ ] following the course title, with lecture hours first, laboratory hours second and clinical hours, if any, third. These contact hours are for the fall and spring semesters. Summer weekly contact hours will be adjusted according to the length of the summer session. (See p. 695 in the Glossary for more information and example.)
- Course Numbers: Courses are numbered to show both the collegiate level at which they are offered and the 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. For example, Spanish 1301 shows that the course is taught at the freshman level and carries three hours of credit per semester. All lower-division undergraduate courses ending in the numbers 87 and 88 are honors courses.
o 0000 courses are developmental level, lower division
o 1000 courses are freshman level, lower division
o 2000 courses are sophomore level, lower division
o 3000 courses are junior level, upper division
o 4000 courses are senior level, upper division
o 5000-7000 courses are master's level
o 8000-9000 courses are doctoral level


## Grading Policies

## Grading System

The University of Texas Rio Grande Valley uses a 4.0 system. The following grades are used to designate achievement in coursework. Their corresponding grade values and points for students in undergraduate programs are indicated below.

| A | Excellent | (4 grade points per hour) |
| :--- | :--- | :--- |
| B | Good | (3 grade points per hour) |
| C | Satisfactory | (2 grade points per hour) |
| D | Below Average | (1 grade point per hour) |
| F | Failure | (0 grade points per hour) |

The following grades may be used in undergraduate coursework, where allowed, and earn no grade points:

P (Passing), NP (No Pass), S (Satisfactory), U (Unsatisfactory), IP (In progress), I (Incomplete), CR (Credit), NC (No Credit), DR (Course dropped), W (Withdrawal), RA (Developmental-Pass), RB (DevelopmentalPass), RC (Developmental-Pass), RD (Developmental - No Pass), RF (Developmental-No Pass), RI (Developmental - Incomplete), RP (Developmental - Pass), RNP (Developmental - No Pass).

## Institutional Grade Point Average

The cumulative grade point average (GPA) at The University of Texas Rio Grande Valley is calculated on the basis of courses taken at the university and excludes transferred grades. Coursework transferred from the University of Texas at Brownsville/Texas Southmost College for students enrolled at UTRGV prior to Fall 2017 will be included in the calculation of the Institutional GPA.

## Calculation of Graduate Grade Point Average (GPA)

The grade point average (GPA) is computed by dividing the total grade points earned by the total credit hours attempted. The Cumulative Grade Point Average is calculated using institutional coursework attempted. The current semester grade point average is calculated using only coursework attempted within a specific semester. Attempted hours are the total number of hours for courses that a student has attempted including failing grades such as F, DR and W. Grade points are assigned based on the
grade received multiplied by the number of credit hours. For example, a grade of $A$ is equivalent to four grade points.

An illustration of the method of calculation of the GPA follows:

| Course No. | Grade | Hours |  | Points Attempted |  | Total Points |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ENGL 1301 | A | 3 hrs . | x | 4 pts. per hr. | = | 12 |
| MATH 1314 | B | 3 hrs . | X | 3 pt . per hr. | = | 9 |
| HIST 1301 | C | 3 hrs . | x | 2 pts. per hr. | = | 6 |
| BIOL 1406 | D | 4 hrs . | x | 1 pts. per hr. | = | 4 |
| KINE 1233 | F | 2 hrs . | x | 0 pts. per hr. | = | 0 |
| TOTAL |  | 15 hrs . |  |  |  | 31 |

TOTAL ATTEMPTED HOURS = 15
TOTAL GRADE POINTS = 31
To calculate the GPA for this example, divide the grade points by the attempted hours as follows:

- 31 divided by $15=2.06$


## Incomplete Grades

An incomplete (I) grade is a temporary grade given only during the last one-fourth of a term/semester and only if:

1. The student is passing the course to date;
2. The student will not have completed the required coursework within the allotted time of a regular semester or summer session; and
3. The instructor determines that the reason for the work being incomplete is 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 " 1 " was received (unless an extension is requested by the instructor) or the grade will automatically be recorded as the grade alternatively assigned by the faculty at the time of submitting the written agreement.

The Office of the Registrar must receive the complete Request for Grade of Incomplete Form with all required signatures by the published deadline for faculty to enter grades, or an NR grade will be entered.

## Credit by Examination

Students may receive credit by examination for some course requirements. For more information, see p. 87.

## Quality of Work

While a grade of $D$ is considered passing in a subject, the student must maintain an overall average of a C, which corresponds to a 2.0 GPA, if the student expects to graduate.

In addition, The University of Texas Rio Grande Valley has certain specific grade requirements. For example, the student must make a C in college algebra and required freshman English courses. The student must also have at least a C average in both the major and minor fields.

NOTE: Other specific requirements can be found in the program descriptions in other sections of the catalog, and overall requirements for a bachelor's degree are listed on p .82 of this catalog.

## Repeated Courses

UTRGV undergraduate students who retake a class that is not designated as "repeatable for credit," will have the last grade and hours attempted used to calculate the grade point average. Repeated courses will be indicated on the student's transcript with an "E" (excluded). The policy for repeating courses applies only to undergraduate courses completed and repeated at UTRGV. Transfer courses will not be used to replace a grade earned at UTRGV for the purpose of raising a student's grade point average.

## Grade Change

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

## Dean's List

After each fall and spring semester, a dean's list is published listing the names of all undergraduate students enrolled in a minimum of 12 college-level (non-developmental) hours who have a grade point average of 3.5 or better for courses taken that semester.

## President's List

After each fall and spring semester, a president's list is published listing the names of all undergraduate students enrolled in a minimum of 12 college-level (non-developmental) hours who have a grade point average of 4.0 for courses taken that semester.

## Grade Reports

Student grade reports are not mailed automatically for students. Students may view their grades online in ASSIST. Students requiring a paper copy of their grades may request a transcript to be mailed to their home address.

## REGISTRATION

## Procedures

## Registration

Students register for their courses online using ASSIST. Students will not be added to the official class rolls or grade sheets after the registration periods have ended. Per the Texas Higher Education Coordinating Board Rules and Regulations, students may not enroll in a course after the official census date (Ch. 9, Subchapter B, Sec.9.31a).

## Advanced Services for Student Information Supported by Technology (ASSIST) Registration on the Web

In order to provide students with easy access to student information, The University of Texas Rio Grande Valley developed Advanced Services for Student Information Supported by Technology (ASSIST). With ASSIST technology, students may access general academic and financial information from home or any place they have access to the web. Personal information is protected by the student's UTRGV username and password. Student receives these as a part of the admission process. For assistance, the student may contact the IT Help Desk located in the Academic Services Building, Rm. 1.102.

Registration on the Web (ASSIST Registration) is available to currently enrolled students and students who apply by the published admission deadline. Academic advisement is mandatory to be eligible for registration. Students with admission, disciplinary, or financial holds will not be permitted to register until the hold has been cleared.

Students may make changes to their schedule prior to the beginning of the semester, or during the add/drop period at the beginning of each term. Registration information is available online at www.utrgv.edu. Students who register during the add/drop period will be assessed a late registration fee.

Computers are available in the Student Services Centers on the UTRGV Edinburg and Brownsville Campuses for web registration.

## Registration Priority

Registration priority is given according to classification, and the university reserves the right to grant priority in registration to segments of the student population as deemed appropriate.

## Dropping/Withdrawing

If a student chooses not to attend a class or classes $s /$ he is responsible for officially dropping or withdrawing from the course(s). Students must drop their classes online in ASSIST by the posted deadline. Students wishing to withdraw from the university (drop all of their classes) must do so in person at the Student Services Centers on the UTRGV Edinburg or Brownsville Campuses. (See the sections on Dropping a Course and on Withdrawal from the University p. 70.) Students who decide not to attend and do not officially complete the drop or withdrawal process through the Office of the Registrar will be responsible for tuition, fees and any other consequences or circumstances resulting from failure to officially drop or withdraw. Students must not assume that they will "automatically" be dropped from their classes if they do not attend or do not pay. (If a student has requested some form of
financial assistance, payment may have been posted to his or her account.) Refer to the refund schedules published online for refund deadlines and details.

In accordance with Texas Education Code, 51.907, undergraduate students who first entered college in the Fall 2007 semester, or later, may not drop more than a total of six courses during their undergraduate career. Courses dropped at other Texas public higher education institutions will count toward the six-course drop limit. A student may appeal a drop, if $s / h e$ shows good cause. Contact the Office of the Registrar for details concerning the appeals process.

## Selection of Courses

During the freshman and sophomore years, the student should plan to satisfy not only the university core curriculum requirements for a bachelor's degree, but also any introductory or prerequisite courses in the major and minor field, as specified by the departments. Although each of the departments of the university list many of the specific courses required in the major and minor areas, usually some choice of courses is permitted at the lower level, the advanced level or at both levels. Choice is permitted when hours are specified as elective hours.

The student should follow the list of required courses found in his/her DegreeWorks degree plan. (See also Degree Requirements on pp. 82-87.)

Many courses listed in the catalog are not offered every semester. This is particularly the case with upper-level courses. In planning a program, the student should ascertain whether a particular course will be offered during the semester he or she plans to take it, and that prerequisites to the course will be achieved prior to enrollment for the course.

When students enter this University with the expectation of subsequently transferring to another institution, they should be certain to obtain a copy of the catalog of that other institution and use it as a guide to courses for which they will register at The University of Texas Rio Grande Valley. It is the student's responsibility to check the requirements.

Students who plan to graduate from The University of Texas Rio Grande Valley should consult DegreeWorks and the catalog sections concerning graduation and the specific requirements and suggestions listed under their respective colleges and departments to ensure that all required work is satisfied. The student's academic advisor, department chair, and dean can help clarify matters if the student has questions.

Prior to registering, students go through academic advisement concerning the best selection of courses. Students who have not met the Texas Success Initiative (TSI) requirement are advised at the Academic Advising Center.

As all undergraduate students are encouraged to schedule a visit with an advisor in the Academic Advising Center, some student populations are required to meet with an academic advisor for additional support. Students may consult the Academic Advising Center's website, www.utrgv.edu/advising, to determine if an advising session is required before course registration.

## Registration Policies

## Change of Major Policies

UTRGV students with 60+ hours will be required to receive approval from an academic advisor to ensure that students are well informed of the implications of changing their major; if change is requested after the census date, the change takes effect for the subsequent semester. The process for changing a major will be outlined on the Registrar's website.

## Core Complete Status

Once a UTRGV student has been certified as core complete, the student remains core complete even if $s /$ he subsequently changes degree plans. Students will have to meet all the requirements of the new degree plan which may include courses that are typically taken to satisfy core requirements.

General Education Core Courses toward Major and Minor Requirements General education courses may count toward both the general education core requirements and the major and minor requirements. Students may take electives to complete the 120 hour requirement for a bachelor's degree.

## Dropping a Course

A student is "dropping" a course or courses if he or she remains enrolled in a minimum of one credit hour after all course drops have been completed. Students who drop all classes for which they are enrolled are considered to have withdrawn from the university for that semester. (For more information on Withdrawal, see the section below on Withdrawal from the University.)

To drop a course or courses after the official census date (12th class day in a long semester; each term's census date is published in the university's academic calendar), a student must log in to ASSIST and request the drop by the deadline as listed in the university's academic calendar.

All course drops must be completed during the first $75 \%$ of the semester or term (refer to the University Calendar in this catalog or the Student Services Center website for deadline dates). Students dropping during this time will receive a grade of DR. After the deadline for drops and withdrawals, the student remains on the class roll and will receive the letter grade he/she earns.

## Withdrawal from the University

To withdraw from the university, a student must complete a formal withdrawal procedure through UCentral by the posted deadline for drops and withdrawals.

A student withdrawing during the first $75 \%$ of the semester or term (refer to the university calendar in this catalog or the Registration Bulletin for deadline dates) will receive a grade of W. After the deadline the student remains on the class roll and receives the letter grade $s / h e$ earns. Refer to the Student Services Center website for refund periods.

## Transfer Student

Transfer students with 30 or more hours but without the University College-approved courses, or courses deemed comparable by The University of Texas Rio Grande Valley, may take upper-division courses if otherwise qualified, but they too must complete all University core curriculum requirements before graduation. Transfer students who lack six hours of freshman English or the equivalent and three
hours of mathematics with a grade of at least C in each course should complete these requirements within their first two semesters at The University of Texas Rio Grande Valley. Students will be required to complete the Texas state-mandated coursework in U.S. history and political science if this has not already been completed at their prior institution.

## Auditing Classes

Students must obtain special permission from the instructor of record to audit or visit a class. Students who wish to audit graduate classes (5000-9000 level) must be eligible to enroll in the course for credit before they will be allowed to audit. Students auditing classes do not receive academic credit and do not have the course or courses listed on their academic record. One may enroll as an auditor at any time by:

1. Obtaining a "Class Audit" Form from the Student Services Center,
2. Having it approved by the instructor of the class to be audited,
3. Paying the required fee at the Office of Payments and Collections, and
4. Using the receipt as an admission card to the class.

Such approval may be granted only if space is available and the instructor permits the student to be a visitor. Instructors reserve the right to refuse any request to visit a course. Enrollment as an auditor does not permit the enrollee to take examinations, to have tests or other papers checked by the instructor, or to participate in the class discussion. Audited courses are not posted on the student's permanent record. Audit fees ( $\$ 50$ per course) are nonrefundable and may not be appealed. Individuals who are not regularly enrolled students at the university are also eligible to audit classes subject to the regulations stated above.

A person 65 years of age or older may enroll as an auditor without credit and without payment of an audit fee.

## Residency

Residency for tuition purposes is determined by regulations set forth by the state of Texas. Students are required to sign an oath of residency as part of the application process. Residency for tuition purposes will be based on this oath and other information submitted by the student. The requirements are outlined on p. 38 of the Fiscal Policies section of this catalog.

## Other Procedures

## Identification Cards

Every student enrolled at The University of Texas Rio Grande Valley must possess an official identification card, issued by the university. The ID card remains the property of the university. The card must be presented for:

- Any University or department-sponsored activity.
- Admission to all intercollegiate athletic events.
- Identification for cashing checks on campus.
- Authorization to resell books to the University Bookstore or Student Book Exchange.
- Checking out equipment from the Office for Student Involvement and the Student Union Recreation Room.
- Identification for receipt of transcripts at UCentral.
- Identification for receipt of awards from Student Financial Services.
- Use of the university food service meal plans.
- Use of recreation facilities.
- Use of the Health Services.
- Purchase of campus parking permit.
- Campus library privileges.
- Voting in campus elections and referendums.
- Identifying oneself to a University official when requested to do so.
- Use of computer equipment in computer labs.

This card is non-transferable. Beginning freshmen and first-time entering transfer students will receive their original ID cards at no charge. A service charge of $\$ 12$ will be required for cards generated during subsequent semesters and for replacement cards. Worn cards can be replaced for $\$ 5.00$. Loss or mutilation of cards must be reported to the V OneCard Office in the Academic Services Building, Rm. 1.101 or call 956-665-7276. Fees are subject to change.

Students may not have in their possession more than one student ID card at the same time.

## Name Change

A student or former student may change the full, legal name on his/her permanent academic record by completing a Change of Name Form and submitting the appropriate documentation as follows to the Student Services Center:

1. Misspelling: Student must present a copy of the birth certificate.
2. New Legal Name: Student must present a copy of the signed court order showing the authorized new legal name.
3. Marriage: If a student wishes to assume his or her spouse's name, the student must present a copy of the marriage certificate.
4. Divorce: Students who wish to discontinue the use of a married name and resume the use of their former name, or another name, must present a divorce decree or signed court order showing court restoration of the former, or other, name.

## Change of Address and/or Telephone Number

If a student changes his/her address or telephone number, $s /$ he is expected to notify the Student Services Center immediately. Address changes can also be posted by the student in ASSIST. The student will be held responsible for any communication from University offices sent to the address last provided.

No special consideration will be given to students who move and fail to receive official communication as a result of their failure to notify the university of their new address.

## Official Means of Communication with Students and UTRGV

The official means of communication with students from The University of Texas Rio Grande Valley regarding administrative issues is the UTRGV email address (V-Mail) assigned by the university. Important information, such as financial aid award notification, registration information, class wait list notifications, payment deadlines, and how to access bills and grades, is sent to the student's UTRGV email address. It is the student's responsibility to activate this address upon admission and check it often.

## Web for Students

Admission, grade, registration and financial information can be accessed on the web at my.utrgv.edu. Web services include:

- Admission Information
o Apply for Admission
o View Admission Status
- Registration (UTRGV username and password required)
o Registration for classes
o Change your class schedule (during the add/drop period published in the official calendar)
o View Class Availability
o Add your name to the waiting list for a closed class
o Student Schedule (graphic)
o Student Schedule (detailed)
o View Fee Assessment
- Class Schedules
- Financial Aid Awards (UTRGV username and password required)
- University Catalogs
- Payment Services
o Credit card
O E-check
o Emergency Loan Applications
o Short Term Loan
o Installment Plan
o Student Refund-Direct Deposit
- Student Records (UTRGV username and password required)
o View Address Information
o Update Address
o Update Phone Numbers
o View Grades
o Request Official Academic Transcripts
o View Unofficial Academic Transcripts
o View Account Summary
o View Your Degree Plan


## Enrollment Verification

Enrollment verification for lending agencies can be requested from the National Student Clearinghouse at www.studentclearinghouse.org, Phone: 703-742-7791, Fax: 703-742-7792. Enrollment verifications for personal use (i.e., insurance companies, employment) can also be requested at the National Student Clearinghouse.

- Full-time Undergraduate: An undergraduate student, who is enrolled for at least 12 credit hours during a regular semester or at least six hours of credit during a summer session, is considered full-time.
- Half-time Undergraduate: A half-time undergraduate student is one who is enrolled for 6 to 8 credit hours during the regular semester or three hours of credit during a summer session.
- Three-Quarter time Undergraduate: A three-quarter time undergraduate student is one who is enrolled for 9 to 11 credit hours during the regular semester.
- Less than Half-time Undergraduate: A less than half-time undergraduate student is one who is enrolled for 1 to 5 hours during a regular semester.
- Full-time Graduate: A graduate student who is enrolled for at least nine hours of credit during a regular semester, or six hours of credit during the summer sessions (six hours can be taken during one summer session or split between the two summer sessions). Graduate students in an accelerated online program are considered fulltime upon enrollment in six credit hours in any two seven-week accelerated modules that comprise a traditional academic semester (fall, spring or summer).
- Half-time Graduate: A graduate student who is enrolled for at least six hours of credit during a regular semester or three hours of credit during the summer sessions. Graduate students in an accelerated online program are considered part-time upon enrollment in three credit hours in any two seven-week accelerated modules that comprise a traditional academic semester (fall, spring or summer).


## Transcripts

A student may secure an official transcript of his/her UTRGV academic record by presenting picture identification at the Student Services Center, by requesting the transcript in writing from the Office of the Registrar, or by submitting a request on the web using ASSIST. Transcripts will be issued at no charge. The term "transcript of record" is understood to refer to the recorded results of the student's work in the classroom, and it is a comprehensive record of an individual's total academic progress at The University of Texas Rio Grande Valley. This statement will contain all the important facts pertaining to the student's academic level and academic achievements. No partial or incomplete classroom records (for example, with grades of F omitted) will be given. Students who owe debts to the university, are delinquent or in default on a student loan, or owe a repayment on a student grant overpayment will have their official transcripts withheld until the university debts are paid or satisfactory arrangements have been made to repay the student loan or student grant over payment.

## ATTENDANCE POLICIES

## Attendance

Responsibility for class attendance rests with the student. Regular and punctual attendance of all scheduled classes is expected. Instructors report non-attendance prior to the census date. Reporting of non-attendance is also a requirement when reporting final grades. Instructors can request a student be dropped for excessive absences.

## Absences on Religious Holy Days

UTRGV will excuse students from attending classes or other required activities, including examinations, for the observance of religious holy days, including travel for that purpose. In addition, UTRGV will permit these students to take an examination or complete an assignment scheduled for the day of absence within a reasonable time after the absence if, not later than the census day of the term, students notify the applicable instructors that they will be absent for a religious holy day. A religious holy day is a holy day observed by a religion whose places of worship are exempt from property taxation under 11.20 of the Texas Tax Code.

## Absences for University-recognized Activities

UTRGV will also excuse students from attending classes or other required activities, including examinations, for active military service or authorized participation in officially sponsored University functions such as athletic events or academic activities. The student should contact the instructor in advance of the excused absence and arrange with the instructor to make up missed work or examinations. Instructors will provide those students an opportunity to make up the work or otherwise adjust the grading to ensure that the student is not penalized for the absence. Failure to notify the instructor or failure to comply with the arrangements to make up the work will void the excused absence.

## Special Populations

## Varsity Athletes

To be in compliance with NCAA Division I eligibility requirements for athletic participation and/or athletically related financial aid, a student-athlete must meet University and NCAA admission requirements and "progress toward degree" requirements in addition to the university's grade point progress requirements stated under Scholastic Probation and Suspension:

1. Enrollment during each regular semester must not drop below 12 hours.
2. Academic Year Requirements consist of both credit hour and grade point average minimums for each term of enrollment.

## Veterans

The Veterans Service Center (VSC) certifies veterans to receive educational benefits for attendance at The University of Texas Rio Grande Valley. The VSC is located on the UTRGV Edinburg Campus in the University Center, Rm. 113; Phone: 956-665-7934 and on the UTRGV Brownsville Campus at Main, Rm. 1.000; Phone: 956-882-8980 (Additional information about VSC is on p. 111). Students receiving VA educational benefits must make progress toward a degree as specified in this catalog under Satisfactory

Progress and Scholastic Probation and Suspension (see p. 78). Students receiving educational benefits must report any changes made to their schedule to the Veterans Service Center. Students who do not report changes in their schedule may be subject to repayment by the Veterans Administration.

## Military Absence

Under certain circumstances, a student who is required to participate in active military service is excused from scheduled classes or other required activities and will be allowed to complete an assignment or exam within a reasonable time after the absence. The excused absence is permitted only if the student will not miss more than $25 \%$ of the total number of class meetings or the contact hour equivalent (not including the final examination period) for the specific course or courses in which the student is enrolled at the beginning of the period of active military service.

Readmission guidelines for a student who withdraws to perform active military services are as follows. These guidelines apply to a student who withdraws from an institution of higher education to perform active military service as a member of the U.S. armed forces or the Texas National Guard, except that this section does not apply to a student who withdraws from an institution solely to perform one or more training exercises as a member of the Texas National Guard. For any academic term that begins after the date a student is released from active military service but no later than the first anniversary of that date, the institution of higher education from which the student withdrew shall admit the student, without requiring re-application or charging a fee for readmission, if the student is otherwise eligible to register for classes at the institution. On readmission of the student under this subsection, UTRGV shall:

1. Provide the student any financial assistance previously provided by the institution to the student before the student's withdrawal if the student meets current eligibility requirements for the assistance, other than any requirement directly affected by the student's service, such as continuous enrollment or another similar training requirement.
2. Allow the student the same academic status that the student had before the student's withdrawal including any course credit awarded to the student by the institution.

UTRGV requires reasonable proof from a student of the fact and duration of the student's active military absence.

In accordance with Education Code Section 51.3042, eligible former members of the armed forces admitted as an undergraduate student or readmitted as an undergraduate student (after having withdrawn to perform military service) will be given course credit:

1. For all physical education courses The University of Texas Rio Grande Valley requires for an undergraduate degree and
2. For additional credit hours, not to exceed 12 , to satisfy any elective course requirements for the student's degree program for courses outside the student's major or minor.

To be eligible, a veteran must have graduated from an accredited public or private high school or a high school operated by the U.S. Department of Defense, and be honorably discharged from the U.S. armed forces after completing two years of service or discharged because of disability. To receive credit, a DD214 verifying eligibility must be provided to the Office of Admissions.

The University of Texas Rio Grande Valley follows the guidelines established by the American Council on Education's Guide to the Evaluation of Educational Experiences in the armed services to assess potential transferability of Military Occupational Specialties.

Acceptable forms of documentation include:

- AARTS Transcript (Army ACE Registry Transcript)
- CCAF Transcript (Community College of the Air Force transcript)
- SMART Transcript (Sailor/Marine ACE Registry Transcript)
- Form DD-214 (Report of Separation)
- Form DD-295 (Application for the Evaluation of Learning Experience During Military Service)

To be considered official, any of the credentials above (except Form DD-214) must be sent to The University of Texas Rio Grande Valley directly from the issuing agency. Students/applicants may submit an original DD-214; a certified copy will be made for office use and the original returned.

Credentials (except form DD-214) should be sent to:

## Office of Admissions

1201 West University Dr.
Edinburg, TX 78539
Unlike college or high school transcripts, submission of military credentials for potential transfer credit is optional and is neither required for undergraduate admission nor subject to admission deadlines. But any credit awarded counts toward admissibility, so official documents should arrive as early as possible.

## Army ROTC

The Army maintains a senior division of the ROTC at The University of Texas Rio Grande Valley. Four-, three- and two-year programs are available to interested students, male and female, graduate and undergraduate.

Army ROTC has unlimited two- and three-year tuition, books and fees scholarships for students with a 2.5 GPA or better who can pass fitness and background screening requirements. These scholarships are valued at about $\$ 3,000$ per or a living stipend of about $\$ 2,800$ per semester.

The four-year program consists of the basic course (freshman and sophomore) and the advanced course (junior and senior). Advanced instruction is oriented toward general military science and includes a fourweek summer camp, usually at the end of the junior year or first year of graduate school.

Students who have successfully completed four years of Junior ROTC in high school may, at the discretion of the professor of military science, be given placement credit for two years of the basic course regardless of academic classification. Veterans also may be given advanced placement for the basic course, at the discretion of the professor.

Successful students are, upon graduation, commissioned as second lieutenants in the Active Army, the U.S. Army Reserve or U.S. Army National Guard. Students may elect to serve as reserve officers on active duty for an initial commitment period of three years or they may elect to serve for as little as three months of basic officer schooling followed by an extended tour with a Reserve or National Guard Unit.

During the course of instruction, the Army furnishes all required uniforms and military textbooks. Advanced course contracted students receive a tax-free monetary allowance of either $\$ 450$ or $\$ 500$ per month for each month of the academic year (10 months of each year).

A special two-year program is available for full-time students who have a minimum of two years remaining on a degree plan and who have not had prior military training or ROTC. This program consists of an intensified course of instruction in military subjects that will qualify the student for the advanced course. The course of instruction is normally taken in the summer between the sophomore and junior years. Students attend a four-week Basic Camp at Fort Knox, KY, and receive transportation allowance to and from the camp, uniforms, room and board and are paid approximately $\$ 750$ for the period. No military obligation is incurred by attendance at this camp.

Application for the two-year program must be completed during the spring semester so that attendance at Basic Camp may be arranged. To learn more, visit the Military Science Program, Lamar Building B, Rm. 103, or call 956-665-3601.

## Continuous Enrollment

## Academic Standards for Regularly Admitted Students

Undergraduate students are expected to meet certain minimal academic standards in work completed in postsecondary education. Students who fail to maintain these minimum standards will be placed on academic probation or academic suspension, as appropriate. In determining whether a student will be placed on academic probation or suspension, all grades earned by the student (only the last grade is used if the student has attempted the course more than once) will be included in the computations of the GPA.

## Scholastic Probation and Suspension Policy

The Academic Probation and Suspension Policy for undergraduate students at The University of Texas Rio Grande Valley is as follows:

1. Academic probation or suspension will be determined each regular (fall or spring) semester on the basis of the student's current semester and cumulative grade point average.
2. An undergraduate student will be placed on academic probation when his/her cumulative GPA falls below 2.0.
3. An undergraduate student will be placed on academic suspension for one regular semester whenever the student enters a semester on academic probation and does not remove him/herself from academic probation (achieve a cumulative GPA higher than 2.0). The student will continue on probation if the student's current semester GPA is 2.0 or above for a fall or spring semester.

| Academic Status | GPA Criteria |
| :--- | :--- |
| Good Standing | Cumulative GPA is 2.0 or above |
| Placed on Academic <br> Probation | Cumulative GPA has dropped below 2.0. |
| Continued on Academic <br> Probation | Previously on Academic Probation, cumulative GPA is <br> below 2.0 and current semester GPA is 2.0 or above. |


| Academic Status | GPA Criteria |
| :--- | :--- |
| Academic Suspension | Previously on Academic Probation, cumulative GPA is <br> below 2.0 and current semester GPA is below 2.0. |

4. A student on academic suspension may enroll for summer sessions for the purpose of raising the cumulative GPA to the level required for good standing for the student's classification. (Once placed on suspension for a semester, the suspension cannot be removed or changed to probation on the basis that the current semester GPA is a 2.25 or higher.) Removal from suspension can be most efficiently accomplished by enrolling only for courses in which the student has previously earned a low or failing grade.
5. A student on academic suspension who raises the cumulative GPA to the level required for good standing will be reinstated as a student in good standing.
6. If a student who has been suspended for failure to meet academic probation requirements feels that unusual circumstances warrant a review, the student may direct a written appeal to the University Admissions Committee, in care of the Office of the Registrar, by the deadline stated in the notification letter and email. The petition must detail the reasons for alleging that circumstances warrant special consideration and should articulate the student's plan for achieving academic success. The committee may reinstate a student who has not served the period of academic suspension when convinced the best interests of both the university and the student will be served by such action.

All students are responsible for knowing whether they are eligible to continue at the university. An ineligible student who nevertheless registers or has registered prior to completion of the semester, in which academic standing is determined, shall be dropped and may not attend classes. Students will not receive special consideration for lack of knowledge of scholastic status, regardless of whether the student registered and paid fees.

Scholastic probation and suspension for graduate students is discussed in the Graduate Catalog.

## Texas Success Initiative

In accordance with Texas Education Code, Section 51.3062, students who enter public institutions of higher education must take the Texas Success Initiative Assessment (TSI Assessment) prior to enrolling in college-level courses. The Texas Success Initiative (TSI) is a state-mandated program designed to improve student success in college. There are two components of the program:

1. An assessment to diagnose students' basic skills in reading, mathematics, and writing, and
2. Developmental instruction to strengthen academic skills that need improvement.

All non-exempt students are required by law to take the TSI Assessment. It is the responsibility of the student to see that scores are sent to the university by the testing institution. TSI, in part, requires the following:

1. Mandatory Testing and Assessment: All students must take the TSI Assessment prior to enrolling in college level courses at a Texas public postsecondary institution.
2. Mandatory Orientation: All new students to The University of Texas Rio Grande Valley, must attend an orientation session prior to being allowed to register for classes. TSI information is disseminated at these orientation sessions.
3. Mandatory Academic Advisement: All students who have not passed all sections of the TSI Assessment must be advised prior to registration each semester.
4. Mandatory Developmental Education or Interventions (if indicated by the TSI assessment): The TSI Assessment concentrates on three basic skills: reading, mathematics and writing. The standards for passing the test represent the minimum knowledge students entering college in Texas should have in order to succeed academically. Developmental courses or interventions are provided to help students overcome deficiencies identified from the assessment. Students must remain in continuous developmental education or interventions until they pass all sections of TSI.

## TSI Assessment Exemption Students

In accordance with Texas Education Code, Section 51.3062, students in the following categories who enter public institutions of higher education a student may be exempt from TSI requirements.

The law allows for exemptions for the following categories of students:

1. For a period of five years from the date of testing, a student who is tested and performs at or above the following standards:
a. ACT: Composite score of 23 with a minimum of 19 on both the English and mathematics tests (partial exemptions are allowed).
b. SAT: A combined verbal and mathematics score of 1070 with a minimum of 500 on both the verbal and the mathematics tests.
2. For a period of five years from the date of testing, a student who is tested and performs on the Texas Assessment of Knowledge and Skills (TAKS) with a minimum score of 2200 on the English Language Arts with a minimum writing subscore of a 3 and a minimum score of 2200 on the mathematics test (partial exemptions are allowed; students with STAAR EOCs should see an academic advisor in the Academic Advising Center (AAC) about TSI exemption).
3. A student who has graduated with an associate or baccalaureate degree from an institution of higher education in the state of Texas.
4. A student who transfers to an institution from a private or independent institution of higher education or an accredited out-of-state institution of higher education and who has satisfactorily completed college-level coursework as determined by the receiving institution.
5. A student who has previously attended any Texas institution of higher education and has been determined to have met readiness standards by that institution.
6. A student who is serving on active duty as a member of the U.S. armed forces, the Texas National Guard, or as a member of a reserve component of the armed forces of the United States and has been serving for at least three years preceding enrollment.
7. A student who on or after August 1, 1990, was honorably discharged, retired or released from active duty as a member of the armed forces of the United States of the Texas National Guard or service as a member of a reserve component of the armed forces of the United States.

## Other TSI Rules

1. Students who fail one or more parts of the TSI Assessment must register for developmental courses or participate in interventions in the deficient area every semester until they meet standards for each part of the test. Standards are set by the Texas Higher Education Coordinating Board and are subject to change.
2. Students who have not passed all parts of the TSI Assessment may not register for any 3000- or 4000 -level courses if the number of college hours they already earned plus the number of hours for which they wish to register totals 60 or more hours.
3. Concurrent Enrollment students and international students seeking a degree are subject to the same TSI requirements as all other students.
4. Test scores are considered official only if they are sent directly from the testing company to The University of Texas Rio Grande Valley, or if they appear on an official transcript from another Texas college or university.

Additional TSI information, including the rules adopted by the Texas Higher Education Coordinating Board, and information about special provisions related to certain disabilities.

Students needing more information on TSI rules or their TSI status can call 956-665-7120 or 956-6652319. The TSI Assessment Information is available from the Testing Center, located at in Community Engagement \& Student Services Bldg., Rm. 1.101, 1407 East Freddy Gonzalez Dr., Edinburg, TX. For more information, call 956-665-7570.

## UNDERGRADUATE DEGREE INFORMATION

## Degree Programs

The University of Texas Rio Grande Valley offers the following types of undergraduate curricula:

1. Those leading to one of the following bachelor's degrees conferred by UTRGV:

- Bachelor of Applied Arts and Sciences (BAAS)
- Bachelor of Applied Technology (BAT)
- Bachelor of Arts (BA)
- Bachelor of Business Administration (BBA)
- Bachelor of Fine Arts (BFA)
- Bachelor of Interdisciplinary Studies (BIS)
- Bachelor of Multidisciplinary Studies (BMS)
- Bachelor of Music (BM)
- Bachelor of Science (BS)
- Bachelor of Science in Computer Engineering (BSCE)
- Bachelor of Science in Computer Science (BSCS)
- Bachelor of Science in Criminal Justice (BSCJ)
- Bachelor of Science in Electrical Engineering (BSEE)
- Bachelor of Science in Manufacturing Engineering (BSMFGE)
- Bachelor of Science in Mechanical Engineering (BSME)
- Bachelor of Science in Nursing (BSN)
- Bachelor of Social Work (BSW)

2. Those satisfying the requirements leading toward degrees offered at other institutions, such as curricula leading to degrees in law, pharmacy, medicine and other specialized fields.
3. Courses satisfying requirements for a minor field.
4. Courses meeting requirements for certification as a teacher.

A complete list of degrees UTRGV offers is located on pp. 9-13.
The College of Sciences also offers curricula meeting requirements for pre-dental (with a major in biology or chemistry), pre-optometry (with a major in biology or chemistry), pre-pharmacy (two years) and premedical (with a major in biology or chemistry) studies.

Minors are offered in most of the fields that offer majors. Additional minors are available in art history, biochemistry, business administration, educational technology, environmental studies, film studies, folklore, French, geographic information systems, geology and earth science, global security studies, graphic design, honors, human resources management, Latin American studies, legal studies, medical humanities, medical Spanish, military science, nanotechnology, public administration, religious studies, special education, sustainable supply chain management, technology education and corporate training, gender and women's studies.

Supporting courses are available in a variety of fields, including astronomy, geography, and German.
Students also may choose to graduate within the framework of honors studies. Requirements are listed on p. 23.

## Requirements for a Bachelor's Degree

1. Degree, minimum hours, and GPA: Students who wish to pursue more than one major which fall under different disciplines must decide at the point of graduation the type of degree s/he will receive (BA, BS, etc., depending on the chosen majors). A minimum of 120 hours of work is required with a minimum institutional GPA of 2.0. Some major requirements exceed the minimum hours and/or may require a higher minimum grade point average.
2. Major and Minor GPA: A minimum institutional GPA of 2.0 in the required hours for both the major and minor fields, or for the broad-field major, is required. Some majors and/or minors may require a higher minimum grade point average.
3. Core Curriculum Hours and GPA: 42 hours of University core curriculum requirements must be satisfactorily completed with a minimum GPA of 2.0.
4. Core First Year Writing Grade Requirement: A minimum grade of $C$ must be achieved in each of the required first year writing courses (ENGL 1301, 1302, or equivalent honors courses).
5. Core Math Courses Grade Requirement: A minimum grade of $C$ must be achieved in approved math courses in the general education core.
. Advanced Hours Overall: Must include a minimum of 42 hours of advanced-level (3000/4000) work. Some degrees require additional advanced hours.
6. Major Requirements: Coursework must include a minimum of the following: 30 hours of work in a major field of concentration, 15 of which must be advanced.
7. Language Proficiency University Requirement: A student graduating with a bachelor's degree from UTRGV is required to demonstrate language proficiency in a language other than English at the undergraduate level equivalent to a minimum of six credits. Individual degree programs may require a higher level of proficiency.

Language proficiency in a language other than English at the undergraduate level equivalent to six credit hours can be demonstrated by a college credit exam (e.g. AP, CLEP, International Baccalaureate), a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## Non-Credit Language Testing Options

- TOEFL and IELTS: Students who are native speakers of languages other than English may fulfill the second language requirement with the Test of English as a Foreign Language (TOEFL) or with the International English Language Testing System (IELTS), provided that it was an admissions requirement and the student met one of the following minimum scores:

| TOEFL Paper <br> Version | TOEFL Computer <br> Version | TOEFL Internet <br> Version | IELTS |
| :--- | :--- | :--- | :--- |
| 500 | 173 | 63 | 6.0 |

- WebCape: The WebCAPE Placement Exam is a computer adaptive placement examination approved by the UTRGV Department of Writing and Language Studies for demonstrating second language proficiency. To demonstrate proficiency for Spanish, French, or German through the WebCAPE exam, the following scores must be achieved:

| Language Tested | CAPE Score <br> (Partial Waiver) | CAPE Score <br> (Proficiency Met) |
| :--- | :--- | :--- |
| Spanish | 270 (SPAN 1311/1312 waived) | 345 |
| French | 260 (FREN 1311 waived) | 336 |
| German | 292 (GERM 1311 waived) | 383 |

If your second language is not listed above, contact the Department of Writing and Language Studies in order to obtain approval to utilize other language placement exams to demonstrate second language proficiency.

- UTRGV Coursework

If UTRGV coursework is desired to meet the second language proficiency requirement, courses may be chosen from those listed below or from other 6-hour same language combinations in more advanced courses than those listed below. Earning course credit through examination such as through CLEP tests may also be an option. Students may consult the credit by examination choices available through the UTRGV Testing Center.
o ARAB 1311 Beginning Arabic I and ARAB 1312 Beginning Arabic II
o CHIN 1311 Beginning Chinese I and CHIN 1312 Beginning Chinese II
o FREN 1311 Beginning French I and FREN 1312 Beginning French II
o GERM 1311 Beginning German I and GERM 1312 Beginning German II
o ITAL 1311 Beginning Italian I and ITAL 1312 Beginning Italian II
o JAPN 1311 Beginning Japan I and JAPN 1312 Beginning Japanese II
o PORT 1311 Beginning Portuguese I and PORT 1312 Beginning Portuguese II
o SGNL 1301 Beginning Sign Language I and SGNL 1302 Beginning Sign Language II
o SPAN 1311 Spanish for Non-Native Speakers I and SPAN 1312 Spanish for NonNative Speakers II
o SPAN 2313 Spanish for Native/Heritage Speakers I and SPAN 2315 Spanish for Native/Heritage Speakers II
o SPAN 1387 Beginning Spanish I for Honors Students and SPAN 1388 Beginning Spanish II for Honors Students
o SPAN 2317 Spanish for Healthcare Professionals I and SPAN 2318 Spanish for Healthcare Professionals II
o COMD 1310 Beginning Sign Language and COMD 1320 Intermediate Sign Language
0 FORL 1391 Elementary Studies in Foreign Languages I and FORL 1392 Elementary Studies in Foreign Languages II (If taken in the same language)
9. University Requirement - UNIV 1301 Learning Framework course: As part of UTRGV's retention and graduation initiatives, entering freshmen and transfer students with fewer than 30 credit hours of college coursework ${ }^{7}$ will enroll in the UNIV1301 - Learning Framework course during their first year as follows:

- Mandatory Status: Entering Freshmen (EF) with ACT score (or SAT equivalent) below 19 or a HS class rank below the top $25 \%$ will enroll in UNIV 1301 Learning Framework during the fall or spring semester of their first year at UTRGV.

[^5]- Provisional Status: Entering Freshmen (EF) will not be required to enroll in UNIV 1301 during their first full term (fall for Fall EFs and spring for Spring EFs) if they are admitted with an ACT composite score of 19 or higher or SAT total equivalent, and are in the top $25 \%$ of their graduating class. If a student does not have a high school rank percentage, the test scores (ACT or SAT) will be the sole criteria. Otherwise, both criteria must be met.
- Continued Provisional Status: Provisional status will be evaluated after the completion of the first full term (fall or spring). A student who earns 12+ credit hours and a 2.5 GPA during the first full term will not need to take UNIV 1301 during the next full term. Students who do not complete 12 credit hours and a 2.5 GPA during their first full term will need to enroll in the course during the next full term (or summer term) and/or before the end of the first year of enrollment.
- Wavier: All students with Provisional Status will be re-evaluated at the end of the second full term. A student who has earned 24 credit hours and a cumulative 2.5 GPA during the first two full terms will not need to take UNIV 1301.
- Part-Time Students: The same criteria will apply to part-time students, with the following exception:
o The student must earn the same number of credit hours as attempted, rather than 12 credit hours required of full-time students.
- Transfer Students: If a transfer student has 15-30 college credit hours and does not have an ACT score and HS class rank available, then the transfer GPA must be a 2.5 or higher in order to be placed on provisional status and to be evaluated as described above. If the transfer GPA is below 2.5 then the student is considered "mandatory status" and will enroll in UNIV 1301 during the fall or spring semester of their first year at UTRGV.

A student who does not have a Provisional Status or does not meet the criteria and fails to enroll in the UNIV1301 course in their first year will receive a registration hold for the beginning of their second year. Faculty and Academic Advising Center (AAC) advisors will work closely with all freshmen students to ensure their successful progress to the second year and completion of their baccalaureate degree.
10. Residency: At least 25 percent of the credit hours required for the degree must be earned through instruction offered by UTRGV. Transfer students may be required to complete additional hours above those on their degree plan to meet this requirement. In this situation, students will work with the Academic Advising Center to select hours that support the student's academic and professional goals.
11. "Re-Using" a Course: A core curriculum course may be used to meet either a major or minor requirement. A course may not be used to satisfy a requirement for both a major and minor, or for two majors or for two minors.
12. Teaching Certificates: Requirements for teaching certificates in various fields or areas are shown in the respective academic sections of the catalog. Consult the Office of the Dean of the College of Education for full details on all certification requirements. All applications for teacher certification are processed through the Educator Preparation and Accountability Office. Degree plans for teacher certification contain a block of courses required for certification. If your degree
plan does not contain these courses, notify the Office of the Registrar that a revised degree plan is needed.
13. Degree Plan: The official degree plan is the DegreeWorks plan available for every student upon declaration of a major.
14. Graduation under a Specific Catalog: The degree requirements that must be completed for graduation will be those in effect at the time the student begins his/her college career or those provided in a subsequent catalog. In any case, the catalog used to determine the degree requirements must not be more than seven years old. Any changes in the degree plan must be approved by the department chair and the dean of the college. For purposes of graduation requirements, this catalog expires August 2022.
15. Substitutions/Waivers: A substitution or waiver form, initiated by the student with the help of an advisor, is required for any deviation from the degree plan and university requirements. Appeals for substitutions and/or waivers that involve the core curriculum (general education) require approval from the student's major department chair/school director, the dean of the college, and the Associate Vice President for Student Academic Success/Dean of the University College or designee. Appeals for substitutions/waivers for general graduation requirements, such as total number of credit hours, grade point average and number of advanced credit hours, require approval from within the student's major department chair/school director, dean, and deputy provost or designee. Appeals for substitution of courses within the major, minor or elective areas of a student's degree plan require the approval of the department chair/school director and the dean of the college only. Content of substituted courses must be consistent with approved degree/program requirements.
16. Graduate Courses: Graduate courses may not be used to satisfy any undergraduate graduation requirements for a bachelor's degree.
17. Non-Traditional Credit: A maximum of 45 hours of college credit will be accepted toward a bachelor's degree by any combination of extension, examination or correspondence, with an 18hour limit on correspondence credit. No credit will be awarded for "life experience."

All course requirements for a bachelor's degree in any one of the several disciplines are formulated within the department in which the discipline falls, and are announced and listed elsewhere in the catalog by the respective departments of the university. Students should contact their major department and request a degree plan as soon as possible upon completion of their sophomore year.

## Pursuing a Double Major

An undergraduate student may elect to pursue two majors by simultaneously completing the prescribed requirements for two majors. A student pursuing a double major must:

1) Complete all requirements for the primary major including all general education requirements, major requirements, and specified elective or support courses on the degree plan (sometimes listed as support courses, technical electives, restricted electives, or designated electives).
2) Complete all requirements for the second major, including prerequisites, and associated specified elective or support courses. Note that a course may not be used to satisfy a requirement for both majors unless otherwise specified in a formal double-major degree plan. However if the primary major requires a minor or free electives, those hours can be satisfied with course requirements from a second major.
3) Comply with all other requirements for graduation listed in the Undergraduate Catalog.

The student will indicate one of the majors as a "primary" major and will receive the degree associated with that major. The student's diploma will list both majors. For example, a student who indicates that his or her primary major is Biology who elects to also complete a second major in Art will receive a single diploma listing a B.S. in Biology with a second major in Art. Students are not permitted to pursue more than two majors. The student will receive one diploma.

Students wishing to pursue a double major must submit a Change of Major/Minor/Catalog Term form to declare the second major. Upon graduation, a student with a double major will be scheduled for the commencement ceremony corresponding with the student's primary major.

## Subsequent Bachelor's Degrees

Students who received their first bachelor's degree from UTRGV or other regionally accredited institution may earn an additional bachelor's degree in a different major from UTRGV. Such students continue to be classified as undergraduates and must:

1. Complete all requirements for the additional major(s), as set forth in the catalog.
2. Complete an additional minimum of 30 hours of credit in UTRGV courses (of which at least 12 must be advanced and a minimum of 6 of these must be in the major field; in the case of a double major, a minimum of 6 advanced hours is required in each major field) for each bachelor's degree sought beyond the first.
3. Complete all requirements for the additional degree(s), including GPA requirements, any minor requirements, elective courses, and advanced courses, as set forth in the catalog.
4. Comply with all other regulations as stated under University core curriculum.

Completion of a baccalaureate degree at another accredited institution will fulfill UTRGV's general education (core curriculum requirements) exclusive of any state specified coursework. Students will be required to complete the Texas state mandated coursework in U.S. history and political science if this has not already been completed as part of their first degree. Students must also complete any other University and departmental requirements for the second degree as stipulated in the catalog.

## Credit by Examination

UTRGV offers college credit by examination to qualified students through a variety of approved examinations. A student may receive up to 30 hours of undergraduate credit by examination through the following programs:

- American College Testing (ACT) Program
- Credit by Examination
- College Entrance Examination Board (CEEB)
- Achievement Tests
- Advanced Placement (AP) Tests
- International Baccalaureate (IB) exams
- College Level Examination Program (CLEP)

Test scores must be sent directly from the testing agency; student or hand-carried copies are not accepted.

Credit is posted on the student's permanent record (transcript) when the student officially enrolls at UTRGV. Credit by exam is accepted as credit only (CR) and does not affect the student's cumulative GPA. Unsuccessful attempts to earn credit by examination are not recorded on the student's official transcript. Policies on credit earned by examination are reviewed every two years in conjunction with the publication of a new catalog.

For further information regarding credit by examination policies at UTRGV, visit the:

## Office of the Registrar

One West University Blvd.
The Tower, Main, Rm. 1.101
Brownsville, TX 78520

1201 West University Dr.
Student Services Bldg., $1^{\text {st }}$ Floor Edinburg, TX 78539
registrar@utrgv.edu
Phone: 956-665-2201

For additional information regarding testing, contact the:

| Testing Center |  |  |
| :---: | :---: | :---: |
| 1601 Price Rd., Suite E | 1407 East Freddy Gonzalez Dr. | testing@utrgv.edu |
| Resaca Village | CESS Building |  |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |
| Phone: 956-882-8875 | Phone: 956-665-7570 |  |

Credit by examination at UTRGV is available as follows:

## CEEB Advanced Placement (AP) Tests

If you are a high school student anticipating course credit through CEEB AP Tests, you should make arrangements to take the proper examination(s) with your high school counselor or AP coordinator. This should be done in time for your scores to be received and evaluated by UTRGV before you begin your first semester. Course credit or exemptions may be obtained in the subjects listed below:

CEEB Advanced Placement Tests Scores

| AP Exam | UTRGV <br> Course | Course Title | Min. <br> Score | Hrs. <br> Credit |
| :--- | :--- | :--- | :--- | :--- |
| Economics (Macro) | ECON 2301 | Principles of Macroeconomics | 3 | 3 |
| Economics (Micro) | ECON 2302 | Principles of Microeconomics | 3 | 3 |
| Computer Science (A) | CSCI 1370 <br> CSCI 1170 | Engineering Computer Science I <br> Engineering Computer Science I <br> Laboratory | 3 | 4 |
| Computer Science (AB) | CSCI 1370 <br> CSCI 1170 <br> CSCI 2380 | Engineering Computer Science I <br> Engineering Computer Science I <br> Laboratory <br> Computer Science II | 3 | 7 |
| Art History | ARTS 1301 <br> ARTS 1303 | Art Appreciation <br> Art History I, Prehistoric to the 14th- <br> Century | 3 | 3 |
| Studio Art - Drawing <br> Portfolio | ART 1316 | Drawing I | 3 | 3 |
| Studio Art - General <br> Portfolio | ART 1311 | Design I | 3 | 3 |


| AP Exam | UTRGV Course | Course Title | Min. Score | Hrs. Credit |
| :---: | :---: | :---: | :---: | :---: |
| Biology | $\begin{aligned} & \text { BIOL } 1406 \\ & \text { BIOL } 1407 \end{aligned}$ | General Biology I General Biology II | 3 | 8 |
| Environmental Science | BIOL 2406 | Environmental Biology | 3 | 4 |
| Chemistry | CHEM 1311 <br> CHEM 1111 <br> CHEM 1312 <br> CHEM 1112 | General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab | 3 | 8 |
| Calculus (AB) | MATH 2413 | Calculus I | 3 | 4 |
| Calculus (BC) | MATH 2413 MATH 2414 | Calculus I Calculus II | 3 | 8 |
| Physics (B) | PHYS 1401 PHYS 1402 | General Physics I General Physics II | 3 | 8 |
| Physics (C) - Mechanics | PHYS 1401 or PHYS 2425 | General Physics I <br> or <br> Physics for Scientists and Engineers I | 3 | 4 |
| Physics (C) - <br> Electricity \& Magnetism | PHYS 1402 or PHYS 2426 | General Physics II or Physics for Scientists and Engineers II | 3 | 4 |
| Statistics | MATH 1342 or PSYC 2401 | Elementary Statistical Methods or Basic Statistics for Psychologists | 3 | 3 |
| English Language | ENGL 1301 | Rhetoric and Composition I | 3 | 3 |
| U.S. History | HIST 1301 | U.S. History I | 3 | 3 |
| U.S. History | HIST 1301 HIST 1302 | U.S. History I U.S. History II | 4 | 6 |
| World History | HIST 2321 | World History I | 3 | 3 |
| U.S. Government | POLS 2301 or POLS 2302 | U.S. \& Texas Government \& Politics I or <br> U.S. \& Texas Government \& Politics II | 3 | 3 |
| Psychology | PSYC 2301 | General Psychology | 3 | 3 |
| Statistics | MATH 1342 <br> or <br> PSYC 2401 | Elementary Statistical Methods or Basic Statistics for Psychologists | 3 | 3 |
| French Language and Culture | $\begin{aligned} & \text { FREN } 1311 \\ & \text { FREN } 1312 \end{aligned}$ | Beginning French I Beginning French II | 3 | 6 |
| French Language and Culture | FREN 1311 <br> FREN 1312 <br> FREN 2311 | Beginning French I Beginning French II Intermediate French I | 4 | 9 |


| AP Exam | UTRGV Course | Course Title | Min. Score | Hrs. Credit |
| :---: | :---: | :---: | :---: | :---: |
| French Language and Culture | FREN 1311 <br> FREN 1312 <br> FREN 2311 <br> FREN 2312 | Beginning French I Beginning French II Intermediate French I Intermediate French II | 5 | 12 |
| German Language and Culture | GERM1311 <br> GERM 1312 | Beginning German I Beginning German II | 3 | 6 |
| German Language and Culture | GERM 1311 <br> GERM 1312 <br> GERM 2311 | Beginning German I Beginning German II Intermediate German I | 4 | 9 |
| German Language and Culture | GERM 1311 <br> GERM 1312 <br> GERM 2311 <br> GERM 2312 | Beginning German I Beginning German II Intermediate German I Intermediate German II | 5 | 12 |
| Spanish Language or Spanish Literature | SPAN 1311 SPAN 1312 | Spanish for Non-Native Speakers I Spanish for Non-Native Speakers II | 3 | 6 |
| Spanish Language or Spanish Literature | SPAN 1311 SPAN 1312 SPAN 2311 | Spanish for Non-Native Speakers I Spanish for Non-Native Speakers II Intermediate Spanish for Non-native Speakers I | 4 | 9 |
| Spanish Language or Spanish Literature | SPAN 1311 <br> SPAN 1312 <br> SPAN 2311 <br> SPAN 2312 | Spanish for Non-Native Speakers I Spanish for Non-Native Speakers II Intermediate Spanish for Non-native Speakers I <br> Intermediate Spanish for Non-native Speakers II | 5 | 12 |
| Chinese, Japanese, Italian, or Latin Language and Culture | FORL 1391 <br> FORL 1392 | Elementary Studies in Foreign <br> Languages I <br> Elementary Studies in Foreign <br> Languages II | 3 | 6 |

NOTE: High school students anticipating college credit through College Entrance Examination Board Achievement, Advanced Placement Tests and/or International Baccalaureate should make arrangements to take the proper examination(s) with their high school counselors, AP or IB coordinators. This should be done in time for scores to be received and evaluated by UTRGV before students begin their first semester.

## International Baccalaureate (IB) Tests

The International Baccalaureate (IB) tests are offered worldwide to students enrolled in programs affiliated with the IB program. The University of Texas Rio Grande Valley will grant credit on IB higherlevel tests for the courses listed below. Please contact Admissions and New Student Services for additional information.

| IB Course | UTRGV Course | Course Title | Required Score | Hrs. Credit |
| :---: | :---: | :---: | :---: | :---: |
| Anthropology Standard Level (SL) | ANTH 2351 | Introduction to Cultural Anthropology | 4 | 3 |
| Biology <br> Standard (SL) or <br> Higher Level (HL) | BIOL 1406 <br> BIOL 1407 | General Biology I (lecture + lab) <br> General Biology II (lecture + lab) | 4 | 8 |
| Chemistry Standard (SL) or Higher Level (HL) | CHEM 1311 <br> CHEM 1111 <br> CHEM 1312 <br> CHEM 1112 | General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab | 4 | 8 |
| Computer Science Higher Level (HL) | $\begin{aligned} & \text { CSCI } 1170 \\ & \text { CSCI } 1370 \end{aligned}$ | Engineering Computer Science I Laboratory <br> Engineering Computer Science I | 4 | 4 |
| Computer Science Higher Level (HL) | $\begin{aligned} & \text { CSCI } 1170 \\ & \text { CSCI } 1370 \\ & \text { CSCI } 2380 \end{aligned}$ | Engineering Computer Science I Laboratory <br> Engineering Computer Science I Computer Science II | 6 | 7 |
| Computer Science Standard Level (SL) | $\begin{aligned} & \text { CSCI } 1170 \\ & \text { CSCI } 1370 \end{aligned}$ | Engineering Computer Science I <br> Laboratory <br> Engineering Computer Science I | 4 | 4 |
| Economics Higher Level (HL) | $\begin{aligned} & \text { ECON } 2301 \\ & \text { ECON } 2302 \end{aligned}$ | Principles of Macroeconomics Principles of Microeconomics | 4 | 6 |
| Economics Standard Level (SL) | ECON 2301 | Principles of Macroeconomics | 4 | 3 |
| English A1 or A2 Standard (SL) or Higher Level (HL) | ENGL 1301 <br> ENGL 2331 | Rhetoric and Composition I Introduction to World Literature | 4 | 6 |
| Extended Essay in English Any Discipline | ENGL $1302{ }^{8}$ | Rhetoric And Composition II | A, B, C | 3 |
| French A1 or A2 Higher Level (HL) | FREN 1311 <br> FREN 1312 <br> FREN 2311 <br> FREN 2312 | Beginning French I Beginning French II Intermediate French I Intermediate French II | 4 | 12 |
| French A1 or A2 Standard Level (SL) | FREN 1311 FREN 1312 | Beginning French I Beginning French II | 4 | 6 |
| Geography Higher Level (HL) | HIST 3302 | Geography and Environment in History | 4 | 3 |
| Geography Standard Level (SL) | GEOG 2313 | Principles of Geography Physics Elementary | 4 | 3 |

[^6]| IB Course | UTRGV <br> Course | Course Title | Required <br> Score | Hrs. <br> Credit |
| :--- | :--- | :--- | :--- | :--- |
| History Americas <br> Higher Level (HL) | HIST 1301 <br> HIST 1302 | U.S. History I <br> U.S. History II | 6 | 3 |
| History Americas <br> Standard Level (SL) | HIST 1301 <br> HIST 1302 | U.S. History I <br> U.S. History II | HIST 2321 <br> HIST 2322 | World History I <br> World History II |
| History World <br> Higher Level (HL) | HIST 2321 <br> HIST 2322 | World History I World History II | 6 | 3 |
| History World <br> Standard Level (SL) | MATH 2412 | Precalculus | 6 | 3 |
| Math Methods <br> Higher Level (HL) | MATH 2413 | Calculus I | 4 |  |
| Math Methods <br> Higher Level (HL) | MATH 2412 | Precalculus | 5 | 4 |
| Math Methods <br> Standard Level (SL) | MATH 2412 | Precalculus | 4 | 4 |
| Math Studies <br> Higher Level (HL) | MATH 2413 | Calculus I | 4 |  |
| Math Studies <br> Higher Level (HL) | MATH 2412 | Precalculus | 4 | 4 |
| Math Studies <br> Standard Level (SL) | MATH | 4 | 4 |  |
| Mathematics <br> Higher Level (HL) | MATH 2412 | Precalculus | 4 | 4 |
| Mathematics <br> Higher Level (HL) | MATH 2413 | Calculus I | 4 | 4 |
| Mathematics <br> Standard Level (SL) | MATH 1314 | College Algebra | 4 | 4 |
| Mathematics <br> Standard Level (SL) | MATH 2412 | Precalculus | 4 | 4 |
| Music <br> Standard Level (SL) | MUSI 1306 | Music Appreciation | 4 | 4 |
| Philosophy <br> Standard Level (SL) | PHIL 1301 | Introduction to Philosophy | 4 | 4 |
| Physics <br> Higher Level (HL) | PHYS 1401 <br> PHYS 1402 | General Physics I |  |  |
| General Physics II |  |  |  |  |


| IB Course | UTRGV <br> Course | Course Title | Required <br> Score | Hrs. <br> Credit |
| :--- | :--- | :--- | :--- | :--- |
| Spanish A1 or A2 or <br> B or AB <br> Standard Level (SL) | SPAN 1311 <br> SPAN 1312 | Spanish for Non-Native Speakers I <br> Spanish for Non-Native Speakers II | 4 | 6 |
| Spanish A1 or A2 or <br> B <br> Higher Level (HL) | SPAN 1311 <br> SPAN 1312 <br> SPAN 2311 <br> SPAN 2312 | Spanish for Non-Native Speakers I <br> Spanish for Non-Native Speakers II <br> Intermediate Spanish for Non-native <br> Speakers I <br> Intermediate Spanish for Non-native <br> Speakers II | 4 | 12 |
| Theatre Arts <br> Higher Level (HL) | THTF 1615 | Summer Theatre Workshop | 4 | 6 |
| Theatre Arts <br> Standard Level (SL) | THTF 1310 | Theatre Appreciation | 4 | 3 |
| Visual Arts Option A <br> Standard Level (SL) <br> or Higher Level (HL) | ART 1301 | Art Appreciation | 4 | 3 |
| Visual Arts Option B <br> Standard Level (SL) <br> or Higher Level (HL) |  |  | 4 |  |

## College-Level Examination Program (CLEP)

Students can earn course credit at UTRGV in a wide variety of subject areas through CLEP Subject Examinations, which are standardized 90 -minute, multiple-choice tests. These exams are administered by the UTRGV Testing Center several times a month throughout the academic year. For available test dates, contact the:

| Testing Center |  |  |
| :--- | :--- | :--- |
| 1601 Price Rd., Suite E | 1407 East Freddy Gonzalez Dr. | testing@utrgv.edu |
| Resaca Village | CESS Building |  |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |
| Phone: $956-882-8875$ | Phone: $956-665-7570$ |  |

Listed below are subject areas in which UTRGV credit can be earned through the CLEP testing program, along with the required minimum score for each test. (The minimum score usually represents successful completion of 35 to 50 percent of the questions on an examination.) UTRGV credit is posted to a student's transcript once the official score report is sent to UTRGV (approximately three weeks after exam) and after he or she officially enrolls at the university. CLEP credit cannot be used to clear financial aid deficiencies.

Students who do not plan to enroll at the university are also permitted to take CLEP tests at the UTRGV Testing Center. However, it is the responsibility of the student to contact the institution at which he/she plans to enroll in order to verify which CLEP tests are accepted for credit.

In order to prepare for CLEP testing, students may purchase The Official Guide for the CLEP Examinations at the UTRGV Bookstore or order it from The College Board website at:
www.collegeboard.com/clep. Students are also recommended to obtain an appropriate textbook and/or study guide for the specific test(s).

Registration fees and test dates for CLEP exams are outlined in a flyer available at the UTRGV Testing Center.

CLEP Subject Examination

| CLEP Exam (Subject) | UTRGV Course | Course Title | Min. Score | Hrs. Credit |
| :---: | :---: | :---: | :---: | :---: |
| Principles of Accounting | ACCT 2301 <br> ACCT 2302 | Introduction To Financial Accounting Introduction To Managerial Accounting | 53 | 6 |
| Introductory Business Law | BLAW 3337 | Business Law I | 54 | 3 |
| Info Sys and Comp Appl | INFS 1301 | Computer Information Systems | 51 | 3 |
| Principles of Macroeconomics | ECON 2301 | Principles of Macroeconomics | 53 | 3 |
| Principles of Microeconomics | ECON 2302 | Principles of Microeconomics | 53 | 3 |
| Principles of Management | MGMT 3361 | Principles of Management | 53 | 3 |
| Principles of Marketing | MARK 3300 | Principles of Marketing | 53 | 3 |
| Biology | BIOL 1406 | General Biology I (lecture + lab) | 50 | 4 |
| Biology | $\begin{aligned} & \text { BIOL } 1406 \\ & \text { BIOL } 1407 \end{aligned}$ | $\begin{aligned} & \text { General Biology I (lecture + lab) } \\ & \text { General Biology II (lecture + lab) } \end{aligned}$ | 50 | 8 |
| Chemistry | CHEM 1311 <br> CHEM 1111 <br> CHEM 1312 <br> CHEM 1112 | General Chemistry I General Chemistry I Lab General Chemistry II General Chemistry II Lab | 50 | 8 |
| College Algebra | MATH 1314 | College Algebra | 50 | 3 |
| Calculus | MATH 2413 MATH 2414 | Calculus I Calculus II | 50 | 8 |
| Introductory Psychology | PSYC 2301 | General Psychology | 50 | 3 |
| Human Growth \& Development | PSYC 3337 | Developmental Psychology : Lifespan | 50 | 3 |
| Analysis of Interp Lit | ENGL 2341 | Introduction to Literature | 50 | 3 |
| American Literature | ENGL 2326 ENGL 3303 ENGL 3304 | Introduction to American Literature Survey of American Literature I Survey of American Literature II | 50 | 6 |
| English Literature | ENGL 2321 | Introduction to British Literature | 50 | 3 |
| History of the U.S. I | HIST 1301 | U.S. History I | 50 | 3 |
| History of the U.S. II | HIST 1302 | U.S. History II | 50 | 3 |
| American Government | POLS 2301 | U.S. \& Texas Government \& Politics I | 50 | 3 |
| Introductory Sociology | SOCI 1301 | Introductory to Sociology | 50 | 3 |
| French Lang | FREN 1311 | Beginning French I | 50 | 3 |


| CLEP Exam (Subject) | UTRGV Course | Course Title | Min. Score | Hrs. Credit |
| :---: | :---: | :---: | :---: | :---: |
| French Lang | FREN 1311 FREN 1312 | Beginning French I Beginning French II | 52 | 6 |
| French Lang | FREN 1311 <br> FREN 1312 <br> FREN 2311 | Beginning French I Beginning French II Intermediate French I | 65 | 9 |
| French Lang | FREN 1311 <br> FREN 1312 <br> FREN 2311 <br> FREN 2312 | Beginning French I <br> Beginning French II <br> Intermediate French I <br> Intermediate French II | 75 | 12 |
| German Lang | GERM 1311 | Beginning German I | 50 | 3 |
| German Lang | GERM 1311 <br> GERM 1312 | Beginning German I Beginning German II | 52 | 6 |
| German Lang | GERM 1311 <br> GERM 1312 <br> GERM 2311 | Beginning German I Beginning German II Intermediate German I | 65 | 9 |
| German Lang | GERM 1311 <br> GERM 1312 <br> GERM 2311 <br> GERM 2312 | Beginning German I <br> Beginning German II Intermediate German I Intermediate German II | 75 | 12 |
| Spanish Lang | SPAN 1311 | Spanish for Non-Native Speakers I | 50 | 3 |
| Spanish Lang | SPAN 1311 <br> SPAN 1312 | Spanish for Non-Native Speakers I Spanish for Non-Native Speakers II | 52 | 6 |
| Spanish Lang | SPAN 1311 <br> SPAN 1312 <br> SPAN 2311 | Spanish for Non-Native Speakers I Spanish for Non-Native Speakers II Intermediate Spanish for Non-native Speakers I | 65 | 9 |
| Spanish Lang | SPAN 1311 <br> SPAN 1312 <br> SPAN 2311 <br> SPAN 2312 | Spanish for Non-Native Speakers I Spanish for Non-Native Speakers II Intermediate Spanish for Non-native Speakers I <br> Intermediate Spanish for Non-native Speakers II | 75 | 12 |

## Local Advanced Standing Examinations-For Credit

Students may acquire college credit through local departmental examinations at UTRGV. Local examinations may not be taken for courses for which an approved CLEP subject examination exists. Students are encouraged to contact the individual academic departments for more information regarding the availability of local examinations, requirements and fees.

## Other Exams

In addition to the exams listed above, COLLEGE BOARD also offers the following exams: College Composition, College Composition Modular, Natural Science, Humanities, Human Growth \& Development, Social Sciences \& History, College Mathematics, and Financial Accounting. Although these
exams are not currently accepted at UTRGV they may still be administered at our campus and transferred to another institution.

## Graduation Policies and Procedures

## Diploma Language

UTRGV diplomas will only document the degree and major(s) earned. However, completion of approved minors, concentrations and certificates will be noted on the transcript.

## Application for Degree

Students will be eligible to apply for graduation upon completion of 90 credit hours. Their degree plans will be audited, and students will be notified of outstanding deficiencies. Students who wish to have a maiden or other previous name added to their diploma must notify the Office of the Registrar prior to graduation. The student's official full name is what will be printed on the diploma.

## Graduation Fee

A nonrefundable graduation fee of $\$ 32$ is charged for undergraduate and graduate degrees. This fee will be charged to the student's UTRGV online account. This fee is used to pay for the processing of applications for graduation, music, graduation speakers, postage, diplomas, and other expenses associated with graduation.

## Transfer of Graduation Date

Prospective graduates who have submitted their Application for Degree Form and do not meet graduation requirements for that graduation date must "transfer" their application to a later graduation date.

## Commencement Exercises

The University of Texas Rio Grande Valley holds commencement exercises and confers degrees three times each year in December and May.

All students participating in the commencement ceremony are required to purchase the proper graduation regalia from the University Bookstore. (No students will be permitted to participate without the proper regalia.)

## Correspondence

In order to ensure that information regarding graduation requirements, deficiencies and commencement exercises are received on a timely basis, the student's correct address must be on file with the Office of the Registrar. Prospective graduates will not receive special consideration for lack of knowledge of graduation requirements, deficiencies or deadlines.

## Honors

Upon graduation, a student receiving a bachelor's degree is listed with "Honors" in accordance with the following standards based on his/her final institutional grade point average:

- Summa Cum Laude GPA of 3.9 to 4.0
- Magna Cum Laude GPA of 3.7 to 3.89
- Cum Laude GPA of 3.5 to 3.69

Honors are listed in the graduation program based on the student's GPA prior to completion of his/her last semester of coursework, and an honors listing in the program does not guarantee graduation with honors upon calculation of the institutional GPA after the student's last semester has been completed.

## ACADEMIC SUPPORT SERVICES

## Academic Advising Center

With locations in both Edinburg and Brownsville, the Academic Advising Center provides undergraduate students with a holistic advising experience that supports them through all stages of their academic career at UTRGV. By teaching the critical information regarding university policies and procedures, an academic advisor can guide undergraduate students as they discover their options and make essential decisions about their academic career. An academic advisor can also provide helpful details regarding undergraduate programs of study, degree requirements and academic resources as students work to ensure they stay on track to graduate.

As all undergraduate students are encouraged to schedule a visit with an advisor in the Academic Advising Center, some student populations are required to meet with an academic advisor for additional support. Students may consult the Academic Advising Center's website to determine if an advising session is required before course registration. In partnership with an advisor, undergraduate students are encouraged to stop by the Academic Advising Center to make use of the following services:

- Academic Recovery Programs and Services
- Academic Skills Development and Assistance
- Advising for Admitted Transfer Students
- Graduation Planning
- Major and Career Exploration
- Referrals to Academic and Campus Resources
- TSI Support

Students interested in visiting or scheduling a session with the Academic Advising Center may contact us in person, via phone, via email or via the web.

| Academic Advising Center |  |  |
| :--- | :--- | :--- |
| One West University BIvd. | 1201 West University Dr. | academicadvising@utrgv.edu |
| Main, Rm. 1.400 | utrgv.edu/advising |  |
| Brownsville, TX 78520 |  |  |
| Phone: $956-882-7362$ | Edinburg, TX 78539 |  |
|  | Phone: 956-665-7120 |  |

## Language Institute

The Language Institute provides English language instruction to students, professionals, and other individuals whose first language is not English; enhances ESL students' ability to participate and integrate successfully in the American culture; and academically prepares students to pursue a degree at an American university. In order to meet the needs of the Rio Grande Valley, The Language Institute has instructional sites in the Edinburg campus and in the Brownsville campus.

| Language Institute |  |  |
| :--- | :--- | :--- |
| 1601 East Price Rd., Suite "E" | 1407 East Freddy Gonzalez Dr. |  |
| Resaca Village Plaza | CESS Bldg., Rm. 1.700 | li@utrgv.edu |
| Brownsville, TX 78521 | Edinburg, TX 78539 |  |
| Phone: 956-882-4178 | Phone: 956-665-2133 |  |

## The Learning Center

The goal of the UTRGV Learning Center (LC) is to assist students by promoting academic success at all levels from freshman core courses all the way through upper-level and graduate courses. Our tutors and Supplemental Instruction (SI) leaders are recommended and hand selected by our faculty based on their content knowledge as well as their ability to work with students who are at various levels of their academic career. The following academic support services are available for tutoring and SI: one-to-one, small group, study group, workshop, and online. The LC is made up of various units on both the Edinburg and Brownsville campus which consist of the same services. These services include all tutorial centers, Supplemental Instruction, embedded tutoring, Link2Success, and our student-athlete VICTORY center.

Our purpose is to help students work towards becoming independent learners. Everyone in The Learning Center works towards ensuring our students succeed by providing them with various support services in a welcoming friendly environment. What we enjoy the most is seeing the lightbulb in our students heads go off, that "AHA!" moment. To reach us for connections to any of these services in Edinburg please call 956-665-2585 or stop by our main office located in the Learning Center Building, Rm. 100. In Brownsville you may call 956-882-8208 or stop by our main office located in the Student Union, Rm. 2.10. Stop by at either location and let us know how we can help you reach your goals. Detailed information is also available on our website at www.utrgv.edu/tutoring.

| The Learning Center |  |  |
| :--- | :--- | :--- |
| One West University Blvd. | 1201 West University Dr. |  |
| Student Union, Rm. 2.10 | Learning Center Bldg., Rm. 100 | utrgv.edu/tutoring |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |
| Phone: 956-882-8208 | Phone: 956-665-2585 |  |

## Tutoring

Working in a small group, on an individual basis, or online, tutoring helps students improve their comprehension of coursework and develop successful academic skills and practices by providing them with support provided by professional staff and peer tutors. Tutoring is available in the subject areas of American Sign Language, biology, chemistry, French, history, math, philosophy, physics, political science, and Spanish. Writing tutoring across the disciplines is available in the Writing Center. All tutors are provided training throughout the semester on tutor pedagogy. Our Learning Centers' training program is certified by the College Reading and Learning Association (CRLA).

## Course-based Learning/Peer Learning

Supplemental Instruction (SI) offers weekly review sessions for students enrolled in historically difficult courses. These sessions, facilitated by trained SI Leaders, are opportunities for you to get together with students in your class to organize your material, compare notes, discuss important concepts, develop strategies for studying the subject, and be well prepared for taking your tests and exams.

Embedded tutors are available in some courses, such as developmental and the competency based BioMed courses. Embedded tutoring is oriented toward increasing student success in students' courses so that they may successfully transition into their subsequent courses and program of study in a timely manner. This is accomplished by providing embedded tutors to improve the faculty-student course ratio and improve student engagement during class time.

Link2Success (L2S) is an embedded academic support model that encourages active learning in a structured manner and involves mandatory attendance for all students below a predetermined cutoff. Unlike tutoring, L2S targets courses rather than students. L2S workshops are strategically paired with courses that have historically high failure and high student withdrawal rates. These courses include gateway courses and courses offered in a sequence. Therefore, L2S is available to all students from freshmen to seniors.

## Student-Athlete VICTORY Center

Academic support and general advisement for UTRGV student-athletes is coordinated through this unit. Study hall requirements, academic programming provided by various LC units, and activities related to college success are monitored in this unit with the support of other departments throughout campus.

## University Libraries

The University Libraries are the campus centers for resources that support the academic programs at

Students enrolled in cooperative programs must be registered in either of the cooperating institutions to have library privileges. These students can use UTRGV library services by obtaining a Texshare Card from their original institutions.

Detailed information about hours and services may be obtained through the Library Web site at www.utrgv.edu/library, or by calling 956-665-2005 (UTRGV Edinburg Campus) or 956-882-7205 (UTRGV Brownsville Campus).

| University Libraries |  |  |
| :--- | :--- | :--- |
| One West University Blvd. | 1201 West University Dr. |  |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |
| Phone: $956-882-7205$ | Phone: 956-665-2005 |  |

## Writing Center

The Writing Center (WC), located on the UTRGV Brownsville Campus in 3.206 of the University Library and on the UTRGV Edinburg Campus in 3.119 of the Student Academic Center, offers UTRGV students assistance with academic writing in all disciplines. Peer tutors, certified by the College Reading and Learning Association, assist students with their class writing assignments. Individual tutoring in writing may include the following: clarifying an assignment; assisting with the drafting process from ideas, notes and outlines; revising and editing an essay for effective organization, sentence structure and grammatical issues; creating appropriate voice and tone; identifying errors and methods for correction; assisting with all documentation styles; and assisting with incorporating source materials. In addition to offering on-site and online weekend writing tutoring, the WC provides computers for student drop-in use, and a resource area and meeting space for students needing tutoring to complete group projects.

| Writing Center |  |  |
| :--- | :--- | :--- |
| One West University Blvd. <br> University Library, Rm. 3.206 <br> Phone: 956-882-7065 | 1201 West University Dr. <br> Student Academic Center, Rm. 3.119 <br> Phone: 956-665-2538 | utrgv.edu/writingcenter |
|  |  |  |

## STUDENT SERVICES DEPARTMENTS

## Dean of Students

The role of the Dean of Students is to ensure that individual and collective student issues are properly addressed. Students are encouraged to have the most enriching college experience possible and to prepare themselves with the leadership skills for life during their student careers and beyond UTRGV. This can be accomplished by offering meaningful educational, social, cultural, wellness and leadership programs which encourage self-fulfilling goals achievement and improve self-esteem.

| Dean of Students |  |  |
| :--- | :--- | :--- |
| One West University Blvd. | 1201 West University Dr. | dos@utrgv.edu |
| Cortez Hall, Rm. 204 | University Center, Rm. 104 | utrgv.edu/dos |

Edinburg, TX 78539
Phone: 956-665-2260

## Child Development Center

The Child Development Center provides students, faculty, and staff with access to affordable child care and early education for their children in a secure and nurturing environment. Student parents are enabled to achieve their pursuit for academic and career success with confidence that their child is receiving quality childcare and education.

| Child Development Center |  |
| :--- | :--- |
| 800 West Van Week St. |  |
| Edinburg, TX 78539 |  |
| Phone: $956-665-2469$ |  |

## Counseling and Psychological Services (CAPS)

Counseling and Psychological Services (CaPS) is a center that provides free and confidential counseling services to address mental health concerns and to promote personal growth for currently enrolled UTRGV students. Counseling services are provided by either licensed mental health professionals or graduate-level interns under the supervision of a licensed counselor.

Students being seen for counseling may work on a wide variety of issues. Examples include: Stress, Family Problems, Depression, Sexual Assault, Anxiety, Abuse, Eating Disorders, Grief/Loss, Self-Esteem, Anger Management, Sexuality, Parenting, Divorce, Academic Difficulties, Harassment, Partner/Relationship Problems, Suicidal Ideation, Domestic Violence, Health Issues, Post-Traumatic Stress, Substance Abuse, and Obsessive-Compulsive Disorder. In some cases, such as with more severe or complex conditions, a student may be referred out for additional or more appropriate treatment options.

| Counseling and Psychological Services (CAPS) |  |  |
| :---: | :---: | :---: |
| One West University Blvd. <br> Cortez Hall, Rm. 237 <br> Brownsville, TX 78520 <br> Phone: 956-882-3896 | 1201 West University Dr. <br> University Center, Rm. 109 <br> Edinburg, TX 78539 <br> Phone: 956-665-2574 | counseling@utrgv.edu utrgv.edu/counseling |

## UTRGV Collegiate Recovery Program

The Collegiate Recovery Program are services to help students work through the process of recovery from addictive behaviors such as substance abuse. It is an opportunity to find support by connecting with fellow students who are also going through recovery. It is also a way to connect with professional help if needed. For more information, call 956-665-2674, or call Counseling and Psychological Services (UTRGV Edinburg Campus: 956-665-2574; UTRGV Brownsville Campus: 956-882-3896).

## Health Services

The clinic offers the same types of services available from the student's family doctor and much more. Services include general medical care as well as specialty clinics in women's wellness, skin care and STD screening. Routine immunizations and tuberculosis (TB) testing are also available. Office visits are free of charge as are most educational services. Health Services offers low-cost charges for medicines, supplies and any needed lab tests. The Class D pharmacy can fill most prescriptions written in the clinic and carries a selection of over-the-counter items. Health Services is accredited by the Accreditation Association for Ambulatory Health Care (AAAHC). Students can use our online portal to make appointments and fill out required forms. Go to https://onlinestudenthealth.utrgv.edu/osh. Log-in with UTRGV username and password and select options on the left side of the screen.

| Health Services |  |  |
| :---: | :---: | :---: |
| One West University Blvd. <br> Cortez Hall, Rm. 237 <br> Phone: 956-882-3896 | 613 North Sugar Rd. <br> Edinburg, TX 78539 <br> Phone: 956-665-2511 | healthservices@utrgv.edu utrgv.edu/healthservices |

## Services Offered

- Eligibility Payments: Registered students pay a Medical Service Fee each semester, which entitles them to a wide variety of Health Services. With a validated UTRGV ID, they are entitled to office visits to see a health care provider as many times per semester as they need with no office visit charge. There are charges for many services and procedures to diagnose and treat illnesses and injuries, such as for laboratory and pharmacy services, but these charges are much lower than those for comparable services provided elsewhere. Services rendered may be paid by cash, check, and most credit cards. Payment arrangements are available. General Medicine: Students with common medical problems are diagnosed and treated on a limited walk-in basis; however, appointments are preferred and necessary for students requesting elective procedures. Referrals to outside providers are made when necessary.
- Physical Exams: UTRGV students requiring a physical exam prior to admittance to a school program can have a physical exam done at Health Services for a nominal fee. Call Health Services to schedule an appointment.
- Pharmacy: A fully licensed Class D pharmacy is conveniently available on the Edinburg campus. The pharmacy carries both prescription and over-the-counter medications. The costs of medications are greatly reduced compared to retail prices.
- Laboratory: A full-service, economical lab is equipped to do routine procedures as well as specimen collections for more sophisticated procedures that must be sent to a reference lab for testing.
- Women Wellness Clinics: These services include Pap smears, family planning education and counseling, treatment of sexually transmitted diseases, pregnancy testing and other women's health issues.
- HIV Testing: Free confidential HIV testing and counseling is available weekly. Call for scheduled days.
- Other Services: Health education resources, nutritional counseling, vision screenings, and weight and blood pressure screenings are also available.


## Important Information about Bacterial Meningitis

The 77th Texas Legislature (2001) required all public institutions of higher education in Texas to notify all new students about bacterial meningitis (Chapter 51, Education Code, Section 51.9191; Chapter 38, Education Code, Section 38.0025).

This information is being provided to all new college students in the state of Texas. Bacterial meningitis is a serious, potentially deadly disease that can progress extremely fast, so take utmost caution. It is an inflammation of the membranes that surround the brain and spinal cord. The bacteria that cause meningitis can also infect the blood. This disease strikes about 3,000 Americans each year, including 100-125 on college campuses, leading to 5-15 deaths among college students every year. There is a treatment, but those who survive may develop severe health problems or disabilities.

## WHAT ARE THE SYMPTOMS?

- High fever
- Severe headache
- Rash or purple patches on skin
- Vomiting
- Light sensitivity
- Stiff neck
- Confusion and sleepiness
- Nausea
- Lethargy
- Seizures

There may be a rash of tiny, red-purple spots caused by bleeding under the skin. These can occur anywhere on the body. The more symptoms, the higher the risk. When these symptoms appear seek immediate medical attention.

## HOW IS BACTERIAL MENINGITIS DIAGNOSED?

Diagnosis is made by a medical provider and is usually based on a combination of clinical symptoms and laboratory results from spinal fluid and blood tests. Early diagnosis and treatment can greatly improve the likelihood of recovery.

## HOW IS IT TRANSMITTED?

The disease is transmitted when people exchange saliva (such as by kissing, or by sharing drinking containers, utensils, cigarettes, toothbrushes, etc.) or come in contact with respiratory or throat secretions.

HOW DO YOU INCREASE YOUR RISK OF GETTING BACTERIAL MENINGITIS?

- Exposure to saliva by sharing cigarettes, water bottles, eating utensils, food, kissing, etc.
- Living in close conditions (such as sharing a room/suite in a dorm or group home).


## WHAT ARE THE POSSIBLE CONSEQUENCES OF THE DISEASE?

- Death (in 8 to 24 hours from perfectly well to dead)
- Permanent brain damage
- Kidney failure
- Learning disability
- Hearing loss, blindness

CAN THE DISEASE BE TREATED?
Antibiotic treatment, if received early, can save lives and chances of recovery are increased. However, permanent disability or death can still occur.

Vaccinations are available and should be considered for:

- Those living in close quarters
- College students 25 years old or younger

Vaccinations are effective against 4 of the 5 most common bacterial types that cause $70 \%$ of the disease in the U.S. (but does not protect against all types of meningitis). Vaccinations take 7-10 days to become effective, with protection lasting 3-5 years. The cost of vaccine varies, so check with your health care provider. Vaccination is very safe. Most common side effects are redness and minor pain at injection site for up to two days. Contact Health Services at 956-665-2511 or 956-882-3896 for details about vaccination.

## HOW CAN I FIND OUT MORE INFORMATION?

- Contact your own health care provider.
- Contact Health Services at: 613 North Sugar Road, Edinburg, TX 78539 or Health Services at Cortez Hall 237, Brownsville, TX 78520.
- Contact the regional Texas Department of Health office at: Health Service Region 11: Harlingen, 601 W. Sesame Drive; Harlingen, TX 78550, Mail Code 1907; Phone: 956-423-0130; Fax: 956-444-3298
- Contact websites: CDC Disease Information www.cdc.gov/ncidod/dbmd/diseaseinfo/American or College Health Association www.acha.org/


## IMMUNIZATION REQUIREMENT FOR STUDENTS

Senate Bill 62 (SB62) was passed during the 2013 legislative session and signed into law. For incoming students to UTRGV, this new law, effective January 1, 2014, requires that all entering students 21 years of age and younger attending an institution of higher education in the state of Texas, including transfer students, show evidence of having received the Meningococcal Meningitis Vaccination no more than 5 years and no less than 10 days prior to the start of the semester or 10 days prior to the student taking up residence in on-campus housing. The law also allows for exemptions on medical grounds or reasons of conscience, including religious belief.

Students must return the Meningococcal Meningitis Vaccination Requirement Form along with one of the following documents:

- A "Bacterial Meningitis Immunization Record" signed by a health practitioner evidencing that the student has been vaccinated against bacterial meningitis or any other official state or local immunization record. Confirmation of the MCV4 (Menactra or Menveo) vaccine will satisfy as the requirement. The MPSV4 (Menomune) vaccination may be accepted if administered or boosted within the past 5 years. Vaccinations must be administered no fewer than 10 days prior to the first day of the semester for which the student is enrolling.
- A "Refusal of Immunization for Medical Reasons" signed by a physician who is licensed and registered to practice medicine in the United States which states the physician's opinion that the required vaccination would be injurious to the health and wellbeing of the student. A "Texas Department of State Health Services Conscientious Exemption" signed by the student stating that the student has declined the vaccination for reasons of conscience, including religious belief.

Students who fail to satisfy this requirement will not be able to attend the university. Failure to submit documentation of the required vaccination does not alleviate the student's responsibility under any contractual relationship with the university. The Meningococcal Meningitis Vaccination Requirement Form and documentation can be mailed, faxed, emailed or hand delivered to the Office of the Registrar. The Immunization waiver received from the Texas Department of State Health Services must be mailed or hand delivered.

For questions about the vaccination requirement, please contact:

## Office of Student Enrollment

One West University Blvd.
The Tower, Main, Rm. 1.101
Brownsville, TX 78520

1201 West University Dr.
Visitors Center, Rm. 1.113
Edinburg, TX 78539

1. The information that a student has a communicable disease shall be confirmed when the student brings the information to the attention of The University of TexasRio Grande Valley and the student confirms the information when asked. If the university president or designee has reasonable cause to believe that a student has a communicable disease, the student may be asked to submit to a college-funded medical examination (a) to determine whether the student's physical condition interferes with participation in an educational program or activity, or poses a threat to self or others or (b) a test or medical examination is necessary to manage accidental exposure to blood or other bodily fluids or airborne pathogens (but only when the test or examination is conducted in accordance with the Communicable Disease Prevention and

Control Act (Article 4419(b)-1, Section 902(d) of Vernon's Annotated Civil Statutes of the State of Texas).
2. The results of such examination shall be kept confidential in accordance with the Communicable Disease Prevention and Control Act, (Article 4419(b)-1, Vernon's Annotated Civil Statutes of the State of Texas), except that the president or designee shall be informed of restrictions and necessary accommodations. Health care and safety personnel may also be informed to the extent appropriate if the condition is one that might require emergency treatment.

## IMMUNIZATIONS

Immunization is required for admission to certain programs of study at The University of Texas Rio Grande Valley unless the student submits to the admitting official at least one (1) of the following:

- An affidavit or a certificate signed by the student's physician (M.D. or D.O.) who is duly registered and licensed to practice medicine in the United States and who has examined the student.
- An affidavit signed by the student or, if a minor, the student's parent or guardian stating that the student declines immunization for reasons of conscience, including a religious belief.
- Proof that he or she is currently up to date with required immunizations.
- Serological proof of immunity to specific diseases

The Texas Board of Health immunization requirements apply to all students enrolled in health-related courses that will involve direct patient contact in medical or dental care facilities and to veterinary medical students whose course work involves direct contact with animals or animal remains as required by the Texas Board of Health, Education Code 51.933; 25 TAC 97.64. The following immunizations are required for these students:

- Tetanus/diphtheria: One dose of vaccine within the past 10 years.
- Hepatitis B: At least two doses of the three-dose series. The third dose must be received before the student completes the first professional semester. Students may also show serologic confirmation of immunity to the hepatitis B virus via appropriate documentation.
- Varicella: One dose, for students who received this vaccine prior to 13 years of age, or two doses, for students who were not vaccinated before their 13th birthday. A history of varicella illness (chicken pox), validated by serologic confirmation of immunity, is acceptable in lieu of vaccination.

Texas Administrative Code Section 21.610 et seq.: Information to students consistent with regulations newly enacted by the Texas Higher Education Coordinating Board pertaining to immunization requirements for students who reside or who have been approved to reside in campus housing.

## Housing and Residence Life

The Office of Housing and Residence Life provides convenient and affordable housing to students attending the university. Living on campus is a great way for you to get connected, meet friends, and be involved. UTRGV Housing and Residence Life offers a wide array of housing options designed to meet your needs and provides an environment that supports academic growth and community respect by offering opportunities for leadership, involvement, and connections for residents that live it up on campus. Students living on campus will also be able to participate in social and educational events
hosted by the Residence Life staff. UTRGV Residence Life will offer student housing at Brownsville, TX featuring apartment style living at Casa Bella. At Edinburg, TX we have three Residence Halls, Unity, Heritage and Troxel and The Village Apartments.

Residence halls provide an opportunity for you to meet people and get involved in a close-knit community that combines all the comforts of home with all the excitement of the traditional college experience.

Apartments provide an opportunity for you to live a more autonomous lifestyle with the opportunity to still be involved in campus life, stay connected to campus resources and the apartment community while living only minutes from your classes. Residence Life offers both traditional residence hall and apartment style housing that is located in close proximity to university resources such as the University Library, Wellness Recreation Sports Complex, and classrooms. Students who live on campus will also have a meal plan that will provide meals at the University Dining Hall or other on-campus venues through the use of Dining Dollars.

Scholarships, grants and loans are available through Financial Aid department to assist you in your housing cost. Our office offers affordable pricing and payment plans with no credit checks to meet your financial needs. Our contracts work with the academic year and semesters so that you are only in housing while attending classes.

Steps to apply:

1. Visit my.utrgv.edu and Log in with your UTRGV Credentials.
2. Click on the Student Housing Icon which will reroute you to the StarRez Housing Portal
3. Click on the Application Link and select the term Fall 2015-Spring 2016.
4. Have your credit card ready to pay online the $\$ 100$ refundable deposit and $\$ 50$ application fee to advance to contract page.
5. Complete all 15 sections and submit application.
6. Wait for email from home@utrgv.edu on room assignments and further instructions.

If you have trouble with the Residence Life Application Portal or if you are an individual with disabilities who requires assistance or special accommodations, please contact 956-665-3439 or email home@utgrv.edu.

The Office of Housing and Residence Life is entitled to check the all applicants' criminal history record and will notify the student if this information is used to deny them housing as per Texas Government Code, Section 411.0945. All policies and procedures related to the Office of Housing and Residence Life can be referenced in the Resident Handbook. The Resident Handbook can be downloaded from our website at www.utrgv.edu/housing or you can pick up a copy at any of our offices.

| Housing and Residence Life |  |  |
| :--- | :--- | :--- |
| 2651 FJRM Ave. | 1201 West University Dr. |  |
| Casa Bella | University Center, Rm. 305 | home@utrgv.edu <br> utrgv.edu/housing |

Brownsville, TX 78520
Phone: 956-882-7191

University Center, Rm. 305
Edinburg, TX 78539
Phone: 956-665-3439

## Student Accessibility Services

Student Accessibility Services office exists to ensure that students with disabilities are able to participate in the full range of college experiences. The goal is to promote optimal development and achievement in all students while fostering independence and self-advocacy. In addition, the staff works to promote an environment that is free of physical and attitudinal barriers.

Students with disabilities (including temporary disabilities) are encouraged to contact Student Accessibility Services for a confidential discussion of their individual needs for academic accommodation. It is the policy of UTRGV to provide flexible and individualized accommodation to students with documented disabilities that may affect their ability to fully participate in course activities or to meet course requirements. To receive accommodation services, students must be registered with the office.

| Student Accessibility Services |  |  |
| :--- | :--- | ---: |
| One West University Blvd. | 1201 West University Dr. | University Center, Rm. 108 |
| Cortez Hall, Rm. 129 | Edinburg, TX 78539 | utrgv.edu/accessibility |
| Brownsville, TX 78520 | Phone: $956-665-7005$ | Video Phone: |
| Phone: $956-882-7374$ |  | $956-683-6003$ or |
|  |  | $1-877-570-7645$ |

## Office for Student Involvement

Student Involvement is the heart of campus life at UTRGV. As a Vaquero, you can participate in events, from leadership to community service, on any day of the week or network with fellow students in one of nearly 300 student organizations. You can join our Fraternity and Sorority Life community, develop lifelong friendships or build a strong leadership foundation through various leadership development programs and opportunities. Explore issues of social justice and diversity through our intercultural program offerings, serve the community at one of our many campus-wide service events or be part of the campus action by joining Student Media. Take full advantage of your Vaquero experience and all that Student Involvement has to offer!

Visit www.utrgv.edu/vlink to get involved and begin creating your very own Involvement Record. Corq is a mobile app for V-Link to keep you up to date and involved in UTRGV campus life. You can share your experiences and create memories with new friends through this app available at Apple Store or Google Play.

| Office for Student Involvement |  |  |
| :--- | :--- | :--- |
| One West University Blvd. | 1201 West University Dr. |  |
| Student Union, Rm. 1.28 | University Center, Rm. 205 | involvement@utrgv.edu <br> utrgv.edu/involvement |
| Brownsville, TX 78520 | Edinburg, TX 78539 |  |
| Phone: 956-882-5111 | Phone: 956-665-2660 |  |

## Student Rights and Responsibilities

The Student Rights and Responsibilities office educates students of their rights and responsibilities as community members, to help them understand the balance between individual and community rights, and to foster a community atmosphere conducive to academic success. Our goal is to create a learning environment that ensures a fair and objective process that upholds behavioral and academic standards
expressed in the student code of conduct. Staff members are also trained to provide students with assistance in filing grievances.

Vaqueros Report It! (www.utrgv.edu/ReportIt) is an online form that can be used to report any behaviors of concern that occur involving UTRGV students, whether these behaviors occur inside or outside of the classroom setting. Reportable behaviors may include Student Code of Conduct concerns, Academic Integrity violations, or concerns about student wellbeing. In addition this form can be used for students to report complaints about UTRGV faculty, staff or departments.

## Student Rights and Responsibilities

One West University Blvd.
Cortez Hall, Rm. 205
Brownsville, TX 78520
Phone: 956-882-5141

1201 West University Dr.
University Center, Rm. 315
Edinburg, TX 78539
Phone: 956-665-5375

## Student Union

The Student Union is the community center of the university that serves students, faculty, staff, alumni, and guests. The building hosts numerous campus events and provides services and conveniences for students.

The Student Union building in Brownsville contains lounge areas, patios and a Food Court featuring SubConnection and The Grille. The Gran Salon Ballroom is also located on the 2nd floor. For students looking to get involved, the Office for Student Involvement is located on the 1st floor.

On the UTRGV Edinburg Campus, the Food Court offers Tacos Ponchos, Su Café (Starbucks coffee), Chick-fil-A, Mein Bowl, Slice of Life, and SubConnection. The Information Desk is available to provide assistance to students who need information and also to borrow magazines, board games or other equipment. Billiards, air hockey and video games are offered in the $2^{\text {nd }}$ floor Game Room. The building offers various amenities including an ATM machine, wireless printing, cell phone charging station, a convenience store, TV lounge areas and study rooms. Meeting rooms are available for all registered student organizations and departments.

| Student Union |  |  |
| :---: | :---: | :---: |
| One West University Blvd. Student Union Brownsville, TX 78520 | 1201 West University Dr. <br> Student Union <br> Edinburg, TX 78539 | studentunion@utrgv.edu Phone: 956-665-7989 |

## University Recreation

The University Recreation Department is committed to positively engaging every member of the university community and supporting academic productivity by promoting active healthy lifestyles through dynamic programs that provide holistic personal growth. Programs offered include Intramurals, Club Sports, Group Exercise, Personal Training, Fitness Assessments, Aquatics Programs, Climbing Wall Programs, Wellness Programming, and Open Recreation.

| University Recreation |  |  |
| :--- | :--- | :--- |
| One West University Blvd. | 615 North Sugar Rd. |  |

Casa Bella 2651 FJRM Ave
Brownsville, TX 78520
Phone: 956-882-7176

Edinburg, TX 78539
Phone: 956-665-7808

## UTRGV Edinburg Campus

The Wellness and Recreational Sports Complex (WRSC) is a state-of-the-art facility that opened in August 2007, and includes the following facility spaces: main gym, multipurpose gym, racquetball courts, weight room, cardio theatre, dance studios, climbing wall, indoor track (1/10th mile), classroom/ audiovisual theater, relaxation lounges, wellness energy zone, and a fitness assessment room. The outdoor area includes a swimming pool, hot tub, basketball courts, beach volleyball courts, tennis courts, palapa/barbecue area, softball field, and intramural sports fields. Students also have access to the HPE-1 indoor swimming pool during rec-swim hours.

## UTRGV Brownsville Campus

The Recreation, Education, and Kinesiology Center (REK Center) is a state-of-the-art facility that opened in August 2008. The facility is owned and operated by Texas Southmost College, but is accessible to all UTRGV students. The facility includes the following facility spaces: main gym, racquetball courts, weight room, dance studio, and swimming pool. Students also have access to the fitness center at Casa Bella, and programmed activities that take place at the Soccer Complex and Garza Gym.

## Veterans Service Center (VSC)

The Veterans Service Center (VSC) at The University of Texas Rio Grande Valley (UTRGV) is dedicated to serving student veterans, guardsmen, reservist and their dependents. The VSC serves as a liaison between students receiving military educational benefits and the Department of Veteran Affairs and assists students in the pursuit of their educational goals.

The VSC assists students in certifying education benefits, advocating for services, developing project to unite the university with our local community, provides counseling services specifically for veterans and promotes student involvement through the Student Veterans of American National Organization. We are proud to serve those who have served our country and are committed to helping military students and their dependents start or continue their education. Our ultimate goal at The University of Texas Rio Grande Valley is to provide an academically challenging environment to help you succeed in the next phase of your professional life.

| Veterans Service Center (VSC) |  |  |
| :--- | :--- | ---: |
| One West University Blvd. <br> Cortez Hall, Rm. 224 | University Center, Rm. 113 | Veteranservices@utrgv.edu |
| utrgv.edu/veterans |  |  |

Brownsville, TX 78520
Phone: 956-882-8980

Edinburg, TX 78539
Phone: 956-665-7934

## STUDENT RIGHTS AND RESPONSIBILITIES

## Purchase of Textbooks

The University of Texas Rio Grande Valley advises students that they are not under any obligation to purchase a textbook from a university-affiliated bookstore. The same textbook may also be available from an independent retailer including an online retailer. (Texas Education Code, Section 51.9705; 19 TAC 4.215). Information regarding textbooks and supplemental materials for specific courses including the International Standard Book Number and retail price information is included in the course schedule which can be accessed through my.utrgv.edu.

## Student Travel

The University of Texas Rio Grande Valley has set forth University rules and procedures regarding student and pre-college University program participant travel and to comply with The University of Texas System policy and State Law (Texas Education Code, Section §51.949) relating to student travel. University students may travel off campus when representing a student organization, University department or engaging in intercollegiate competition or academic activities. Examples of student travel include, but are not limited to, class field trips and assignments; attendance at scholarly or professional conferences; University-funded student organization travel; class trips for educational or cultural enrichment; athletic, student publication, dramatic, music or forensic competition or performances; student leadership conferences; placement forums; and graduate school visits. All student travel must be registered with and approved by the dean of students or his or her designee.

For more information regarding student travel, please refer to the UTRGV Handbook of Operating Procedures.

## Vehicle Registration and Parking Permits

All students, whether full- or part-time, who operate a motor vehicle in the campus area must register the vehicle with the University Parking and Transportation Department. A hangtag permit or decal to be placed on the vehicle indicating the permit number and parking privileges will be provided. The University of Texas Rio Grande Valley enforces all Texas Vehicle inspection codes (Texas Education Code, Sec. 51.207). All vehicles that park on the campus premises must have current inspection stickers and a current parking permit properly displayed. Parking and Traffic rules and regulations are available at the Parking and Transportation Department or at www.utrgv.edu/pts.

Note: A disabled veteran with a disabled veteran license plate may park with either a free University permit or without a University permit (as determined by University parking regulations) in a disabled parking space for an unlimited period of time.

## Annual Security and Fire Safety Report

The Annual Security and Fire Safety Report (previously known as the Student Right to Know and Campus Security Act) contains critical information you should familiarize yourself with about campus safety and security. Described in detail is the University Police Department (UPD): law enforcement arrest authority; crime reporting policies, procedures and responses; working relationships with state and local
police; encouragement of prompt reporting of crimes; and access control procedures. Additionally, there is information concerning drug and alcohol abuse prevention, sexual assault information, weapons on campus, and policies on missing students who reside in on-campus housing and fire safety information. The Annual Security and Fire Safety Report contains data about crime statistics for the three previous calendar years detailing the reported crimes that occurred on the UTRGV Main Campus, UTRGV McAllen Teaching Site, UTRGV at Starr County Facility, and the support facilities to include property owned or controlled by The University of Texas Rio Grande Valley and on public property or property immediately adjacent to and accessible from the campuses.

This information is required by the Jeanne Clery Disclosure of Campus Security Policy and Crime Statistics Act and the Higher Education Reauthorization Act and is provided by The University Police Department. The Annual Security and Fire Safety Report is available on the web at www.utrgv.edu/police/clery or a hard copy will be provided if you contact the Empowerment Zone at 956-665-5375.

During emergency situations the University Police Department can be reached by calling 911 or dialing "HELP" (ext. 4357) from any University phone. For non-emergencies the police can be reached by dialing 956-665-7151. The University Police Department is located at 501 N. Sugar Road or they can be reached at police@utrgv.edu. Crimes reported on the The University of Texas Rio Grande Valley campus can be accessed at the following web address: www.utrgv.edu/police/clery.

Any law enforcement information provided by state law enforcement agencies concerning registered sex offenders may be obtained from the University Police Department at 956-665-7151.

## Annual Fire Safety Report

The UTRGV's Department of Environmental Health and Safety (DEHS) is charged with oversight of the Fire Safety Program which ensures compliance with National Fire Protection Association (NFPA) mandates and Best Management Practices associated with fire and facilities safety in an institutional environment. All faculty, staff and students are required to comply with these specific mandates. In accordance with the HEOA, UTRGV publishes an Annual Fire Safety Report, which outlines key information relating to the fire safety related systems associated with UTRGV campus housing. Included in the report is a description of the fire safety system for each on-campus student housing facility, the number of fire drills held the previous year, UTRGV's policies or rules on portable electrical appliances, smoking, and open flames, procedures for student housing evacuation, policies for fire safety education and training programs, reporting mechanisms in the event of a fire, and plans for future improvements in fire safety. Also included in this report are Fire Safety Statistics, which outline the number of fires and the cause of each fire, the number of injuries or deaths, and the value of any property damage. In addition to the Annual Fire Safety Report, a Fire Log is maintained by the

DEHS which lists any fires that occurred in an on campus housing facility. For each fire, information regarding the location of the fire, the nature of the fire, the date the fire occurred, and the time of day the fire occurred is included.

A hard copy of the Annual Fire Safety Report and the Fire Log is available by visiting the DEHS offices, located at Lamar Bldg. 1.202, 1201 West University Dr., Edinburg, Texas, or it can be requested by contacting the Department of Environmental Health and Safety at 956-665-3690. In addition, a copy of the report can be accessed at www.utrgv.edu/police/clery.

## Making a False Alarm or Report

Pursuant to section 42.06 of the Texas Penal Code, it is a state jail felony to report a present, past, or future bombing, fire, offense, or other emergency that a person knows to be false relating to an institution of higher education.

## Important Phone Numbers

| Department | UTRGV Brownsville <br> Campus | UTRGV Edinburg <br> Campus |
| :--- | :--- | :--- |
| University Police-Emergency | $956-882-2222$ | $956-\mathrm{HELP}$ (4357) |
| University Police-Non-Emergency | $956-882-8232$ | $956-665-7151$ |
| Dean of Students | $956-882-5141$ | $956-665-2260$ |
| Counseling and Psychological Services | $956-882-3896$ | $956-665-2574$ |
| Health Services | $956-882-7643$ | $956-665-2511$ |
| Student Rights and Responsibilities | $956-882-5141$ | $956-665-5375$ |
| Accessibility Services | $956-882-7374$ | $956-665-7005$ |
| Title IX/Sexual Misconduct | $956-882-5141$ | $956-665-5375$ |
| Substance Abuse/Recovery Services | $956-882-3896$ | $956-665-2674$ |

## Higher Education Opportunity Act (HEOA)

The Higher Education Opportunity Act (HEOA) specifies The University of Texas Rio Grande Valley requirements for hate crime reporting, emergency response and evacuation procedures, as well as missing student notification and fire safety related issues for UTRGV's on campus housing facilities.

## Emergency Response and Evacuation

The University of Texas Police Department, in conjunction with the Department of Environmental Health and Safety, is charged with the Emergency Response Program on the UTRGV campus. The program's primary goal is to ensure that, in the event of an emergency, the UTRGV responds in a manner that protects the lives and health of the UTRGV community and any visitors; protects university facilities, property and equipment; and provides for the restoration of university facilities, functions and services. It is vital that all faculty, staff and students be familiar with emergency procedures associated with a manmade or natural disaster that may occur on campus. In accordance with the HEOA, UTRGV has developed a policy statement that outlines Emergency Response and Evacuation Procedures utilized to immediately notify the campus community upon the confirmation of a significant emergency or dangerous situation. The procedures include a list of organizations responsible for carrying out the emergency process, a description of the process the institution will use to determine the extent of the emergency, who to notify, the content of the notification, and the mechanisms used to initiate the notification system. In addition, procedures are also included for disseminating the emergency information to the larger community.

A hard copy of the Emergency Response and Evacuation Procedures are available by visiting the DEHS offices, located at Lamar Bldg. 1.202, 1201 West University Dr., Edinburg, TX, or it can be requested by contacting the Department of Environmental Health and Safety at 956-665-3690. In addition, the procedures can be accessed via the Department of Environmental Health and Safety.

## Gang-Free Zones

Premises owned, rented or leased by The University of Texas Rio Grande Valley and areas within 1,000 feet of the premises are "gang-free" zones. Certain criminal offenses, including those involving gangrelated crimes, will be enhanced to the next highest category of offense if committed in a gang-free zone by an individual 17 years or older. See Texas Penal Code, Section 71.028.

## Family Educational Rights and Privacy Act (FERPA)

The Family Educational Rights and Privacy Act (FERPA), 20 U.S.C. §1232g, and the Texas Public Information Act, Texas Government Code $\S 552.001$ et seq., are respectively federal and state laws that provide for the review and disclosure of student educational records. In accordance with these laws, The University of Texas Rio Grande Valley has adopted the following policy. Individuals are informed of their rights under these laws through this policy, which is included in the UTRGV Handbook of Operating Procedures and this catalog.

The University 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, except as follows:

- To appropriate University officials who require access to educational records in order to perform their legitimate educational duties.
- To officials of other schools in which a student seeks or intends to enroll, is enrolled in or receives services from, upon request of these officials.
- To federal, state or local officials or agencies authorized by law.
- In connection with a student's application for, or receipt of, financial aid.
- 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 for which it was obtained.
- To the parents of a dependent student as defined in section 152 of the Internal Revenue Code of 1954.
- 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.
- In an emergency situation if the information is necessary to protect the health or safety of students or other persons.
- To an alleged victim of any crime of violence, the results of the alleged perpetrators disciplinary proceeding may be released.

Additionally, any law enforcement information provided by state law enforcement agencies concerning registered sex offenders may be released from the The University Police Department. The police department can be contacted at 956-665-7151. The University will release information in student education records to appropriate University or University of Texas System officials as indicated in no. 1 above when there is a legitimate educational interest. A school official is a person employed by the university in an administrative, supervisory, academic or research, or support staff position (including law enforcement unit personnel and health staff); a person or company with whom the university has contracted (such as an attorney, auditor or collection agent); a person serving on The University of Texas System Board of Regents; or a student serving on an official committee or assisting another school
official in performing his or her tasks. A school official has a legitimate educational interest if the official needs to review an educational record in order to fulfill his or her professional responsibility. Upon request, the university discloses education records without consent to officials of another school in which a student seeks or intends to enroll. Where required by regulations, a record of requests for disclosure and such disclosure of personally identifiable information from student education records shall be maintained by the custodian of the public record for each student and will also be made available for inspection pursuant to this policy. If the university discovers that a third party who has received student records from the university has released or failed to destroy such records in violation of this policy, the university will determine any future access by that third party and may take further appropriate action. 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, the university may release directory information, which shall include:

- Name, address, telephone number
- Date and place of birth
- Major field of study
- Participation in officially recognized activities and sports
- Dates of attendance
- Most recent previous educational institutions attended
Students may withhold directory information by notifying the Office of the Registrar in writing. The institution will honor requests for nondisclosure until the student grants permission in writing, to release the information.


## Access to File

Upon written request, the university shall provide a student with access to his or her educational records. The vice president for business affairs at The University of Texas Rio Grande Valley 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 Office of the Executive Vice President for Business Affairs. This list includes:

Academic Records

| Department | UTRGV Brownsville Campus | UTRGV Edinburg Campus |
| :--- | :--- | :--- |
| Office of Undergraduate Admissions | Main, Rm. 1.100 | SSB, 1st floor |
| Office of the Registrar | Main, Rm. 1.100 | SSB, 1 floor |
| Graduate College | SABH, Rm. 1.202 | MASS, Rm. 1.158 |
| Student Affairs/Student Services <br> Records | Cortez Hall, Rm. 206 | STHC, Rm. 1.105 |


| Department | UTRGV Brownsville Campus | UTRGV Edinburg Campus |
| :--- | :--- | :--- |
| Counseling and Psychological Services | Cortez Hall, Rm. 237 | UC, Rm. 109 |
| Learning Center: Executive Director | Student Union, Rm. 2.10 | UC, Rm. 104 |
| Dean of Students | Cortez Hall, Rm. 204 | UC, Rm. 104 |
| Residence Life | Casa Bella | UC, Rm. 315 |
| Career Center | Cortez Hall, Rm. 129 | SSB, Rm. 2.101 |

## Educational Records do not include:

- Financial records of the student's parents or guardian.
- Confidential letters of recommendations that were placed in the educational records of a student prior to January 1, 1975.
- Records of instructional, administrative and educational personnel that are kept in the sole possession of the maker and are not accessible or revealed to any other individual.
- Records of law enforcement units.
- Medical and psychological records.
- Records that only contain information about an individual built or acquired by the university 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 educational records contain information that is inaccurate or misleading, or is otherwise in violation of their privacy or their rights, may discuss their problems informally with the department that generated the record in dispute. If an agreement is reached with respect to the student's request, the appropriate records will be amended. If an agreement is not reached, the student will be notified within a reasonable period of time that the records will not be amended, and he or she will be informed by the head of that department of his or her right to a formal hearing.

A student's requests for a formal hearing must be made in writing to the vice president for business affairs who, within a reasonable period of time after receiving such requests, will inform the student 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 students expense. The hearing officer who will adjudicate such challenges will be appointed by the vice president for business affairs in non-academic matters and by the provost/vice president for academic affairs in academic matters.

Decisions of the hearing officer 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 on 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 university.

## Copies

Students may access their academic records using ASSIST. Furthermore, students may have copies of documents included in their educational records and this policy. These copies will be made at the students expense at rates authorized in the Texas Public Information Act. (There is no charge for student transcripts.) Official copies of academic records or transcripts will not be released for students who have a delinquent financial obligation or financial "hold" at the university.

## 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.C. 20202-4605.

## Drug and Alcohol Policy

The University of Texas Rio Grande Valley is a drug-free school and complies with the Drug Free Workplace Act of 1990. The Drug Free School and Communities Act of 1989 requires institutions of higher education to adopt and implement programs to prevent the unlawful possession, use, or distribution of illicit drugs and alcohol. Information concerning these programs must be distributed to students annually. For information regarding these policies please refer to the following: Drug Free School and Communities Act provided by the Dean of Students at www.utrgv.edu/dos.

UTRGV is committed to maintaining a safe and healthy environment for the campus community. Alcohol and other drugs should not interfere with the university's educational mission. All UTRGV students, faculty members, staff members, administrators and visitors are subject to local state and federal laws regarding the unlawful possession, distribution, or use of alcohol or illegal drugs.

The following university policies can be found in the UTRGV Handbook of Operating Procedures. The possession, transportation, and/or consumption of alcohol by individuals less than 21 years of age is strictly prohibited. University police officers enforce laws regulating the use of alcoholic beverages and underage drinking with court appearance citations, referral to the Office of Student Rights and Responsibilities and/or arrest. Alcoholic beverages may not be consumed or possessed in public areas of the university. Additional policies regarding alcohol apply at campus housing areas. If a student is found responsible for violating the alcohol policies, sanctions range from educational programs to expulsion. In addition, according to the UTRGV Student Code of Conduct the use, manufacture, possession, sale, or distribution on the campus of the sub-stances defined and regulated under Chapters 481, 484 and 485 of the Texas Health and Safety Code, except as may be allowed by the provisions of such articles. If a student is found responsible of the illegal use, possession, or sale of a drug or narcotic on campus, the minimum penalty shall be suspension from the institution for a specified period of time; and/or suspension of rights and privileges.

## Hazing

Hazing in state educational institutions is prohibited by both state law (Sections 51.936 \& 37.151 et seq., Texas Education Code) and by the Regents' Rules and Regulations (Rule 50101). Individuals or organizations engaging in hazing could be subject to fines and charged with criminal offenses. Additionally, the law does not affect or in any way restrict the right of the university to enforce its own rules against hazing.

## Individuals

A person commits an offense if the person: engages in hazing; solicits, encourages, directs, aids or attempts to aid another engaging in hazing; Recklessly permits hazing to occur; or 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 dean of students or other appropriate official of the institution.

## Organizations

An organization commits an offense if the organization condones or encourages hazing or if an officer or any combination of members, pledges, or alumni of the organization commits or assists in the commission of hazing.

## 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 or safety of 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:

- Any type of physical brutality, such as whipping, beating, striking, branding, electronic shocking, placing of a harmful substance on the body, or similar activity.
- Any type of physical activity, such as sleep deprivation, exposure to the elements, confinement in a small space, calisthenics, or other activity that subject the student to unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.
- Any activity involving the consumption of a food, liquid, alcoholic beverage, liquor, drug or other substance that subjects the student to an unreasonable risk of harm or that adversely affects the mental or physical health or safety of the student.
- Any activity that intimidates or threatens the student with ostracism, that subjects the student to extreme mental stress, shame or humiliation, 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.
- Any activity that induces, causes, or requires the student to perform a duty or task that involves a violation of the Penal Code.

The fact that a person consented to or acquiesced in a hazing activity is not a defense to prosecution. The University of Texas System Board of Regents' Rules and Regulations, Rule 50101, Sec. 2.8 provides that, "Any student who, acting singly or in concert with others, engages in hazing is subject to discipline. Hazing in state educational institutions is prohibited by state law (Texas Education Code, Section 51.936). Hazing with or without the consent of a student whether on or off campus is prohibited, and a violation of that prohibition renders both the person inflicting the hazing and the person submitting to the hazing subject to discipline. Initiations or activities of organizations may include no feature that is dangerous, harmful, or degrading to the student, and a violation of this prohibition renders both the organization and participating individuals subject to discipline."

Hazing with or without the consent of a student is prohibited by the System, and a violation of that prohibition renders both the person inflicting the hazing and the person submitting to the hazing subject to discipline. Initiations or activities by organizations may include no feature which is dangerous, harmful, or degrading to the student, and a violation of this prohibition renders both the organization and participating individuals subject to discipline. Activities which under certain conditions constitute acts that are dangerous, harmful, or degrading, in violation of Rules include but are not limited to: calisthenics, such as sit-ups, push-ups, or any other form of physical exercise; total or partial nudity at any time; the eating or ingestion of any unwanted substance; the wearing or carrying of any obscene or physically burdensome article; paddle swats, including the trading of swats; pushing, shoving, tackling, or any other physical contact; throwing oil, syrup, flour, or any harmful substance on a person; rat court, kangaroo court, or other individual interrogation; forced consumption of alcoholic beverages either by threats or peer pressure; lineups intended to demean or intimidate; transportation and abandonment (road trips, kidnaps, walks, rides, drops); confining individuals in an area that is uncomfortable or dangerous (hot box effect, high temperature, too small); any type of personal servitude that is demeaning or of personal benefit to the individual members; wearing of embarrassing or uncomfortable clothing; assigning pranks such as stealing; painting objects; harassing other organizations; intentionally messing up the house or room for clean up; demeaning names; yelling and screaming; and requiring boxing matches or fights for entertainment.

## 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 dean of students 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.

## Student Conduct

The University considers cultivation of self-discipline by its students to be of great importance in the development of responsible citizens. Therefore, the university expects its students to maintain standards of personal discipline that are in harmony with the education goals and purpose of the university. Although the university is committed to the full support of the constitutional rights of its students, including due process, it also has an equal obligation to protect its educational purpose and the interest of the student body. The University must therefore be concerned with the actions of individuals or groups that are in conflict with the welfare and integrity of the institution or in disregard of the rights of other students or faculty.

Attendance at a tax-supported educational institution of higher learning is optional and voluntary. By such voluntary entrance into the academic community of the university, students voluntarily assume the obligations of performance and behavior imposed by the university relevant to its lawful missions, processes, and functions. When students enter the university, it is assumed that they have a serious
purpose and a sincere interest in their own social and intellectual development. They are expected to learn to cope with problems with intelligence, reasonableness, and consideration for the rights of others; to obey laws and ordinances of the nation, state, and community for which they, as well as the university, are a part. As students prize rights and freedoms for themselves, they are expected to respect the rights and freedoms of others.

The administration of student discipline at the university is a responsibility shared by students, faculty, and administrative staff. In many cases, peer group influence, counseling, admonition, and example may resolve problems of student conduct. Where these preferred means fail, resort is made to disciplinary procedures. Any academic or administrative official, faculty member, or student may file a complaint against any student for misconduct. A student may be penalized herein, even though he or she is also punished by state or federal authorities for the same act.

Students are subject to federal, state, and local laws as well as University rules and regulations. Students are subject to reasonable disciplinary action, including suspension and expulsion in appropriate cases, for breach of federal, state, or local laws or University rules and regulations. Individuals who are not currently enrolled at the university remain subject to the disciplinary process for conduct that occurred during any period of enrollment, and for statements, acts, or omissions related to application for enrollment or the award of a degree.

Rules and regulations relating to the students of the university are enacted with the view towards protecting the best interests of the individual, the general welfare of the entire student body, and the educational objectives of the university. These rules and regulations are few, and most students will not find them unduly restrictive. Violations of institutional rules and regulations, including those, which may subsequently be enacted, may subject a student to disciplinary action.

The Student Conduct Code and the student disciplinary hearing and appeals procedure can be found in the UTRGV Handbook of Operating Procedures.

## Copyrighted Material

Using peer-to-peer (P2P) file-sharing applications to illegally share copyrighted music and movies is the number one way students violate federal copyright law. Students, faculty and staff are all obligated to comply with federal law and university policy regarding appropriate use of information technology and avoiding copyright infringement.

## Bandwidth

The university enforces network policies regarding bandwidth usage and limits. Under some circumstances, the university may activate monitoring tools designed to detect abnormal or potentially infringing traffic in order to determine its appropriateness and, if necessary, initiate disciplinary procedures.

## Copyright Complaints and Legal Content Alternatives

If you copy and distribute copyrighted material without legal permission, you may be found liable for civil or criminal copyright infringement. Civil penalties for Federal Copyright infringement range from $\$ 750$ per song to $\$ 150,000$ in damages for each willful act. Criminal penalties can run up to five years in prison and $\$ 250,000$ in fines.

The university cannot protect you from a copyright complaint. The university may also be required by law to disclose information about you to a complainant for use in pursuing legal action against you. The process for handling DMCA notices received by the university is outlined in the Digital Millennium Copyright Act (DMCA) policy. The penalties for violation of copyright law can range from university sanctions to civil and criminal prosecution.

You are not protected from financial penalty just because you received material at no cost or are distributing material with no charge. Your only protection is to not possess or distribute any unlicensed copyrighted material. There are many Web sites that provide legal online music, movies, and other content. Refer to the Keep It Legal page for a list of services that comply with the DMCA.

## Peer-to-peer Software

Peer-to-peer (P2P) applications such as BitTorrent, BearShare, Limewire, Morpheus, iMesh and KaZaA make it easy for you to share files, and there are legitimate uses for this class of software. However, please keep the following guidelines in mind.

## Network Bandwidth

Most P2P applications are configured so other users can access your hard drive and share your files all the time. This constant file transfer can degrade your computer's performance and generate heavy traffic loads on the university network. P2P applications can consume your weekly allocation very quickly. The university's network bandwidth consumption is monitored. If your usage impacts the overall performance of the network, your computer may be blocked.

If you use a P2P application to share content legally, you should know how to control or disable the application.

## Privacy

If you are running a P2P application, you may be inadvertently sharing personal information, such as email messages or credit card information. You need to make sure you know which files and data the application is sharing. You should know how to control or disable your P2P application to ensure that you are not inadvertently sharing personal information.

## Security

Viruses are easily spread using P2P applications. Many P2P applications include "malware" in the download, so you may be unintentionally infecting your computer. To protect your computer, keep your anti-virus program up-to-date and only install programs acquired from reputable sources. You can download anti-virus software on the UTRGV Downloads site.

## Resource Use

Some P2P applications use your computer as a computational or storage resource for another organization's use. This may not be an acceptable use of state-owned resources such as the university network or university-owned computers. Do not permit any such use of your system without the consent of the university. For assistance, please contact the Information Security Office at ciso@utrgv.edu.

## University Policy and Assistance

By running a P2P application, you may be consuming excessive network bandwidth and/or violating copyright law, both of which are violations of the university's rules for acceptable use of information technology. You may also be sharing confidential information and/or making your computer insecure.

If you have questions about P2P applications, please call the IT Help Desk at 956-665-2020 or send an email to the IT Help Desk.

## Sexual Assault

## Introduction

The University of Texas Rio Grande Valley is committed to creating and maintaining a community in which students, faculty, and staff can work and study in an atmosphere free from all forms of harassment, exploitation, or intimidation. Every member of the university community should be aware that the university does not tolerate student harassment, including sexual assault, dating violence, domestic violence, or stalking, and that such behavior is prohibited by both federal and state law and by University policy. UTRGV will take action to prevent, correct, and if necessary, discipline or prosecute behavior that violates this policy and the law. All forms of sexual assault, sexual harassment, dating violence, domestic violence, and stalking, and all attempts to commit such acts, are regarded as serious University offenses that will to result in disciplinary action which may include, suspension, required withdrawal, expulsion, or termination.

UTRGV is committed to assisting all victims and survivors of, sexual harassment, including sexual violence. A member of the university community who wishes to file a complaint or who has information regarding a violation of university policy has various options regarding filing a report including contacting the Title IX Coordinator, University Police Department or filing an anonymous report at www.utrgv.edu/Reportlt. Prosecution can also take place in accordance with Texas criminal law, independent of University actions.

Students, faculty and staff are also encouraged to seek assistance through the Office for Victim Advocacy \& Violence Prevention (OVAVP) at 956-665-8287, OVAVP@utrgv.edu, or www.utrgv.edu/OVAVP. Services through advocates at OVAVP are confidential and advocates can assist in navigating campus and community reporting, available resources, and accommodations for victims/survivors.

A chart illustrating the reporting options and detailing the services available campus can be found on the website for the Title IX Office at www.utrgv.edu/Equity.

## Title IX

Sexual harassment, including sexual assault, dating violence, domestic violence, and stalking can have serious effects on a student's school performance, in addition to many other significant effects. Title IX provides that all students have the right to receive an education free from sex discrimination. UTRGV will take immediate action to eliminate such crimes when they occur on campus, prevent recurrence, and address the effects of such crimes, regardless of where they occurred.

Students, faculty, and staff of UTRGV, as well as family, friends, or bystanders, are encouraged to report suspected incidents of sexual harassment, including sexual assault, dating violence, domestic violence,
or stalking to the university's Title IX Coordinator - www.utrgv.edu/Equity. Any faculty or staff member who receives a report of one of these crimes, and who is not bound by professional confidentiality (advocates, counselors, and healthcare providers are confidential resources on campus), is required to report it to the Title IX Coordinator.

## What to Do If You Think You Have Been Sexually Assaulted or Have Experienced Sexual Harassment, Dating Violence, Domestic Violence, or Stalking

## Sexual Assault

Students are strongly encouraged to report attempted or completed sexual assaults to the University Police Department (956-665-7151 or 956-882-3832). Reporting the incident does not mean that the victim/survivor must proceed with prosecution. Immediately following an attack, the victim/survivor should try to write down everything she or he remembers about the incident, including the physical description of the suspect(s) and any further information about the identity or location of the suspect(s).

If you or someone you know is unsure about whether you want to call the police, there are confidential victim advocates available $24 / 7$ who can offer more information through campus (OVAVP - 956-6658287 from 9:00 am - 6:00 pm and OVAVP@utrgv.edu after hours) and through community organizations (Mujeres Unidas in Hidalgo County - 956-630-4878 or 800-580-4879 for the 24-hour crisis hotline, Friendship of Women in Brownsville -956-544-7412, and Family Crisis Center in Harlingen - 956-423-9305 or 866-423-9304 for the 24-hour hotline).

If you have been sexually assaulted, Mission Regional Medical Center (956-323-1111) and McAllen Medical Center (956-632-4000) in Hidalgo County and Valley Baptist Medical Center (956-389-1100) in Harlingen have dedicated SAFE nurses (SAFE = Sexual Assault Forensic Examiner) available 24/7 in private, dedicated spaces to conduct rape exams. Performing a rape exam does not obligate a victim or survivor to proceed with prosecution and rape exams are stored for two years in case a victim or survivor wishes to proceed with prosecution at a later date. The University Police Department and OVAVP advocates can assist in transporting sexual assault victims for a rape exam. The hospital will not charge a victim or survivor for performing a rape exam.

## Notification of Law Enforcement

Victims of sexual assault or persons who have information regarding a sexual assault are strongly encouraged to report the incident to the University Police Department (956-665-7151 or 956-882-3832) immediately.

It is the policy of the University Police Department to conduct investigations of all sexual assault complaints with sensitivity, compassion, patience, and respect for the victim. Investigations are conducted in accordance with guidelines established by the Texas Penal Code, Code of Criminal Procedure and the Hidalgo County District Attorney's Office and the Cameron County District Attorney's office.

All information and reports of sexual assault are kept strictly confidential. In accordance with the Texas Code of Criminal Procedures Art. 57, victims may use a pseudonym to protect their identity. A pseudonym is a set of initials or a fictitious name chosen by the victim to be used in all public files and records concerning the sexual assault. Victims of sexual assault are not required to file criminal charges
or seek judicial actions through the university disciplinary process. However, victims are encouraged to report the assault in order to provide the victim with physical and emotional assistance. Students may also contact local law enforcement agencies. Members of the University Police Department, OVAVP advocates, and other University offices will assist the student in notifying the appropriate agency in the applicable jurisdiction.

## Accommodations for Victims and Survivors

OVAVP advocates and the Dean of Students Office can assist victims and survivors with issues including, but not limited to, class schedule changes, withdrawal procedures, or campus housing relocation. If the reporting student provides credible evidence that the accused student presents a continuing danger to person or property or poses an ongoing threat of disrupting the academic process, the Office of Student Rights and Responsibilities may take interim disciplinary action against the accused student as appropriate.

## Procedures for Campus Disciplinary Action

A student may also choose to report an assault to the Office of Student Rights and Responsibilities for disciplinary action regardless of whether or not the student has decided to press criminal charges. A student may also file a report of sexual assault against another student, or a faculty or staff member, by directly contacting the Associate Dean for Student Rights and Responsibilities 956-665-5375 (UTRGV Edinburg Campus) or 956-882-5141 (UTRGV Brownsville Campus) or www.utrgv.edu/Reportlt. Procedures for resolving complaints regarding sexual assault, sexual harassment, dating violence, domestic violence, and stalking are detailed in the UTRGV Handbook of Operating Procedures. In any case, both the accuser and the accused are entitled to the same opportunities to have others present during any disciplinary proceedings. Both the accuser and the accused will be informed of the outcome of any proceedings.

During any complaint proceeding, the university has a wide range of latitude when developing sanctions. Those sanctions may range from probation to expulsion from the university.

Sexual Harassment, Dating Violence, Domestic Violence, and Stalking
More information and national hotlines are available for these crimes:

- Domestic Violence and Dating Violence: www.thehotline.org
- Stalking: National Stalking Resource Center: www.victimsofcrime.org/our-programs/stalking-resource-center
- Sexual harassment: www2.ed.gov/about/offices/list/ocr/sexharassresources.html
- OVAVP advocates are available to assist in directing victims and survivors to campus and community resources (956-665-8287, OVAVP@utrgv.edu, www.utrgv.edu/OVAVP).
- Victims and survivors of these crimes are strongly encouraged to contact the University Police Department (956-665-7151 or 956-882-3832) or the UTRGV Title IX Coordinator (956-665-2103).


## Education and Prevention Programs

There are many campus resources that can help campus community members to understand, address, and prevent sexual assault, sexual harassment, dating violence, domestic violence, and stalking, including services from the following.

- Student Rights and Responsibilities: Multiple programs are offered focusing on how to be an active bystander, healthy relationships, what to do if you are a victim of sexual assault and assault awareness throughout the year. More information can be obtained by calling 956-6655375 (UTRGV Edinburg Campus) or 956-882-5141 (UTRGV Brownsville Campus). Student Rights and Responsibilities can also connect students with resources in the region.
- The Office for Victim Advocacy \& Violence Prevention (OVAVP): provides proactive educational programs to raise awareness/reduce the likelihood of sexual assault of both women and men. In addition, OVAVP provides comprehensive services for victims of sexual assault including Sexual Assault Advocates. OVAVP staff are available to provide specialized trainings, informational sessions, and talks. More information can be obtained by calling 956-665-8287, emailing OVAVP@utrgv.edu, or visiting www.utrgv.edu/OVAVP.
- University Police Department: The University Police Department offers prevention programs and specialized talks for campus groups. More information can be obtained by visiting www.utrgv.edu/police.


## Solicitation on Campus

The University's policy on solicitation is outlined in the UTRGV Handbook of Operating Procedures. The term solicitation means the sale, lease, rental or offer for sale, lease, rental of any property, product, merchandise, publication, or service, whether for immediate or future delivery; an oral statement or the distribution or display of printed material, merchandise or products that is designed to encourage the purchase, use or rental of any property, product, merchandise, publication or service; the receipt of or request for any gift or contribution; or the request to support or oppose or to vote for or against a candidate, issue or proposition appearing on the ballot at any election held pursuant to state or federal law or local ordinances. Solicitation is prohibited on any property, street, or sidewalk, or in any building, structure, or facility owned or controlled by the university or the University of Texas System. Please refer to the policy for a list of permissible activities.

# STUDENT ACADEMIC RESPONSIBILITIES AND APPEALS 

## Academic Responsibilities

Students are expected to inform themselves thoroughly concerning the regulations of the university and the course requirements for degrees, and to make inquiries in case of doubt.

Regulations will not be waived, nor exceptions to requirements made, on a plea of ignorance of the regulations and requirements. Students, therefore, should become familiar with all of the information related to the program contained in the University Catalog, on the university website, and in other official publications.

Each student, by registering, enters an academic college of the university and is under its jurisdiction with regard to the student's program of study and degree requirements. Students should work directly with the person in their major department who is assigned the responsibility of supervising their programs concerning course requirements and options, deficiencies, degree plan and special regulations. Requests to waive regulations and/ or requirements should be directed in writing to the dean of the college.

## Academic Appeals

Students wishing to appeal final grades or decisions regarding academic standards should first discuss the matter with the instructor of the class. If no resolution occurs, and the student wishes to pursue the matter further, the student may appeal in writing to the appropriate department chair within one long semester after the disputed grade or decision is issued. The department chair will respond in writing to the student within 14 calendar days (excluding holidays) of the receipt of the student's written appeal.

Pursuant appeals will be written and directed within 14 calendar days (excluding holidays) of the date of the department chair's decision to the school, college, or division College Academic Appeals Committee. The committee will consist of a panel of three faculty members, two of whom may not be from the department in which the appeal originated. The dean or director will appoint the panel members upon receipt of the written appeal and notify the student in writing of the date, time and location of the hearing and the names of the members of the panel. The student and the faculty member involved may appear in person before the panel and present evidence. The hearing will be closed to the public, and no person other than the student, the faculty member involved and panel members may be present. No person may represent the student or the faculty member.

After the College Academic Appeals Committee has heard the appeal, it will deliberate and come to a decision. The committee's decision will be written and mailed, or delivered in person, to the student and faculty member within three class days of the close of the hearing. The student may appeal in writing within 14 calendar days to the dean/director (excluding holidays). The dean's/director's decision will be final, and it must be mailed or delivered in person to the student within 14 calendar days (excluding holidays) of the receipt of the student's written appeal.

## Student Complaint Procedures

## Purpose

The University of Texas Rio Grande Valley endeavors to provide fair and objective procedures for hearing student complaints. Students are protected from coercion, intimidation, interference, harassment, retaliation, or discrimination for filing a complaint or assisting in an investigation.

## Student Advisement for Concerns/Complaints

University policies and procedures direct students about how to file a complaint. The applicable policy will depend on the nature of the complaint. If a student has questions about the applicable policy, The Offices for the Dean of Students, located in the University Center, Rm. 104, on UTRGV Edinburg Campus and in Cortez Hall, Rm. 205 on UTRGV Brownsville Campus, can assist a student who has questions regarding existing policies and procedures. Methods to file complaints are outlined more fully in the UTRGV Handbook of Operating Procedures.

## Undergraduate Academic Programs

*For updated curriculum, please visit the Undergraduate Programs Website
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## GENERAL EDUCATION CORE CURRICULUM 2015-2016

010 - Communication ( 2 courses - 6 hours required; minimum grade of C)
Objectives: Critical Thinking, Communication, Teamwork, Personal Responsibility
ENGL 1301 Rhetoric and Composition I (or ENGL 1387 Honors)

ENGL 1302 Rhetoric and Composition II (or ENGL 1388 Honors)

020 - Mathematics ( $\mathbf{1}$ course $\mathbf{- 3}$ hours required; minimum grade of C)
Objectives: Critical Thinking, Communication, Empirical \& Quantitative Skills

MATH 1314 or 1414 College Algebra
MATH 1324 Mathematics for Business and Social Sciences
MATH 1325 Calculus for Business and Social Sciences
MATH 1332 Contemporary Mathematics
MATH 1333 Mathematics for Art and Music

MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
MATH 2412 Pre-Calculus
MATH 2413 Calculus I (or MATH 2487 Honors)

030 - Life and Physical Sciences (2 courses - 6 hours required; lecture only)
Objectives: Critical Thinking, Communication, Empirical \& Quantitative Skills, Teamwork

ASTR 1401 Introductory Astronomy I
ASTR 1402 Introductory Astronomy II
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
CHEM 1311 General Chemistry I or CHEM 1307
Chemistry for Engineers

GEOL 1403 Physical Geology
GEOL 1404 Historical Geology
PHYS 1401 General Physics I
PHYS 1402 General Physics II
PHYS 2425 Physics for Scientists and Engineers I
PHYS 2426 Physics for Scientists and Engineers II
PSCI 1421 Physical Science I
PSCI 1422 Physical Science II

CHEM 1312 General Chemistry II
040 - Language, Philosophy \& Culture (1 course - 3 hours required)
Objectives: Critical Thinking, Communication, Social Responsibility, Personal Responsibility

050 - Creative Arts (1 course - 3 hours required)
Objectives: Critical Thinking, Communication, Teamwork, Social Responsibility

ARTS 1301 Art Appreciation
ARTS 1303 Art History I, Prehistoric to the 14th-Century ARTS 1304 Art History II, 14th-Century to the Present DANC 2323 Dance Appreciation ENGL 2314 Appreciation and Analysis of Literature FREN 2323 Introduction to French Cinema in English MUSI 1306 Music Appreciation

MUSI 1307 Mexican Folk Music
MUSI 1308 Music History and Literature I
MUSI 1310 History of Rock
MUSI 1313 Teaching Music in the Elementary School
PHIL 1330 Philosophy, Art, and Film
THTF 1310 Theatre Appreciation

060 - American History (2 courses - 6 hours required)
Objectives: Critical Thinking, Communication, Social Responsibility, Personal Responsibility
HIST 1301 U.S. History I (or HIST 1387 Honors)
HIST 1302 U.S. History II (or HIST 1388 Honors)
070 - Government/Political Science ( $\mathbf{2}$ courses - 6 hours required)
Objectives: Critical Thinking, Communication, Empirical \& Quantitative Skills, Social Responsibility
POLS 2301 US \& Texas Government \& Politics I (or POLS 2302 US \& Texas Government \& Politics II (or POLS 2387 Honors) POLS 2388 Honors)

080 - Social and Behavioral Sciences (1 course - 3 hours required)
Objectives: Critical Thinking, Communication, Empirical \& Quantitative Skills, Social Responsibility
ANTH 1324 Human Evolution ECON 1301 Introduction to Economics
ANTH 2302 Introduction to Archaeology ECON 2301 Principles of Macroeconomics
ANTH 2351 Introduction to Cultural Anthropology
CRIJ 1301 Introduction to the Criminal Justice System
CRIJ 1307 Crime in America
ENGL 2315 Humans and Language
PSYC 2301 General Psychology
SOCI 1301 Introduction to Sociology
090 - Integrative/Experiential Learning Option (6 hours required)
Objectives: Critical Thinking, Communication, and an additional objective(s) tied to the specific courses' foundational core component area (e.g. an Astronomy course would carry the objectives for Life Sciences)

## 1. Integrative and Experiential Learning

Courses in this category involve interdisciplinary topics or approaches and/or learning through direct experience.

## Science Labs

(Maximum 3 hours; offered in conjunction with science courses listed in the Life and Physical Sciences component area)

ASTR 1401 Introductory Astronomy I one-hour lab
ASTR 1402 Introductory Astronomy II one-hour lab
BIOL 1406 General Biology I one-hour lab (or BIOL 1487 Honors)
BIOL 1407 General Biology II one-hour lab (or BIOL 1488 Honors)
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
CHEM 1111 General Chemistry Lab I or CHEM 1107 Chemistry for Engineers Lab
CHEM 1112 General Chemistry Lab II
Computer Application (maximum 3 hours)
CSCI 1380 Computer Science I
CSCI/CMPE 1370 Engineering Computer Science I (or CSCI/CMPE 1378 Honors)
Interdisciplinary (maximum 6 hours)
DIET 2351 Introduction to Clinical Nutrition

GEOL 1403 Physical Geology one-hour lab GEOL 1404 Historical Geology one-hour lab PHYS 1401 General Physics I one-hour lab PHYS 1402 General Physics II one-hour lab PHYS 2425 Physics for Scientists \& Engineers I onehour lab
PHYS 2426 Physics for Scientists \& Engineers II one-hour lab
PSCI 1421 Physical Science I one-hour lab
PSCI 1422 Physical Science II one-hour lab

INFS 2398 Information Technology for Student Success and Career Development

QUMT 2398 Decision Analytics

## 2. Language, Philosophy, \& Culture/Humanities (maximum 3 hours)

Students may select an additional three-hour course in the Language, Philosophy, and Culture area to complete the 6 required hours in the Component Area Option. The selected course must be from a different prefix than the course selected in the Language, Philosophy, and Culture area.
3. Applied Communication (maximum 3 hours)

COMM 1311 Introduction to Communication
COMM 1315 Public Speaking

## GENERAL EDUCATION CORE CURRICULUM 2016-2017

010 - Communication ( 2 courses - 6 hours required; minimum grade of C)
ENGL 1301 Rhetoric and Composition I or ENGL 1387 Rhetoric and Composition I (H) ${ }^{1}$
ENGL 1302 Rhetoric and Composition II or ENGL 1388 Rhetoric and Composition II (II) or ENGL 1305 Writing Cultural Studies

020 - Mathematics ( 1 course - 3 hours required; minimum grade of C )
MATH 1314 or 1414 College Algebra
MATH 1342 Elementary Statistical Methods or MATH
MATH 1324 Mathematics for Business and Social 1387 (H) Sciences
MATH 1325 Calculus for Business and Social Sciences
MATH 1332 Contemporary Mathematics or MATH 1382 (H)

MATH 1343 Introduction to Biostatistics or MATH 1388 (H)
MATH 2412 Pre-Calculus
MATH 2413 Calculus I or MATH 2487 (H)
030 - Life and Physical Sciences (2 courses - 6 hours required; lecture only)
ASTR 1401 Introductory Astronomy I
ENVR 1402 Introduction to Environmental Science II
ASTR 1402 Introductory Astronomy II
GEOL 1403 Physical Geology
BIOL 1406 General Biology I or BIOL 1487 (H)
GEOL 1404 Historical Geology
BIOL 1407 General Biology II or BIOL 1488 (H)
PHYS 1401 General Physics I
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
CHEM 1311 General Chemistry I or CHEM 1307
Chemistry for Engineers
CHEM 1312 General Chemistry II
ENVR 1401 Introduction to Environmental Science I

PHYS 1402 General Physics II
PHYS 2425 Physics for Scientists and Engineers I PHYS 2426 Physics for Scientists and Engineers II
PSCI 1421 Physical Science I
PSCI 1422 Physical Science II

ENGL 2387 Readings in World Literature I (H)
ENGL 2388 Readings in World Literature II (H) FREN 2382 Introduction to French Literature MASC 2301 Introduction to Mexican-American Studies MUSI 1309 World Music Cultures

PHIL 1300 Critical Thinking
PHIL 1301 Introduction to Philosophy or PHIL 1387 (H)
PHIL 1305 Introduction to Latin American Philosophy
PHIL 1306 Introduction to Asian Philosophy
PHIL 1310 Ethics, Happiness, and the Good Life
PHIL 1312 Introduction to Social and Political Philosophy
PHIL 1366 Philosophy and History of Science and Technology
PHIL 2306 Introduction to Ethics
PHIL 2326 Ethics, Technology, and Society
PHIL 2351 Religious Diversity in the Global Community FREN 2323 Introduction to French Cinema in English

MUSI 1306 Music Appreciation
MUSI 1306 Music Appreciation
MUSI 1308 Music History and Literature I
MUSI 1310 History of Rock

PHIL 1330 Philosophy, Art, and Film
THTF 1310 Theatre Appreciation
THTF 2366 Cinema Appreciation

060 - American History (2 courses - $\mathbf{6}$ hours required)
HIST 1301 U.S. History I or HIST 1387 U.S. History I (H) or HIST/MASC 2327 Mexican American History I
HIST 1302 U.S. History II or HIST 1388 U.S. History II (H) or HIST/MASC 2328 Mexican American History II
070 - Government/Political Science (2 courses - $\mathbf{6}$ hours required)
POLS 2305 U.S. Federal Government \& Politics or POLS 2385 (H)
POLS 2306 Texas Government \& Politics or POLS 2386 (H)
080 - Social and Behavioral Sciences (1 course - 3 hours required)
ANTH 1324 Human Evolution

ANTH 2302 Introduction to Archaeology
ANTH 2306 Anthropology of Borders and Migration
ANTH 2351 Introduction to Cultural Anthropology
ECON 1301 Introduction to Economics

ECON 2301 Principles of Macroeconomics
ENGL 2315 Humans and Language PSYC 2301 General Psychology
SOCI 1301 Introduction to Sociology

## 090 - Integrative/Experiential Learning Option (6 hours required)

1. Applied Communication and Literacies (maximum 3 hours)

COMM 1311 Introduction to Communication
COMM 1315 Public Speaking

## 2. Humanities (maximum 4 hours)

PHIL 1102 Work and Human Flourishing
Students may also select an additional three-hour course from the Language, Philosophy, and Culture area to complete the six required hours in the (090) Component Area Option.
3. Computer Application (maximum 1 hour)

MGMT 1101 Leadership and Career Lab
4. Science Labs (maximum 3 hours)

Students may use up to 3 hours from the lab component of any of the science courses listed in the Life \& Physical Sciences component area (030) for the Integrative/Experiential Learning component area. Courses that have a separate lab are also listed below.

ASTR 1401 Introductory Astronomy I Lab
ASTR 1402 Introductory Astronomy II Lab
BIOL 1406 General Biology I or BIOL 1487 (H) Lab
BIOL 1407 General Biology II or BIOL 1488 (H) Lab
BIOL 2401 Anatomy and Physiology I Lab
BIOL 2402 Anatomy and Physiology II Lab
CHEM 1107 Chemistry for Engineers Lab
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab
ENVR 1401 Introduction to Environmental Science I
Lab
5. Interdisciplinary (maximum 4 hours)

INDS 2390 Humanities in the World
INDS 2190 Humanities and Service Learning
6. Technologies (maximum 3 hours)

ENVR 1402 Introduction to Environmental Science II Lab
GEOL 1403 Physical Geology Lab
GEOL 1404 Historical Geology Lab
PHYS 1401 General Physics I Lab
PHYS 1402 General Physics II Lab
PHYS 2425 Physics for Scientists and Engineers I Lab PHYS 2426 Physics for Scientists and Engineers II Lab
PSCI 1421 Physical Science I Lab
PSCI 1422 Physical Science II Lab

# COLLEGE OF BUSINESS AND ENTREPRENEURSHIP (COBE) 

# School of Accountancy 

Dr. Hassanali Espahbodi<br>Director, School of Accountancy<br>Location: Main 2.542D (UTRGV Brownsville Campus)<br>Phone: 956-882-5835<br>Fax: 956-882-5808<br>Email: hassanali.espahbodi@utrgv.edu

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

WITH A MAJOR IN
ACCOUNTING
Accountants and auditors prepare, analyze, and examine financial reports to ensure their fairness and reliability. Some accountants provide taxation advice and other consulting services to individuals and organizations or work in various capacities in not-for-profit organizations. Others serve as controllers, internal auditors, chief financial officers, and budget analysts. Demand for accountants is independent of the state of the economy and accounting graduates earn a very high salary.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate knowledge of accounting functional area concepts and theories.
2. Understand an accountant's ethical responsibility.
3. Demonstrate effective business decision-making skills using both quantitative and qualitative factors.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Social and Behavioral Sciences - $\mathbf{3}$ hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - 3 hours
Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

B - MAJOR REQUIREMENTS - 78 HOURS (60 advanced)
1 - Business Core - 48 hours ( 30 advanced)
a - Business Foundation - 18 hours
ACCT 2301 Introduction to Financial Accounting

ACCT 2302 Introduction to Managerial Accounting INFS 2300 Data Modeling Management Tools ECON 2302 Principles of Microeconomics MGMT 1301 Introduction to Business QUMT 2341 Business Statistics I
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
QUMT 3341 Business Statistics II FINA 3380 Introduction to Finance MARK 3300 Principles of Marketing MGMT 3361 Principles of Management MGMT 4389 Strategic Management Choose one (Management Information Systems): ACCT 3326 Accounting Information Systems INFS 3390 Management Information Systems Choose one (International Business):

ACCT 3350 International Accounting BLAW 3340 International Business Law ECON 3353 International Trade FINA 4381 International Finance INFS 3380 Global Information Technology INTB 3330 International Business MARK 3310 International Marketing Choose one (Ethics):

ACCT 4350 Ethics for Accountants MARK 3330 Business Ethics \& Corporate Social Responsibility MGMT 4304 Business and Society
Choose one (Business Communications): COMM 3313 Business and Technical Communication MARK 3320 Personal Branding and Communication MGMT 3335 Communication Policy and Strategy
2 - Accounting Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
a - Accounting Foundation - 18 hours (18 advanced)
ACCT 3321 Intermediate Accounting I
ACCT 3322 Intermediate Accounting II
ACCT 3323 Income Tax
ACCT 3324 Cost Accounting and Management
ACCT 4327 Auditing
ACCT 4331 Advanced Accounting
b -Accounting Electives - 12 hours ( 12 advanced)
Choose 9 hours of advanced Accounting courses and 3 hours of advanced Business.
Students are encouraged to consult with an advisor prior to selecting electives.
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 60 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' C ' or better in all Business Foundation courses.
3. Grade of ' C ' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Business Foundation completed coursework.

## Progression requirements

Students must earn a grade of "C' or better in all advanced (3xxx-4xxx) BBA-applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.
Graduation requirements
Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& Accounting Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## Department of Economics and Finance

Dr. Andre Mollick<br>Chair, Department of Economics and Finance Location: BUSA 216 (UTRGV Edinburg Campus)<br>Phone: 956-665-3354<br>Email: andre.mollick@utrgv.edu

BACHELOR OF ARTS (BA)

## WITH A MAJOR IN

 ECONOMICSAn economics degree opens the door to a wide range of career opportunities in finance, research and analysis, and also business and public affairs. A degree in economics can also take you even further to pursue a graduate education, from law school to public administration. Whatever your strengths may be, an economics degree will help you join the debate, prepare for a career, and succeed in your future.

## STUDENT LEARNING OUTCOMES:

1. Written communication skills: To enhance the students' communication skills.
2. Analytical skills: To provide an application-oriented curriculum designed to analyze daily problems faced by students in the work environment.
3. Current global awareness: To raise awareness of current and important global economic issues.
4. Knowledge of Economics: To provide an understanding of and the capacity to analyze a host of economic issues.
5. Oral Communication: To construct and deliver well-organized, logical, and informative oral arguments.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Social and Behavioral Sciences - 3 hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - 3 hours
Choose one:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

B - MAJOR REQUIREMENTS - 48 HOURS (30 advanced)
1 - Economics Core - 48 hours ( 30 advanced)
a - Economics Foundation - 18 hours
ECON 2302 Principles of Microeconomics
POLS 2350 Political Economy
Choose one:
COMM 1311 Introduction to Communication
COMM 1315 Public Speaking
Choose one:
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
QUMT 2341 Business Statistics I
SOCI 2305 Introduction to Social Research
Choose two:
ACCT 2301 Introduction to Financial Accounting
SOCI 1323 Social Problems
PSYC 1310 General Psychology
ANTH 2351 Introduction to Cultural Anthropology
Any advanced POLS
b - Advanced Economics Core - 21 hours (21 advanced)
ECON 3341 Econometrics
ECON 3351 Macroeconomic Theory
ECON 3352 Microeconomic Theory
Choose one:
ECON 3342 Business and Economics Forecasting
ECON 4340 Introduction to Mathematical Economics
Choose one:

ECON 3354 Health Economics ECON 3358 Labor Economics Choose one:

ECON 3343 Economics of the Government Sector ECON 3381 Money and Banking Choose one:

ECON 3353 International Trade
FINA 4381 International Finance
c - Advanced Economics Electives - 9 hours (9 advanced) Choose any advanced ECON electives.

## C - FREE ELECTIVES - 12 HOURS (6 advanced)

D - MINOR - 18 HOURS (6 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

1. Student must complete all 18 hours of Economics Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' $C$ ' or better in all Economics Foundation courses.
3. Grade of 'C' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Economics Foundation completed coursework.

## Progression requirements

Students must earn a grade of " $C$ ' or better in all advanced (3xxx-4xxx) BA-ECON applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.

## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in Advanced BA-ECON applicable courses.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF BUSINESS ADMINISTRATION (BBA) <br> WITH A MAJOR IN <br> ECONOMICS 

An economics degree opens the door to a wide range of career opportunities in finance, research and analysis, and also business and public affairs. A degree in economics can also take you even further to pursue a graduate education, from law school to public administration. Whatever your strengths may be, an economics degree will help you join the debate, prepare for a career, and succeed in your future.

## STUDENT LEARNING OUTCOMES:

1. Written communication skills: To enhance the students' communication skills.
2. Analytical skills: To provide an application-oriented curriculum designed to analyze daily problems faced by students in the work environment.
3. Current global awareness: To raise awareness of current and important global economic issues.
4. Knowledge of Economics: To provide an understanding of and the capacity to analyze a host of economic issues.
5. Oral Communication: To construct and deliver well-organized, logical, and informative oral arguments.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Social and Behavioral Sciences - $\mathbf{3}$ hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - $\mathbf{3}$ hours
Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

B - MAJOR REQUIREMENTS - 78 HOURS
1 - Business Core - 48 hours (30 advanced)
a - Business Foundation - 18 hours
ACCT 2301 Introduction to Financial Accounting ACCT 2302 Introduction to Managerial Accounting INFS 2300 Data Modeling Management Tools ECON 2302 Principles of Microeconomics MGMT 1301 Introduction to Business QUMT 2341 Business Statistics I
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
QUMT 3341 Business Statistics II FINA 3380 Introduction to Finance MARK 3300 Principles of Marketing MGMT 3361 Principles of Management


## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& Economics Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

WITH A MAJOR IN FINANCE

Careers in finance look at how organizations manage funds over a period of time and also investigate their earnings to ensure future financial success for all entities involved. Analysts, traders, managers, brokers, and advisors - finance is a wide-reaching area of study. This fast-paced and analytic field emphasizes decision making within both financial and capital markets. This degree prepares students for careers in investment and commercial banking, financial planning, money making, insurance, and even real estate.

## STUDENT LEARNING OUTCOMES:

1. Communication skills: Finance students will be able to express their ideas and thoughts in written form.
2. Analytical skills: Finance students will be able to analyze daily problems faced by students in the work environment.
3. Current global awareness: Finance students will be aware of current and important global economic issues.
4. Knowledge of Finance: Finance students will have an understanding of important finance issues including: time value of money, capital budgeting, valuation of firms, valuations of financial instruments, financial forecasting, functions of financial markets and institutions, financial planning.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required

## Social and Behavioral Sciences - $\mathbf{3}$ hours

ECON 2301 Principles of Macroeconomics

## Integrative and Experiential Learning - $\mathbf{3}$ hours

Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

## B - MAJOR REQUIREMENTS - 78 HOURS ( 60 advanced)

1 - Business Core - 48 hours ( 30 advanced)
a - Business Foundation - 18 hours
ACCT 2301 Introduction to Financial Accounting ACCT 2302 Introduction to Managerial Accounting INFS 2300 Data Modeling Management Tools ECON 2302 Principles of Microeconomics MGMT 1301 Introduction to Business
QUMT 2341 Business Statistics I
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
QUMT 3341 Business Statistics II
FINA 3380 Introduction to Finance
MARK 3300 Principles of Marketing
MGMT 3361 Principles of Management
MGMT 4389 Strategic Management
Choose one (Management Information Systems):
INFS 3390 Management Information Systems
ACCT 3326 Accounting Information Systems
Choose one (International Business):
ACCT 3350 International Accounting
ECON 3353 International Trade
FINA 4381 International Finance
INFS 3380 Global Information Technology
INTB 3330 International Business
MARK 3310 International Marketing
MGMT 4311 International Management
Choose one (Ethics):
ACCT 4350 Ethics for Accountants
MARK 3330 Business Ethics and Corporate Social Responsibility
MGMT 4304 Business and Society
Choose one (Business Communications):
COMM 3313 Business and Technical Communication
MARK 3320 Personal Branding and Communication
MGMT 3335 Communication Policy and Strategy
2 - Financial Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
a - Financial Foundation - $\mathbf{2 4}$ hours (24 advanced)
ECON 3341 Econometrics
ECON 3342 Business and Economics Forecasting
ECON 3381 Money and Banking
FINA 3380 Introduction to Finance
FINA 3382 Investment Principles

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 60 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' $C$ ' or better in all Business Foundation courses.
3. Grade of ' $C$ ' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Business Foundation completed coursework.
Progression requirements
Students must earn a grade of "C' or better in all advanced (3xxx-4xxx) BBA-applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.

## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& Finance Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN ECONOMICS

A - MINOR REQUIREMENTS - 18 HOURS (12 advanced)
1 - Economics Core - 12 hours (6 advanced)
ECON 2301 Principles of Macroeconomics
ECON 2302 Principles of Microeconomics
ECON 3351 Macroeconomic Theory
ECON 3352 Microeconomic Theory
2 - Economics Electives - $\mathbf{6}$ hours (6 advanced)
Choose 6 hours of advanced ECON electives.

# Department of Information Systems 

Dr. Jerald Hughes<br>Chair, Department of Information Systems Location: BUSA 114 (UTRGV Edinburg Campus)<br>Phone: 956-665-3353<br>Email: j.hughes@utrgv.edu

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

WITH A MAJOR IN INFORMATION SYSTEMS

This major is designed to prepare students with the business and computer-related knowledge necessary to enter a career in the information systems field. The Information Systems program allows students to combine functional business skills with technology skills for the development, implementation, management, and strategic direction of information systems. The program provides graduates with the necessary analytical, technical, and managerial background to function effectively in information systems organizational environments. Information Systems graduates will be able to implement, coordinate and direct information systems activities of an organization, including systems analysis, database administration and electronic records management, network data communications, business analytics, and project management.

## STUDENT LEARNING OUTCOMES:

1. Students will understand the role of the Information Systems department is to align Information Systems projects to the strategic goals of the company and to enhance organizational effectiveness.
2. Students will understand concepts needed to design and implement information systems infrastructure.
3. Students will be able to design and implement information systems infrastructure.
4. Students will be able to communicate effectively orally and in writing.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - $\mathbf{3}$ hours
MATH 1314 College Algebra
Social and Behavioral Sciences - $\mathbf{3}$ hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - $\mathbf{3}$ hours
Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

## B - MAJOR REQUIREMENTS - 78 HOURS (60 advanced) <br> 1 - Business Core - 48 hours ( 30 advanced) <br> a - Business Foundation - 18 hours

ACCT 2301 Introduction to Financial Accounting ACCT 2302 Introduction to Managerial Accounting INFS 2300 Data Modeling Management Tools ECON 2302 Principles of Microeconomics MGMT 1301 Introduction to Business QUMT 2341 Business Statistics I b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)

BLAW 3337 Business Law I
QUMT 3341 Business Statistics II FINA 3380 Introduction to Finance
MARK 3300 Principles of Marketing MGMT 3361 Principles of Management
MGMT 4389 Strategic Management
Choose one (Management Information Systems): INFS 3390 Management Information Systems ACCT 3326 Accounting Information Systems
Choose one (International Business):
ACCT 3350 International Accounting ECON 3353 International Trade FINA 4381 International Finance INFS 3380 Global Information Technology INTB 3330 International Business MARK 3310 International Marketing MGMT 4311 International Management
Choose one (Ethics):
ACCT 4350 Ethics for Accountants
MARK 3330 Business Ethics and Corporate Social Responsibility MGMT 4304 Business and Society
Choose one (Business Communications):
COMM 3313 Business and Technical Communication
MARK 3320 Personal Branding and Communication MGMT 3335 Communication Policy and Strategy
2 - Information Systems Core - 30 hours ( 30 advanced)
a - Information Systems Foundation - 21 hours ( 21 advanced)
INFS 3308 Business Information Infrastructure
INFS 3310 Introduction to Business Programming
INFS 3335 Database Management
INFS 3336 Systems Analysis
INFS 3338 Computer Networks and the Internet
INFS 4308 Project Management
QUMT 4343 Quantitative Methods for Decision-Making in Business
b - Advanced Information Systems Core - 9 hours (9 advanced)
Choose from:
INFS 3300 Internship in Information Systems

INFS 3320 Organizational Information Assurance
INFS 3330 Business Process Logic
INFS 3395 ERP Implementation
INFS 4312 E-Commerce Design
INFS 4330 Business Intelligence
INFS 4340 Information Systems and Governance INFS 4391 Information Security INFS 4395 ERP Customization INFS 4397 Health Computer Information Systems INFS 4399 Special Topics in Information Systems

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 60 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' C ' or better in all Business Foundation courses.
3. Grade of ' $C$ ' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Business Foundation completed coursework.

## Progression requirements

Students must earn a grade of " $C$ ' or better in all advanced ( $3 x x x-4 x x x$ ) BBA-applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.

## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& Information Systems Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
INFORMATION SYSTEMS

## A - MINOR REQUIREMENTS - 18 HOURS MINIMUM (6 advanced minimum)

The minor in information systems consists of 18 hours of INFS coursework as specified below.

With the approval of the department chair, students who have taken equivalent programming and information technology courses may take any combination of six advanced INFS courses. Students with no programming and information technology academic background may take any combination of 4 more INFS advanced courses after taking:

INFS 3308 Business Information Infrastructure
INFS 3310 Introduction to Business Programming
NOTE: All INFS core and elective courses have INFS 3308 and INFS 3310 as prerequisites.

# Department of International Business and Entrepreneurship 

Dr. Russell Adams<br>Chair, Department of International Business and Entrepreneurship Location: MAIN 2.542C (UTRGV Edinburg Campus)<br>Phone: 956-882-7654<br>Fax: 956-882-7999<br>Email: russell.adams@utrgv.edu

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

## WITH A MAJOR IN INTERNATIONAL BUSINESS

The International Business degree will provide students with the abilities and skills necessary to navigate a business world that is increasingly globalized.

## STUDENT LEARNING OUTCOMES:

1. International issues knowledge tested by participation in International Management (INTB 4361) project with country sketch, company description, and country/US comparison; ETS major field test for International Studies.
2. Quantitative/Qualitative international business knowledge assessed in exams, presentation case studies and projects in INTB courses.
3. Skills are tested, enhanced and evaluated in INTB courses with exams, presentations case studies, and projects.
4. Critical thinking skills are tested, enhanced and evaluated in INTB courses with exams, presentations case studies, and projects.
5. Integrity skills are enhanced and evaluated in INTB courses with writing assignments, projects, and simulations.
6. Information and technology skills are assessed through projects, simulations, writing assignments and exams.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Social and Behavioral Sciences - $\mathbf{3}$ hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - 3 hours
Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

B - MAJOR REQUIREMENTS - 78 HOURS (60 advanced)
1 - Business Core - 48 hours ( 30 advanced)
a - Business Foundation - 18 hours
ACCT 2301 Introduction to Financial Accounting
ACCT 2302 Foundations of Managerial Accounting
INFS 2300 Data Modeling Management Tools
ECON 2302 Principles of Microeconomics MGMT 1301 Introduction to Business QUMT 2341 Business Statistics I
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
QUMT 3341 Business Statistics II FINA 3380 Introduction to Finance MARK 3300 Principles of Marketing MGMT 3361 Principles of Management MGMT 4389 Strategic Management Choose one (Management Information Systems): INFS 3390 Management Information Systems ACCT 3326 Accounting Information Systems Choose one (International Business):

ACCT 3350 International Accounting ECON 3353 International Trade FINA 4381 International Finance INFS 3380 Global Information Technology INTB 3330 International Business MARK 3310 International Marketing MGMT 4311 International Management Choose one (Ethics):

ACCT 4350 Ethics for Accountants MARK 3330 Business Ethics and Corporate Social Responsibility MGMT 4304 Business and Society Choose one (Business Communications):

COMM 3313 Business and Technical Communication
MARK 3320 Personal Branding and Communication MGMT 3335 Communication Policy and Strategy
2 - International Business Core - $\mathbf{3 0}$ hours (30 advanced)
a - International Business Foundation - $\mathbf{2 4}$ hours (24 advanced)
INTB 3331 International Law
MARK 3310 International Marketing

> ACCT 3350 International Accounting
> INFS 3380 Global Information Technology
> ECON 3353 International Trade
> FINA 4381 International Finance and Economics
> MGMT 4311 International Management
> MARK 4350 Marketing Research
> b - International Business Electives - $\mathbf{6}$ hours ( $\mathbf{6}$ advanced)
> Choose from:

INTB 4393 Topics in International Business
MARK 4361 International Competitiveness
MARK 3321 Hispanic Marketing
MARK 4331 Multicultural Markets
MARK 4341 Business in Asia
MARK 4351 Business in Latin America

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 60 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

## Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' C ' or better in all Business Foundation courses.
3. Grade of ' C ' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Business Foundation completed coursework.

## Progression requirements

Students must earn a grade of ' $C$ ' or better in all advanced ( $3 x x x-4 x x x$ ) BBA-applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.

## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& International Business Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# Department of Management 

Dr. Sibin Wu<br>Chair, Department of Management Location: BUSA 222C (UTRGV Edinburg Campus)<br>Phone: 956-665-3559<br>Fax: 956-665-5065<br>Email: sibin.wu@utrgv.edu

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

WITH A MAJOR IN
MANAGEMENT

Our department is dedicated to provide high quality management education that prepares students to become leaders for the region, the state, and the world. Through our world class academic offerings, students learn how to plan, organize, and direct the activities of small businesses and large corporations.

## STUDENT LEARNING OUTCOMES:

1. Develop an understanding of the forces that shape people's behavior in the workplace.
2. Develop the knowledge and skills needed to start a new business.
3. Develop the knowledge and skills needed to apply operations management concepts.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Social and Behavioral Sciences - $\mathbf{3}$ hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - $\mathbf{3}$ hours
Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

B - MAJOR REQUIREMENTS - 78 HOURS ( 60 advanced)
1 - Business Core - 48 hours (30 advanced)
a - Business Foundation - 18 hours
ACCT 2301 Introduction to Financial Accounting
ACCT 2302 Introduction to Managerial Accounting
ECON 2302 Principles of Microeconomics
INFS 2300 Data Modeling Management Tools
MGMT 1301 Introduction to Business
QUMT 2341 Business Statistics I
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
FINA 3380 Introduction to Finance
MARK 3300 Principles of Marketing
MGMT 3361 Principles of Management
MGMT 4389 Strategic Management
QUMT 3341 Business Statistics II
Choose one (Management Information Systems):
ACCT 3326 Accounting Information Systems
INFS 3390 Management Information Systems
Choose one (International Business):
ACCT 3350 International Accounting
ECON 3353 International Trade
FINA 4381 International Finance
INFS 3380 Global Information Technology
INTB 3330 International Business
MARK 3310 International Marketing
MGMT 4311 International Management
Choose one (Ethics):
ACCT 4350 Ethics for Accountants
MARK 3330 Business Ethics and Corporate Social Responsibility
MGMT 4304 Business and Society
Choose one (Business Communications):
COMM 3313 Business and Technical Communication
MARK 3320 Personal Branding and Communication
MGMT 3335 Communication Policy and Strategy
2 - Management Core - 30 hours ( 30 advanced)
a - Management Foundation - 12 hours (12 advanced)
MGMT 3362 Human Resource Management
MGMT 4321 Organizational Behavior
MGMT 4356 Foundations of Entrepreneurship
MGMT 4363 Operations Management
b - Advanced Management Core - 18 hours (18 advanced)
Choose from:
ACCT 3324 Cost Accounting and Management
MGMT 3300 Internship in Management
MGMT 3335 Communication Policy and Strategy*
MGMT 3365 Compensation
MGMT 3366 Recruitment and Selection
MGMT 3367 Organizational Training and Development
MGMT 3368 Negotiations
MGMT 4300 Topics in Management
MGMT 4304 Business and Society*
MGMT 4311 International Management*
MGMT 4351 Entrepreneurship in the Border Corridor
MGMT 4362 Business and Sustainability
MGMT 4365 Quality Management

MGMT 4367 Purchasing and Supply Chain Management MGMT 4370 Project Management MGMT 4399 Business Consulting
*Available only when not completed in Business Core.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 60 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of 'C' or better in all Business Foundation courses.

The materials and logistics field is known in industry by several names including - supply chain management, Production control management, logistics management and materials management. MTML graduates will have an overall understanding and knowledge of the theory and tools necessary to acquire, transport, store and manage raw materials and finished goods in a global economy.

## STUDENT LEARNING OUTCOMES:

1. Students will learn the key elements required to efficiently move good (logistics)
2. Students will learn the key tools for managing materials
3. Students will graduate with the skills necessary to work in the materials management or logistics field.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - $\mathbf{3}$ hours
MATH 1325 Calculus for Business and Social Sciences
Social and Behavioral Sciences - 3 hours
ECON 2301 Principles of Macroeconomics

B - MAJOR REQUIREMENTS - 78 HOURS (60 advanced)
1 - Materials Management and Logistics Foundation - 48 hours ( 30 advanced) a -Business Foundation - 18 hours

ACCT 2301 Introduction to Financial Accounting
ACCT 2302 Introduction to Managerial Accounting
INFS 2300 Data Modeling Management Tools
MGMT 1301 Introduction to Business
QUMT 2341 Business Statistics I
ECON 2302 Principles of Microeconomics
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
INFS 3390 Management Information Systems
BUSI 3343 Decision Analysis
FINA 3380 Introduction to Finance
ENGL 3343 Business Communication
MGMT 4304 Business and Society
MGMT 3361 Principles of Management
MGMT 4363 Operations Management
MARK 3300 Principles of Marketing
MGMT 4389 Strategic Management
2 - Materials Management and Logistics Core - 30 hours ( 30 advanced) a - Advanced Materials Management and Logistics Core - 24 hours (24 advanced)

ACCT 3324 Cost Accounting and Management
MGMT 4367 Purchasing and Supply Chain Management
MGMT 4311 International Management
INTB 4393 Topics in International Business
MTML 3310 Import/Export Theory
MTML 4310 Forecasting
MTML 4320 Materials Management and ERP
MTML 4330 Import/Export Operations
b - Advanced Business Electives - $\mathbf{6}$ hours (6 advanced)
Choose any advanced Business course(s).

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 60 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' $C$ ' or better in all Business Foundation courses.
3. Grade of 'C' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Business Foundation completed coursework.
Progression requirements
Students must earn a grade of " C ' or better in all advanced ( $3 x x x-4 x x x$ ) BS-MM applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.

## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& Materials Management and Logistics Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## A - MINOR REQUIREMENTS - 18 HOURS ( 6 advanced minimum)

1 - Business Administration Core - 9 hours ( $\mathbf{3}$ advanced)
ACCT 2301 Introduction to Financial Accounting
ACCT 2302 Introduction to Managerial Accounting
MGMT 3361 Principles of Management
2 - Business Administration Electives - 9 hours (3 advanced minimum) Choose from:

INFS 2300 Data Modeling Management Tools
ECON 2301 Principles of Macroeconomics
FINA 3380 Introduction to Finance
MARK 3300 Principles of Marketing

## MINOR IN <br> HUMAN RESOURCE MANAGEMENT

> 1 - Human Resource Management - 15 hours (15 advanced)
> MGMT 3362 Human Resource Management MGMT 3365 Compensation MGMT 3366 Recruitment and Selection MGMT 3367 Organizational Training and Development MGMT 4321 Organizational Behavior
> 2 - Human Resource Management Elective - 3 hours (3 advanced) Choose from:

> MGMT 3300 Internship in Management MGMT 3335 Communication Policy and Strategy MGMT 3368 Negotiations

## MINOR IN MANAGEMENT

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)

A minor in Management will provide students with the knowledge, skills, and practices essential for managing in all types of organizations, including nonprofit organizations, and may enhance the marketability of students seeking employment, regardless of primary major.

1 - Management Core - 9 hours ( 9 advanced)
MGMT 3361 Principles of Management MGMT 3362 Human Resource Management MGMT 4321 Organizational Behavior
2 - Advanced Management Electives - 9 hours (9 advanced)
Choose from:
MGMT 3300 Internship in Management MGMT 3335 Communication Policy and Strategy MGMT 3365 Compensation MGMT 3366 Recruitment and Selection MGMT 3367 Organizational Training and Development

MGMT 3368 Negotiations
MGMT 4300 Topics in Management
MGMT 4304 Business and Society
MGMT 4311 International Management
MGMT 4351 Entrepreneurship in the Border Corridor
MGMT 4356 Foundations of Entrepreneurship
MGMT 4362 Business and Sustainability
MGMT 4363 Operations Management
MGMT 4365 Quality Management MGMT 4367 Purchasing and Supply Chain Management MGMT 4370 Project Management MGMT 4399 Business Consulting

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)

A minor in Sustainable Supply Chain Management will provide students with the knowledge, skills and practices essential for operational decision making from a sustainability perspective. All three aspects of sustainability - economic, social and environmental - are emphasized. Graduates may be employed in either manufacturing or service organizations in the areas of supply chain, distribution, retail operations, or environmental management.

1 - Sustainable Supply Chain Core - 15 hours (15 advanced)
MGMT 4362 Business and Sustainability
MGMT 4363 Operations Management
MGMT 4365 Quality Management
MGMT 4367 Purchasing and Supply Chain Management
MGMT 4370 Project Management
2 - Advanced Sustainable Supply Chain Elective - 3 hours (3 advanced)
Choose from:
MGMT 3300 Internship in Operations Management
MGMT 3335 Communication Policy and Strategy
MGMT 3368 Negotiations
MGMT 4311 International Management

# Department of Marketing 

Dr. Michael Minor<br>Chair, Department of Marketing<br>Location: BUSA 211D (UTRGV Edinburg Campus)<br>Phone: 956-665-3379<br>Email: michael.minor@utrgv.edu

## BACHELOR OF BUSINESS ADMINISTRATION (BBA)

WITH A MAJOR IN<br>MARKETING

Marketers conduct marketing research where they study cultural, social, economic, and environmental factors that can have an effect on product or service development. If you are sociable, creative, and enjoy working with teams, you can expect to find job positions, such as marketing coordinators, retail store managers, marketing directors, advertising managers, and public relations, with this career.

## STUDENT LEARNING OUTCOMES:

1. Students will acquire and retain marketing knowledge including concepts, theories, strategies, tactics, methods, techniques, and tools.
2. Students will acquire skills to put marketing knowledge and skills into practice including marketing research, developing marketing plans, making a sales pitch, and working with decision simulations.
3. Students will exhibit effective written and oral communication skills.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Social and Behavioral Sciences - 3 hours
ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - $\mathbf{3}$ hours
Choose one from the following:
INFS 2398 Information Technology for Student Success and Career Development QUMT 2398 Decision Analytics

B - MAJOR REQUIREMENTS - 78 HOURS ( 60 advanced)
1 - Business Core - 48 hours ( 30 advanced)
a - Business Foundation - 18 hours
ACCT 2301 Introduction to Financial Accounting
ACCT 2302 Introduction to Managerial Accounting
INFS 2300 Data Modeling Management Tools
ECON 2302 Principles of Microeconomics
MGMT 1301 Introduction to Business
QUMT 2341 Business Statistics I
b - Advanced Business Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
BLAW 3337 Business Law I
QUMT 3341 Business Statistics II
FINA 3380 Introduction to Finance
MARK 3300 Principles of Marketing
MGMT 3361 Principles of Management
MGMT 4389 Strategic Management
Choose one (Management Information Systems):

INSF 3390 Management Information Systems ACCT 3326 Accounting Information Systems
Choose one (International Business):
INFS 3380 Global Information Technology
ACCT 3350 International Accounting ECON 3353 International Trade FINA 4381 International Finance INTB 3330 International Business MARK 3310 International Marketing MGMT 4311 International Management Choose one (Ethics):

ACCT 4350 Ethics for Accountants MGMT 4304 Business and Society MARK 3330 Business Ethics and Corporate Social Responsibility Choose one (Business Communications): COMM 3313 Business and Technical Communication MGMT 3335 Communication Policy and Strategy MARK 3320 Personal Branding and Communication
2 - Marketing Core - 30 hours ( 30 advanced) a - Marketing Foundation - 9 hours (9 advanced)

MARK 3340 Consumer Behavior MARK 4350 Marketing Research MARK 4399 Marketing Strategy (Capstone)
b - Marketing Certificate - $\mathbf{2 1}$ hours ( $\mathbf{2 1}$ advanced)
Select one certificate below:
i - Multicultural and Global Certificate - $\mathbf{2 1}$ hours (21 advanced)
MARK 3311 Business and Culture
MARK 3321 Hispanic Marketing
MARK 4331 Multicultural Markets
MARK 4341 Business in Asia
MARK 4351 Business in Latin America
MARK 4361 International Competitiveness
Choose one:
MARK 3350 Services Marketing
MARK 3360 Retailing
MARK 4360 Social Media and eMarketing
MARK 4370 Topics in Marketing
MARK 4380 Marketing Internship
ii - Design, Commercialization and Development Certificate - $\mathbf{2 1}$ hours (21 advanced)

MARK 3365 Product and Service Design
MARK 3375 New Product Development
MARK 4385 Integrated Marketing Communications MARK 4395 Fashion Design and Popular Culture Choose three:

MARK 3350 Services Marketing MARK 3360 Retailing

> MARK 4360 Social Media and eMarketing MARK 4370 Topics in Marketing MARK 4380 Marketing Internship
> iii - Entertainment Business Certificate - $\mathbf{2 1}$ hours (21 advanced)
> MARK 3392 Event Marketing
> MARK 3393 Sports Marketing
> MARK 4394 Music Marketing
> MARK 4395 Fashion Design and Popular Culture
> Choose three:
> MARK 3350 Services Marketing MARK 3360 Retailing
> MARK 4360 Social Media and eMarketing
> MARK 4370 Topics in Marketing
> MARK 4380 Marketing Internship
> iv - Branding and Communication Certificate - $\mathbf{2 1}$ hours (21 advanced)
> MARK 3382 Branding
> MARK 3383 Pricing Strategy and Tactics
> MARK 4384 Professional Selling and Sales Management
> MARK 4385 Integrated Marketing Communications
> Choose three:
> MARK 3350 Services Marketing
> MARK 3360 Retailing
> MARK 4360 Social Media and eMarketing
> MARK 4370 Topics in Marketing
> MARK 4380 Marketing Internship
> v - No Certificate - $\mathbf{2 1}$ hours (21 advanced)
> Choose 21 advanced hours from any of the certificates above, except courses unique to the Branding and Communication Certification.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

 TOTAL ADVANCED HOURS - 60 HOURS
## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Admission requirements

1. Student must complete all 18 hours of Business Foundation Courses, and a minimum of 15 General Education Courses including ECON 2301, before applying to CoBE.
2. Grades of ' C ' or better in all Business Foundation courses.
3. Grade of 'C' or better in ECON 2301.
4. A minimum 2.5 GPA in combined General Education Core \& Business Foundation completed coursework.
Progression requirements
Students must earn a grade of ' $C$ ' or better in all advanced ( $3 x x x-4 x x x$ ) BBA-applicable courses in order to earn program credit towards this major. Students must maintain a minimum 2.5 GPA.

## Graduation requirements

Students must have:

1. A minimum 2.5 GPA in combined Advanced Business Core \& Marketing Core coursework.
2. An overall minimum 2.5 GPA required.
3. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)<br>1 - Marketing Core - 6 hours (6 advanced)<br>MARK 3300 Principles of Marketing MARK 3340 Consumer Behavior<br>2 - Marketing Electives - 12 hours<br>Choose 12 hours of MARK electives.

## Course Inventory for College of Business and Entrepreneurship (COBE) Accounting

ACCT 2301 Introduction To Financial Accounting
Emphasizes the preparation of financial reports for, and their use by, external constituents. BBA degrees require that this course be passed with a 'C' or better. Prerequisites: MATH 1314, MATH 1414, MATH 1324, or MATH 1325.

ACCT 2302 Introduction To Managerial Accounting
Emphasizes the preparation and use of financial and non-financial reports for managerial planning and decision-making purposes. BBA degrees require that this course be passed with a 'C' or better. Prerequisites: ACCT 2301 with a 'C' or better.

ACCT 3321 Intermediate Accounting I
Discussion of the theoretical concepts and technical procedures underlying the preparation of external financial reports by corporations. Differences between the U.S. GAAP and IFRS are discussed. Prerequisites: ACCT 2302 with a 'C' or better and Junior standing.

ACCT 3322 Intermediate Accounting II
Continues the coverage of the theoretical concepts and technical procedures underlying the preparation of external financial reports by corporations. Differences between the U.S. GAAP and IFRS are discussed. Prerequisites: ACCT 3321 with a 'C' or better and Junior standing.

ACCT 3323 Income Taxation
Analyzes the federal income tax rules as they apply to individual taxpayers. Includes examining the tax implications of property transactions. Prerequisites: ACCT 2301 with a 'C' or better and Junior standing.

ACCT 3324 Cost Accounting and Management
A detailed study of the cost accounting concepts, systems, and techniques with an emphasis on providing information for managerial decision-making. Prerequisites: ACCT 2302 with a ' C ' or better and Junior standing.

ACCT 3325 Governmental and Not-for-Profit Accounting
Focus on control of public resource flows in governmental and not-for-profit organizations in the absence of ownership and profit motive. The course emphasizes accountability and financial reporting to citizens and other constituents. Prerequisites: ACCT 2301 with a ' C ' or better and Junior standing.

ACCT 3326 Accounting Information Systems
Analyzes the role of accounting information systems in organizations. Emphasis is placed on data processing, organizational effectiveness, and controls necessary to ensure the accuracy and reliability of financial information. Prerequisites: ACCT 2302 with a 'C' or better and Junior standing.

ACCT 3327 Fraud Examination and Forensic Accounting
Examines various forensic accounting concepts as well as fraud prevention and detection strategies. Case analysis and expert witness presentations will be emphasized. Prerequisites: ACCT 2301 with a ' C ' or better and Junior standing.

ACCT 3328 Quantative Methods for Accounting
Emphasizes analytical and quantitative techniques for decision making. Prerequisites: ACCT 2302 with a 'C' or better and Junior standing.

ACCT 3350 International Accounting
Examines the similarities and differences between select U.S. and International Accounting Standards. Also discusses the effects of socio-economic and cultural factors on the development of accounting standards in different regions of the world. Prerequisites: ACCT 3321 with a 'C' or better and Junior standing.

ACCT 4324 Advanced Cost/Managerial Accounting
Advanced topics in cost/managerial accounting with an emphasis on emerging concepts and techniques useful for decision making. Prerequisites: ACCT 3324 with a 'C' or better and Junior standing.

ACCT 4327 Auditing
Exposes students to the theory and practices of auditing, primarily from the independent auditors' perspective. Legal, ethical, and social responsibilities of auditors, as well as written and oral communication skills development are emphasized. Specialized information resources and their uses in decision making by auditors comprise an integral part of the course. Prerequisites: ACCT 3322 with a 'C' or better and Junior standing.

ACCT 4329 Corporate and Partnership Taxation
Examination of federal income tax rules applicable to partnerships and corporations. Prerequisites:
ACCT 3323 with a 'C' or better and Junior standing.
ACCT 4330 Estate and Gift Taxation
Topics related to estate, gift and trust taxation will be covered. Integration of these taxes with income taxes and personal financial plans will also be explored. Prerequisites: ACCT 3323 with a 'C' or better and Junior standing.

ACCT 4331 Advanced Accounting
A study of the theory and practices of accounting for investments in other companies with emphasis on long-term investments and consolidated financial statements. Prerequisites: ACCT 3322 with a ' C ' or better and Junior standing.

ACCT 4332 Accounting Research
Research and analysis of accounting issues and cases. Internal Revenue Code and Treasury Regulations, FASB Codification, and AICPA Professional Standards are examined. Prerequisites: ACCT 3323 with a 'C' or better and Junior standing. Corequisite: ACCT 4327 or prior credit with a 'C' or better.

ACCT 4333 Accounting Theory
A critical study of contemporary accounting and auditing theories. Emphasis is placed on income determination, asset valuation, and current authoritative literature. Prerequisites: ACCT 3322 with a 'C' or better and Junior standing.

ACCT 4345 Accounting Internship
A 150-hour training in a public accounting firm, industry, or a not-for-profit organization, under the supervision of a CPA. May not be repeated for credit. Prerequisites: Approval of internship coordinator and 12 hours of upper-level accounting courses.

ACCT 4347 Advanced Auditing
Examines the auditing philosophy and advanced auditing issues. Entails research of public company auditing standards (issued by PCAOB) and nonpublic company auditing standards (issued by AICPA). Governmental, not-for-profit auditing issues, and internal auditing concepts will also be covered. Prerequisites: ACCT 4327 with a 'C' or better and Junior standing.

ACCT 4348 Special Topics In Accounting
The course covers advanced topics in accounting. It may be repeated for credit when topics vary. Prerequisites: ACCT 3322 with a 'C' or better, or consent of instructor.

ACCT 4350 Ethics for Accountants
Examines the principles of integrity, objectivity, independence and professionalism, as well as compliance with the rules of professional conduct. Designed to satisfy the requirements of the Texas State Board of Public Accountancy for CPA exam candidates. Prerequisites: Junior standing. Corequisite: ACCT 4327.

## Business

BUSI 3343 Decision Analysis
A study of regression, forecasting, and other analytical methods. The format of the course will be lectures and case studies. Students will address problems in context, determine the proper techniques, collect the information, and then solve the problem. Prerequisites: MATH 1314 or MATH 1325 with 'C' or better.

## Business Law

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 and the study and analysis of cases and rules of law relating to basic business practices. Prerequisites: Junior Standing.

BLAW 3338 Business Law II
A continuation and expansion of the study of rules of law in a business society. Prerequisites: BLAW 3337 with a 'C' or better.

BLAW 3340 International Business Law
U.S. laws governing international business. The impact of foreign laws on business within the host country, including U.S. companies in that country. Prerequisites: BLAW 3337 with a 'C' or better.

BLAW 4331 Topics In Business Law
Each course will address a separate business law topic as determined by the instructor and based on student demand. This course may be repeated for credit if topics vary. Prerequisites: BLAW 3337 with a 'C' or better.

## Economics

ECON 1301 Introduction to Economics
Uses economic analysis to examine a variety of past and current economic, social and political issues/problems. While the focus will be on the United States, international issues will also be considered. In particular, the student will have the opportunity to develop an understanding of how economic, social and political systems, through their institutions and structures, affect a variety of issues related to the economy and society.

ECON 2301 Principles of Macroeconomics
Provides an introduction to the economy as a whole. Topics include national income and output, unemployment, inflation, market forces and economic growth, international linkages (such as trade deficits), and economic, social and political structures and institutions (such as fiscal and monetary policies and the Federal Reserve System).

ECON 2302 Principles of Microeconomics
Introduction to the economic problem and the fundamentals of microeconomics. Analysis of the market system (including market failure), consumer demand, the firm's supply decision, product and resource markets, resource allocation and efficiency and international linkages (such as comparative advantage). Prerequisites: ECON 2301 with a grade of 'C' or better.

ECON 3300 Internship in Economics
Provides students the opportunity to gain real world experience in their chosen economics career field by working with a participating employer or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements for the assignment. The employment can be either paid or unpaid, and must include at least 10 hours of work each week over the period of one academic term. Prerequisites: ECON 2301, ECON 2302, upper-division standing, and approval by both department chair and employer providing internship experience.

ECON 3336 The Political Economy of Mexico
Surveys the growth of the Mexican economy, its institutions and problems. Emphasis is placed on the relative roles of government and private enterprise in the development process. Prerequisites: ECON 2301.

ECON 3341 Econometrics
Studies standard regression procedures of parameter estimation and hypothesis testing in economics. This course covers basic probability concepts, the linear regression model, the properties of the least squares estimators, hypothesis testing, functional form, heteroskedasticity, autocorrelation, and the basics of panel data estimation and simultaneous equation. Prerequisites: ECON 2301, ECON 2302, and QUMT 2341.

ECON 3342 Business and Economics Forecasting
Studies forecasting techniques as they apply to finance and economics. The course covers graphical analysis, modeling and forecasting trends, seasonality adjustment, stationarity, MA, AR, ARMA, ARIMA, unit roots, forecasting with regression models, and forecast evaluation. Prerequisites: ECON 3341.

ECON 3343 Economics of the Government Sector
Economic roles of the government, public sector economic decision making, and the effects of government expenditures and taxation on resource allocation, income distribution and economic growth. Also includes topics such as pollution control, education, deregulation, and income security programs. Prerequisites: ECON 2301 and ECON 2302.

ECON 3351 Macroeconomic Theory
Provides an analysis of the construction, character and operational uses of the macroeconomic models of classical, Keynesian, Monetarist and Neoclassical schools of thought. Applications of the foregoing models to such issues as inflation, unemployment, economic growth, interest rates, and investment in the U.S. economy are emphasized. Prerequisites: ECON 2301 and ECON 2302.

ECON 3352 Microeconomic Theory
Provides an in-depth study of the theory of consumer demand and the theory of the firm. Supply and demand analysis and different market structures are also discussed. Prerequisites: ECON 2301 and ECON 2302.

ECON 3353 International Trade
Provides an analysis of the mechanism of international trade and its effects on the domestic economy. Emphasis is placed on the issues of comparative advantage, trade barriers, international factor mobility (including foreign direct investment) and trade agreements. Prerequisites: ECON 2301 and ECON 2302.

ECON 3354 Health Economics
Examines the economics of health and health care, the production of health services, the markets for hospital and physician services and the health insurance market. Other major topics include managed care, the pharmaceutical industry, the role of government in the health care sector, and health care reform. Prerequisites: ECON 2302.

ECON 3355 Development Economics
Presents an overview of the field of Development Economics. It aims to demonstrate the application of economic theory to the problems of economic development in less developed countries. Topics covered include: economic growth, economic inequality, poverty, malnutrition, health, education, microfinance, gender, population growth, migration, and the rural economy. Prerequisites: ECON 2301.

ECON 3357 Economics of Poverty
Provides an analysis of the causes and socioeconomic consequences of poverty. Discussions involve such topics as income transfer programs, welfare reform, Social Security, national health programs and income tax structures. Prerequisites: ECON 2301.

ECON 3358 Labor Economics
Provides an in-depth analysis of labor market structures and processes, patterns and determinants of employment and wages, labor force participation, unemployment, discrimination and human capital. Prerequisites: ECON 2301 and ECON 2302.

ECON 3360 Managerial Economics
Applies economic reasoning to entrepreneurial decision making. The course covers topics such as personnel economics, production theory, pricing policies and investment planning. Prerequisites: ECON 2301 and ECON 2302.

ECON 3381 Money and Banking
Surveys the components, nature, functions, creation and destruction of money and credit. Other topics include financial institutions and their functions and an introduction to monetary theory and policy. Prerequisites: ECON 2301 and ECON 2302.

ECON 4340 Introduction to Mathematical Economics
Introduction to quantitative methods used to analyze a variety of macroeconomic and microeconomic issues, including the role of fiscal and monetary policies in the macroeconomy, markets, production costs, profit maximization and utility maximization. Methods discussed include structural models, matrix algebra, comparative statics and unconstrained and constrained optimization. Prerequisites: ECON 2301, ECON 2302, and MATH 1342 (or MATH 1387 - or equivalent).

ECON 4359 History of Economic Thought
Provides a survey of the field of economics. Pre-scientific, classical and contemporary works will be studied to offer knowledge of the development of economic theory and view of current direction and scope. Prerequisites: ECON 2301 and ECON 2302.

ECON 4361 Studies in Economics
[3-0]
Provides an in-depth analysis of a special economics topic selected by the instructor. The topic will be established a priori, such that interested students should contact the instructor or department chair before registration. This course will have variable content and may be repeated for credit with consent of instructor. Prerequisites: ECON 2301 and ECON 2302.

## Entrepreneurship

ENTR 3340 New Venture Creation and Innovation
The skills needed for evaluating and ensuring the success of a business opportunity include team building, organizing, planning, integrating, and persuading. The course will develop creativity and innovation skills through hands on learning to help students better identify, create and implement entrepreneurial solutions. Students will create a new product concept. Prerequisites: 60 hours completed.

ENTR 4360 Entrepreneurial Finance
Topics covered include the development, implementation and control of financial plans, strategies and policies by owner-managers of small and medium sized firms, as well as the analysis of alternatives and decision making. Prerequisites: 60 hours completed.

## Finance

FINA 1335 Life and Money: Introduction to Financial Literacy
Introduces students to financial tools that can assist in making financial decisions regarding spending, saving, and the use of credit. By the end of the course, students should be able to take their knowledge and ability and apply them to real life situations.

FINA 3380 Introduction to Finance
Analyzes the finance function in the firm and the specific responsibilities of the firm's corporate manager. Emphasis is placed on financial decisions using managerial information systems as an integrating force to deliver planned results. This study includes, but is not limited to, decisions affecting the internal management of the firm and the acquisition of new assets and funds. Prerequisites: ACCT 2301, ACCT 2302, and ECON 2301.

FINA 3382 Investment Principles
Provides an overview of the valuation of investment securities of corporations and governmental agencies. The purchase and sale of securities through brokerage houses and investment banking firms are also studied. Prerequisites: FINA 3380.

FINA 3384 Fundamentals of Real Estate
Studies the physical and economic characteristics of real estate, particularly as they relate to law, taxation, appraisal, marketing and finance.

FINA 3385 Principles of Insurance
Studies the identification and control of risks facing the individual and the business firm, as well as the use of insurance and other mechanisms in dealing with them, are studied. Other topics include risk analysis, loss prevention, personal and property insurance, insurance programs, and estate plans.

FINA 3386 Financial Institutions and Markets
Studies the dynamics of financial markets and their interaction with the suppliers of funds, particularly financial intermediaries, are studied in this course. Prerequisites: ECON 3381.

FINA 3387 Real Estate Finance
Provides an analysis of the nature and problems of developing the financing of real estate. Also, it covers a study of financial markets and instruments that are used to solve the financial needs of various real estate activities. Prerequisites: ACCT 2301, ACCT 2302, and ECON 2301.

FINA 3388 Fundamentals of Financial Planning
Analyzes the multifaceted task of financial planning. Financial planning is a life-long process that assists families in taking control of their financial future. Topics include four broad areas: basics, borrowing, investing, and protection. In addition, the course provides learning activities that will facilitate student growth and development in written and oral communication skills. Prerequisites: FINA 3380.

FINA 3389 Retirement Planning
Designed to examine the topics of retirement planning and retirement plans from both the employer/employee and individual client settings. A case study approach will be used to apply and integrate the material, and evaluation of financial alternatives will be emphasized. In addition, the course will provide learning activities that will facilitate student growth and development in written and oral communication skills.

FINA 3391 Small Business Financial Management
Covers three important aspects of financial management for the small business: 1) sources of financing; 2) financial planning; and 3) valuation of the small business. Students will be required to complete a term project involving at least one of these aspects in a real business situation. Prerequisites: ACCT 2301, MGMT 3361, and 3 hours of economics.

FINA 3393 Entrepreneurial Finance
Provides an in-depth analysis of venture financing and techniques to manage entrepreneurial risk. Prerequisites: ACCT 2301, MGMT 3361, and 3 hours of economics.

FINA 4300 Topics in Finance
Analyzes a special finance topic and will be selected by the instructor. Total course content and requirements will be established on an individual basis by the instructor. Prerequisites: Consent of instructor.

FINA 4381 International Finance
Discusses the application of finance principles in the international environment, including the nature of the balance of payment mechanism, the factors affecting the foreign exchange market, defensive techniques to protect the business against foreign exchange risk and the investing, financing and working capital management within a multinational firm. Prerequisites: FINA 3380

FINA 4382 Advanced Investments
Provides the theoretical framework, techniques and applications of investment management. It also develops models for performance evaluation emphasizing optimum combination of risk and return. Prerequisites: FINA 3382.

FINA 4383 Corporate Finance
This finance major capstone course focuses on the major decision areas of corporate finance. This course builds on the theoretical concepts and empirical evidence presented in introductory courses of corporate finance, investments, and financial markets. Prerequisites: FINA 3382, FINA 3380, and either ECON 3381 or FINA 3386.

FINA 4389 Commercial Banking
Analyzes 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 are covered. Prerequisites: ECON 3381 or FINA 3386.

## Information Systems

INFS 1101 Introduction to Office Software
A hands-on approach to different software packages for word processing, spread sheets, database, email, and Internet. Topics cover the fundamental use of productivity software. This includes word processing fundamentals, beginning and intermediate use of presentation software, spread sheet software, and the creation and use of a database.

INFS 1301 Computer Information Systems
This course serves as an introduction to the primary components of a business computer system and to the primary application software packages used to increase productivity of business professionals. These topics will be reinforced with microcomputer laboratory exercises. Students failing to demonstrate computer proficiency who wish to take advanced business courses in the must take this course.

INFS 2300 Data Modeling Management Tools
Students taking this course will learn to build, enhance, and manipulate business spreadsheets; to make reports and charts; to conduct what-if analyses; and to complete advanced analyses in Excel. They will also be introduced to the steps involved in building, maintaining, and enhancing databases, and working with tables, queries forms and reports. They will learn how spreadsheets and Microsoft databases can share information with other Microsoft programs. Prerequisites: Computer proficiency.

INFS 2398 Information Technology for Student Success and Career Development
In this course, students gain empirical and quantitative skills using computational techniques, descriptive statistical techniques, and simulation applicable to decision making that are needed to succeed in courses within the Bachelor degree programs. This course provides students with the methodologies to approach problems in an ethical, rational and logical manner by developing statistical, decision analytical, and simulation techniques that have been applied to problems arising in a variety of areas.

INFS 3300 Internship in Information Systems
This course is designed to give students an opportunity to gain real-world experience in their chosen career field by working with a participating employing firm or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better; approval by the department chair.

INFS 3308 Business Information Infrastructure
This course introduces students to the basic concepts of computing and information technology infrastructure components in the context of the contemporary business environment. Topics include computer architecture, traditional packaged and open source software, operating systems, cloud computing, virtualization, web services and multimedia, and business impacts and strategies for these technologies.

INFS 3310 Introduction to Business Programming
Students will be introduced to developing business applications using modern programming languages. Topics include fundamentals of logic development and implementation, user interface design, data controls, and systems integration. Students will understand terminology and principles of programming; produce coding plans for problem statements, sample test cases, and pseudo-code; be able to design, develop, test, and implement working application programs for given business problem specifications. Prerequisites: Advanced standing; Computer proficiency or INFS 1301; INFS 2398 with 'C' or better.

INFS 3320 Organizational Information Assurance
This course covers concepts of information assurance in enterprises. Students will learn how to: demonstrate understanding of the dimensions of organizational information assurance; evaluate meaningful metrics to measure the quality of information assurance, and set appropriate priorities and policies; measure security risk and present plans for loss prevention, incident response, mitigation strategies, and recovery of business information assets after an incident; improve communication to business owners and security teams, including legal and public relations implications of business information security and privacy issues. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better, or permission of the instructor.

INFS 3330 Business Process Logic
This course examines the changing role of business processes as they are adapted to exploit new technologies and business models through the use of computer-based tools. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 3335 Database Management
This course is an introduction to foundations of database technology. Basic knowledge in data structures, normalization of data and data modeling will be included. Relational, hierarchical and network models will be covered. The student will be introduced to the rudiments of the construction of database schema via laboratory experiences stressing application development through advanced programming techniques and SQL. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 3336 Systems Analysis
This course examines the analysis of business information systems and their redesign through automated applications. Students will learn the nature of information needs and the role of information systems in organizations. Using a variety of information systems development approaches and problem-solving tools, student will initiate, plan and analyze a real-life project within an organization. Team projects will result in a system proposal. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 3338 Computer Networks and the Internet
This course provides knowledge of the fundamental concepts of data communication and networking to the students. Topics include Application layer, Physical layer, Data Link Layer, Network Layer, and Transport Layer. In addition, classification of network technologies is explained, including wired and wireless local area networks, wide area networks, and backbone networks. Key concepts underlying network management and network design are emphasized. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 3380 Global Information Technology
The purpose of this course is to investigate the role of information technologies in multinational settings. This course will examine the international business environment and how information systems and technology can be effectively utilized in multinational environments. Prerequisites: Computer proficiency or INFS 1301; Advanced standing; MGMT 3361 with 'C' or better; or permission of the instructor.

INFS $\mathbf{3 3 9 0}$ Management Information Systems
This course is a study of the use of current information technology in strategic decision-making and operations of modern organizations, both public and private. The course examines how organizations plan, develop, implement, and maintain information systems to take advantage of recent technological advances in information technology. Prerequisites: Computer proficiency or INFS 1301; Advanced standing; or permission of the instructor.

INFS 3395 ERP Implementation
This course presents the specific concepts, systems, strategies, and technologies for ERP implementation. It introduces students to the concept of business process re-engineering and various ERP implementation strategies. Furthermore, specific ERP architecture, integration components, and interfaces in place to allow enterprise enhancements with primary applications and third party applications are examined. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 4308 Project Management
This course presents the specific concepts, systems, and technologies for managing information system projects effectively. This course leads the students through a complete project life cycle, from requirements analysis and project definition to start-up, reviews, and phase-out. The role of the project manager as team leader is examined together with important techniques for controlling project costs, schedules, and performance. Lectures, case studies, a research project, and group discussions are combined to develop the skills needed by project managers in today's business environments. Prerequisites: Advanced standing; INFS 3308, INFS 3310, and INFS 3390 with 'C' or better; or consent of the department chair.

INFS 4312 E-Commerce Design
This course introduces the development of Internet-based systems and delivery of business content on the web using HTML, JavaScript, and other tools. Hands-on exercises and projects will be used to emphasize various tools and techniques used in web application development. Students will learn best practices for e-commerce strategies and e-commerce systems management techniques. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 4330 Business Intelligence
This course is a study of the use of data warehousing and data mining techniques for business intelligence. Topics covered include data extraction, cleaning up, transformation, OLAP processing, and various data mining algorithms and techniques. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better; or permission of the instructor.

INFS 4340 Information Systems and Governance
This course will develop an understanding of how IT should be planned in organizations how IT can become a strategic tool to improve business performance. Students will learn IT/ business strategy alignment, application portfolio assessment, optimization of service delivery tasks and processes, and IT Roadmap development. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 4391 Information Security
This course prepares students to address business problems in organizational information security. Students will learn: to identify and prioritize business information assets, and threats to those assets; how attacks against information resources are carried out; how to use network utilities and defensive tools to protect information assets; to define a business information security strategy and architecture; and how to plan for and respond to intruders in a business information system. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better; or permission of the instructor.

INFS 4395 ERP Customization
This course introduces students to different levels of ERP (SAP) customization in the course of ERP implementation. More specifically, it allows students to gain insight on how to customize the out-of-the-box ERP system so that it suits a specific business need and delivers critical data in the way that adequately reflects business operations. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

INFS 4397 Health Computer Information Systems
This course provides the knowledge about fundamentals of Health Computer Information Systems in efficient operation of healthcare organizations. The course specifically focuses on: Evolution of HCIS components and basic HCIS functions, technology infrastructure for healthcare organizations, basic concepts such as EHR, HIE, CPOE and CDSS, HICS standards such as HIPPA, HL7, and DICOM, strategic information systems planning for healthcare organizations, systems analysis and project management, information security issues, and the roles of HCIS professionals in health organizations. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better; or permission of the instructor.

INFS 4399 Selected Topics in Information Systems
In this course, students will study concepts and rudiments of behaviors, technologies, management, environments, and practices for the Information Systems topic being presented. They will learn the skills required to discuss current issues related to the topic within business, cultural, and national norms, through readings and discussions. Students will practice skills by working on mini-projects using the information technology related to the topic. Prerequisites: Advanced standing; INFS 3308 and INFS 3310 with 'C' or better.

QUMT 2341 Business Statistics I
An introduction to descriptive statistics and statistical inference. Topics include collection, organization, and visualization of numerical data, central tendency, dispersion, probability theory, conditional and joint probabilities, counting rules, discrete and continuous probability distributions, sampling distributions and central limit theorem, and statistical concepts in quality control. Prerequisites: MATH 1314 or MATH 1414 or MATH 1324 or MATH 1325; and computer proficiency or INFS 1301.

QUMT 2398 Decision Analytics
In this course, students gain empirical and quantitative skills using computational techniques, descriptive statistical techniques, and simulation applicable to decision making that are needed to succeed in courses within the Bachelor degree programs. This course provides students with the methodologies to approach problems in an ethical, rational and logical manner by developing statistical, decision analytical, and simulation techniques that have been applied to problems arising in a variety of areas. Prerequisites: MATH 1314 or equivalent.

QUMT 3341 Business Statistics II
This course extends the students introduction to statistics. Topics include confidence intervals, hypothesis testing for means and proportions, analysis of variance, correlation, simple and multiple regression, and time series decomposition. Prerequisites: QUMT 2341.

QUMT 3343 Statistical Methods for Business
Students will study descriptive and inferential statistical techniques used to solve business-related problems. Topics include descriptive techniques, probability, confidence intervals, tests of hypotheses, analysis of variance, chi-square tests, correlation, and regression. Prerequisites: MATH 1342 (or MATH 1387) or QUMT 2341; or other equivalent as determined by the instructor.

QUMT 4343 Quantitative Methods for Decision-Making in Business
This course introduces students to quantitative based decision analysis techniques used in an informed decision making process across many functional areas of the enterprise. The course addresses analytical problems in human staffing, operations flow, marketing mix, and supply chain management settings. Analytical methods include but are not limited to linear programming, network modeling, project scheduling (PERT \& CPM), decision analysis, and inventory modeling. Prerequisites: QUMT 3343 or QUMT 3341.

## International Business

INTB 3330 International Business
Business concepts, analytical processes and philosophical bases for international business operations. Emphasis is on environmental dynamics, multinational business organizations, cultural and economic constraints, unique international business practices and international operations, strategy, and policy. Prerequisites: Junior standing.

INTB 3331 International Law
This course covers a wide range of topics including differences in national legal systems, the formation of international law through treaties and practice, and the relationship between international law and domestic law. It may include such topics as immigration law, human rights, intellectual property protection, the settlement of international disputes, and customs law. Prerequisites: Junior standing and approval by both the department chair and the employing organization.

INTB 4393 Topics in International Business
The study of significant topics related to International Business. Course may be repeated for credit when topic varies. Prerequisites: Junior standing.

## Management

MGMT 1301 Introduction to Business
This course is a survey of various business disciplines and their interrelationships, suitable for both business and non-business majors.

MGMT 3300 Internship in Management
This internship is designed to give a student an opportunity to gain experience by working with a business, not-for-profit or public organization. The student and a supervising faculty member must agree to written learning goals prior to the assignment, and the student must complete written reports regarding the achievement of these goals. May not be repeated for credit. Prerequisites: Junior standing and approval by both the department chair and the employing organization.

MGMT 3335 Communication Policy and Strategy
Course focuses on communication policy and practice as contributions to the effectiveness and efficiency of organizational operations in domestic and global theaters. The focus includes decisionmaking, ethical dilemmas, and tactics related to establishment of organizational policies and practices guiding communication, internal and external, global, and domestic, to the organization. The course uses case study format. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

MGMT 3361 Principles of Management
The management functions of planning, organizing, leading, and controlling provide the foundation for this course. Emphasis is placed on organizational theory and behavior. Prerequisites: 51 credit hours completed.

MGMT 3362 Human Resource Management
This course focuses on the current developments within the field of human resource management. Students will study the concepts, principles, policies, and organizational procedures used by businesses in the management of personnel. Topics include employment law, recruitment, selection, compensation, training and development, career management, performance management, collective bargaining, labor relations, and employee health and safety. Prerequisites: MGMT 3361 or consent of instructor.

MGMT 3365 Compensation
This course presents the principles and practices of the determination of relative values of jobs and their applications to basic wage and salary structure. The class includes the formulation of a job evaluation plan and its accompanying wage structure. Prerequisites: MGMT 3361 or consent of instructor.

MGMT 3366 Recruitment and Selection
This course is designed to provide an understanding of the process of recruitment and selection in organizations. It will cover the basic aspects of these areas (e.g. job analysis, legal issues, selection devices) as well as current issues such as global staffing, downsizing, and contingent workers. While the focus of the course is from an organization's point of reference, a significant portion of the requirements will aid students in developing the tools, resources, and awareness to get placed and promoted in organizations. Prerequisites: MGMT 3361 or consent of instructor.

MGMT 3367 Organizational Training and Development
This course is designed to provide students with the fundamental aspects of training as well as handson practical experience in developing training programs for organizations. The primary focus of this course deals with aiding students in developing the skills necessary to deliver training and development sessions that can be applied in organizations in order to meet the needs of the fastpaced, information-generating corporate environments that are necessary in firms today. A major emphasis will be on skill development in regard to the design and delivery of training that is both efficient and cost effective to the organization. Prerequisites: Junior standing.

MGMT 3368 Negotiations
This course is designed to improve your ability to negotiate successfully. This will be achieved through developing your understanding of the principles, strategies, and tactics of effective negotiation and professional relationship management. You will learn to identify and assess the variables in negotiations, develop sound negotiation planning techniques, and develop an understanding of various strategies and tactics to use as you ethically resolve conflicts, transactional, and interpersonal differences. The course methodology is highly participative and relies on experiential learning, feedback, and an openness to change and development Prerequisites: Junior standing.

MGMT 4300 Topics in Management
Significant topics related to management that will be selected by the instructor. This course may be repeated for credit when the topic varies. Prerequisites: MGMT 3361 or consent of instructor.

MGMT 4304 Business and Society
The ethical and social responsibilities of business are analyzed using basic ethical principles. This course also examines the relationship between business and stakeholders such as employees, customers, investors, and the community, and considers the impact of external factors such as cultural trends, governmental regulations, and legal rulings. Prerequisites: Junior standing.

MGMT 4311 International Management
The course focuses on the study of global management practices of planning, organizing, staffing, communicating, negotiating, leading, and controlling across nations. This includes the adaptation of these management functions across social, cultural, economic, legal, ethical, and political environments. The course explores the intersection of these topics with current business events. Prerequisites: MGMT 3361 and junior standing.

MGMT 4321 Organizational Behavior
This course focuses on the study of management theory with emphasis on the investigation of individual and group behaviors within organizations, and organizational structure. Covered areas are individual differences, group dynamics, leadership, motivation, goal setting, communication, decision making, and diversity. Prerequisites: MGMT 3361 or consent of instructor.

MGMT 4351 Entrepreneurship in the Border Corridor
The South Texas-Northeastern Mexico border corridor, extending from Austin/San Antonio in the north, running through McAllen/Reynosa, the two Laredo's, and continuing to Monterrey/Saltillo, is one of the most dynamic regions in the Americas. In partnership with the College of Business at UTSA, this course is designed to provide high potential undergraduates specialized knowledge and skills useful for those pursuing careers in entrepreneurship and/or international business in our area Prerequisites: Junior standing.

MGMT 4356 Foundations of Entrepreneurship
Entrepreneurial ventures and new businesses have many special characteristics. This course focuses on identifying entrepreneurial opportunities and managing a growth-oriented business. Prerequisites: MGMT 3361 or consent of instructor.

MGMT 4362 Business and Sustainability
This course is designed to introduce students to the concept of sustainability and sustainable business models. All three aspects of sustainability -- economic, social, and environmental -- are emphasized. The goal is to educate students on how businesses can integrate the three aspects of sustainability and incorporate them into strategy and operations. Prerequisites: Junior standing.

MGMT 4363 Operations Management
This course is concerned with strategic operational decisions, designing systems and developing the operations planning and control processes for managing organizational resources in accordance with the overall business strategy. The basic approach to be followed is to study the important problems that confront operations managers and the decision processes by which they are resolved. Both manufacturing and service operations are emphasized. Prerequisites: Junior standing.

MGMT 4365 Quality Management
This course focuses on the design of products and services that meet customer needs; control of processes to ensure meeting design requirements; and the continuous improvement of quality. Analytical methods for obtaining and maintaining quality will be addressed in the course. In order to understand real-life applications of quality management, students will be involved in working with companies on actual quality problems. In addition, case discussions will be used to enhance the students' understanding of the key points in lectures. Prerequisites: Junior standing.

MGMT 4367 Purchasing and Supply Chain Management
A study of the integration and coordination of activities, such as purchasing, outsourcing, materials management, logistics, supplier selection, global sourcing, and international distribution, to create an effective flow of materials and information from suppliers to customers Prerequisites: Junior standing.

MGMT 4370 Project Management
This course focuses on the organizational function of managing projects process. It uses cases and applications in service sectors to enhance student understanding about the issues and challenges of managing workflow. Prerequisites: Junior standing.

MGMT 4389 Strategic Management
The formulation, implementation and evaluation of business strategy make up the foundation of this course. It requires the integration of knowledge contained in previous business courses, as well as the application of strategic planning methods. This course provides a critical examination of strategic and global issues facing modern business organizations. It is the capstone course for all Business Administration majors. Prerequisites: Department approval is required. This course should be taken in the semester in which the student is graduating.

MGMT 4399 Business Consulting
This course is an on-site evaluation of an operating business by a student or students serving in the role of a consultant or consulting team. Course emphasis will be directed toward an analysis of the basic business functions of accounting, finance, production, marketing, and management as they pertain to the successful operation of a business. Prerequisites: Junior standing and consent of the department.

## Marketing

MARK 3300 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. Prerequisites: Admission to the College of Business and Entrepreneurship or junior standing plus departmental approval.

MARK 3310 International Marketing
The development of the international marketing mix for the multinational organization, and an indepth look at global versus domestic marketing management. Emphasis is placed on adapting marketing concepts and strategies to accommodate individual environmental differences in the development of international marketing plans. Prerequisites: Junior standing.

MARK 3311 Business and Culture
This course gives students a social scientific view of markets and marketing as a practice. The focus is on the interplay between culture and subcultures on the one hand and markets and marketing on the other. When possible, students will be involved in a research project to acquire experience with approaches to studying that interplay. Prerequisites: Junior standing.

MARK 3320 Personal Branding and Communication
This course encourages and empowers students to see and carry themselves as personal brands. The concepts, theories, and skills covered in this course enable students to develop a professional disposition toward their careers, communicate effectively in written and oral forms, work successfully in teams, and acquire leadership qualities. The course is highly experiential and students are exposed to several hands-on skill development assignments. Prerequisites: Junior standing.

MARK 3321 Hispanic Marketing
This is an interdisciplinary review of economic, psychological, social, and cultural characteristics of Hispanic consumers and markets. Emphasis will be on processes of motivation, perception, and learning, as well as strategies appropriate in Hispanic markets. Prerequisites: Junior standing.

MARK 3330 Business Ethics and Corporate Social Responsibility
This course trains undergraduate students for ethical behavior in various areas of business including management, finance, marketing, information systems, and accounting. It focuses on the decisionmaking process and outcomes, the organizational framework that helps understand the role of ethics in stakeholder relationships, and the ethics program and organizational tools aimed at correcting and preventing ethical problems in the organization. The course combines competency-based learning, participant-oriented research and readings, and case-based problem-solving. Prerequisites: Junior standing.

MARK $\mathbf{3 3 4 0}$ Consumer Behavior
This course is 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. Prerequisites: Junior standing.

## MARK 3350 Services Marketing

This course focuses on the marketing of services businesses highlighting the differences between them and marketing product businesses. The course looks at different categories of services businesses, i.e. retail, hospitality, and professional services to identify differences in the way consumers evaluate these enterprises and means of improving customer satisfaction. Prerequisites: Junior standing.

MARK 3360 Retailing
Principles and methods of modern retailing, emphasis on problems of store location and layout, buying, pricing, credit, stock control, personnel, and sales promotion. Designed for students who wish to gain a general knowledge of the retail field as well as those specializing in marketing. Prerequisites: Junior standing.

MARK 3365 Product and Service Design
This course is about the generation and screening of ideas that motivate and inform the design of products and services. In the idea generation, the course covers theories and methods that can help marketers to (1) understand and capture the end-users' communicated needs and wants and subconscious habits and (2) determine how such understanding can be used to improve the features and standards of products and services. In the idea screening stage, the course familiarizes students with concepts and tools to evaluate the generated ideas in terms of technical feasibility, economic justification, and sustainability concerns. Prerequisites: Junior standing.

MARK 3375 New Product Development
New Product Development covers in detail the new product development (NPD) process that is widely used by companies of varying sizes and industries. Many important issues often encountered in new product development such as strategic planning for new products will be examined and discussed. A variety of cutting-edge techniques and useful methods for creativity stimulation and innovation management will be studied as well. The course material is essential to business success for companies interested in innovation. Prerequisites: Junior standing.

MARK 3382 Branding
This course covers three major tasks facing today's brand managers: (1) analyzing the market; (2) developing objectives and strategies for branding; (3) developing or improving the brand; and (4) making decisions about price, promotion, channels of distribution, and service. It takes a hands-on approach toward preparing students to assume the position of brand managers. Prerequisites: Junior standing.

MARK 3383 Pricing Strategy and Tactics
This course is designed to provide students with an integrative framework for making pricing decisions. The purposes of the course are to help students learn to synthesize economic and marketing principles with accounting and financial information, and to analyze pricing options within market, legal, and corporate constraints. Prerequisites: Junior standing.

MARK 3392 Event Marketing
This course provides an inside view to the world of marketing as it relates to different segments of the event industry. Students will learn strategies and best practices of a successful event marketing campaigns, from small conferences to large festivals. This course will lead students through the basic principles of what motivates the patrons to attend and support events. When possible, the course incorporates a hands-on project requiring students to work in team(s) to plan and carry out an event with local event producers. Prerequisites: Junior standing.

MARK 3393 Sports Marketing
This course is an introduction to the marketing aspects of sports businesses with particular attention paid to the various stakeholders within the sports industry. Students learn about the roles of fans, sponsors and media in marketing sport events. When possible, the course incorporates a hands-on project requiring students to work in team(s) to plan and carry out an event with/for a local sports team and other organizations. Prerequisites: Junior standing.

MARK 4331 Multicultural Markets
This course gives students an overview of multicultural marketing and the dynamics of a diverse market environment, while identifying target audiences and how best to reach that audience. By reflecting on the biases in the business world, it helps students to evaluate diverse marketing approaches while learning the necessary skills involved in identifying and evaluating the unique characteristics of diverse market groups and their impact on the bottom line. Prerequisites: Junior standing.

MARK 4341 Business in Asia
This course exposes socio-cultural and techno-legal characteristics of Asia and identifies its commonalities and differences with regards to the rest of the world, especially North America. It delves into the ways in which marketing practices can be adapted for application in Asian markets in order to optimize the effectiveness and efficiency of those practices. Prerequisites: Junior standing.

MARK 4350 Marketing Research
This course covers quantitative research procedures and techniques used in business today. These include problem definition, sources of research data, survey methods, questionnaire design, and sampling techniques. Practical application of procedures and techniques is emphasized through class research projects. Prerequisites: QUMT 3343.

MARK 4351 Business in Latin America
This course exposes socio-cultural and techno-legal characteristics of Latin America and identifies its commonalities and differences with regards to the rest of the world, especially North America. It delves into the ways in which marketing practices can be adapted for application in Latin American markets in order to optimize the effectiveness and efficiency of those practices. Prerequisites: Junior standing.

MARK 4360 Social Media and eMarketing
This course explains how strategic marketing communication has changed due to the rise of social media, and equips students with relevant knowledge and skills to develop marketing communication strategies that incorporate social media and cutting-edge consumer-to-consumer social interactions. The course will also cover related aspects of digital marketing, electronic commerce, and mobile marketing. For example, students will have the opportunity to evaluate existing websites and learn theories of improving the customer utility of websites. Prerequisites: Junior standing.

MARK 4361 International Competitiveness
This course is about international competitiveness theory and practice. It expands students' view of international business and improves their assessment of foreign opportunities and challenges. The course is designed to provide a broad coverage of topics and issues around the concepts and practices in international competition and enhance the understanding and application of competitive tools in business through three states of learning: information, knowledge, and critical thinking. Prerequisites: Junior standing.

MARK 4370 Topics in Marketing
Current topics in marketing will be covered as selected by the instructor. Course can be repeated for credits as topics change. Prerequisites: Junior standing.

MARK $\mathbf{4 3 8 0}$ Marketing Internship
This internship is designed to give students an opportunity to gain real-world marketing experience by working with a participating employing firm or organization. The students will be supervised by a faculty member acting as a liaison between the employing organization and the academic department to assure compliance with specific learning and experience requirements. The employment can be either paid or unpaid, and must be at least 10 hours of work each week over the period of one academic term. Prerequisites: Junior standing and approval of department chair.

MARK 4384 Professional Selling and Sales Management
This course focuses on developing professional salesmanship and managing sales force. Topics include: planning the presentation, meeting the prospect, the interview, overcoming resistance, closing the sale, and building goodwill sales planning as well as staffing, training, and directing of the sales force including sales force analysis and evaluation. Prerequisites: Junior standing.

MARK 4385 Integrated Marketing Communications
This course focuses on the development and management of an organization's integrated marketing communications to ensure that messages received by customers are consistent across time, media channel, and communication source with special attention to online (i.e., e-marketing campaigns or programs) and offline communications (e.g., print, mail order, public relations, industry relations, billboard, radio, and television). Prerequisites: Junior standing.

MARK 4394 Music Marketing
This course surveys music publishing, live entertainment, recording companies, production and A\&R, and marketing, with an eye on both practical and theoretical issues. It will examine major organizational players and provides a general overview of the industry. Prerequisites: Junior standing.

MARK 4395 Fashion Design and Popular Culture
This course covers the productions, consumption and regulation of fashion industry, products, and services. It familiarizes students with fashion industry's links to popular national cultures, subcultures, advertising, and marketing. It details the process of fashion design (e.g., idea generation and screening, concept development and testing, business analysis, market testing, commercialization, and pricing. Prerequisites: Junior standing.

MARK 4399 Marketing Strategy (Capstone)
This is the capstone marketing course and places emphasis on integrating knowledge of various marketing tools and models that may be useful in assisting the marketing manager in the decisionmaking process. All areas of marketing are discussed within the decision-making framework, with practical applications of techniques emphasized. This course must be taken in your last semester. Prerequisites: MARK 3300.

## Materials Management and Logistics

## MTML 3310 Import/Export Theory

This course is designed to expose the student to the fundamental of import and export operations in a global environment. Topics include history of import and export, the global legal environment and practical considerations of importing and exporting. Prerequisites: Admission to the College of Business and Entrepreneurship or junior standing plus departmental approval.

## MTML 4310 Forecasting

This course is concerning the various business forecasting techniques. This is a quantitative course designed to provide instruction in common techniques used in forecasting as well as the ability to understand the limitations and short comings of various models as well as the ability to interrupt the data. Prerequisites: Admission to the College of Business and Entrepreneurship or junior standing plus departmental approval.

MTML 4320 Materials Management and ERP
This course focuses on management of the supply chain and is developed around the use of an ERP program. The course provides the student with a fundamental understanding of the tools, processes and objectives associated with the analysis and decision-making for successful management of a supply chain. Prerequisites: Admission to the College of Business and Entrepreneurship or junior standing plus departmental approval.

MTML 4330 Import/Export Operations
This course is designed to expose the student to the fundaments of import and export operations in a global environment. Topics include document preparation, valuation, security considerations and shipping via various modes of transportation. Prerequisites: Admission to the College of Business and Entrepreneurship or junior standing plus departmental approval.

# COLLEGE OF EDUCATION AND P-16 INTEGRATION (CEP) 

# Department of Human Development and School Services 

Dr. John Lowdermilk<br>Chair, Department of Human Development and School Services<br>Location: EDUC 3230C (UTRGV Edinburg Campus)<br>Phone: 956-665-7026<br>Email: john.lowdermilk@utrgv.edu

BACHELOR OF SCIENCE (BS)
WITH A MAJOR IN
EARLY CARE AND EARLY CHILDHOOD STUDIES

To prepare highly skilled professionals to assume roles and positions in teaching, research, educational leadership, and human development to contribute to the educational achievement of all young children ages 0-5 years in early childhood settings.

## STUDENT LEARNING OUTCOMES:

1. The candidate will demonstrate competency to plan and teach developmentally appropriate practices in early care and early childhood education settings for children ages 0-5.
2. The candidate will demonstrate the ability to build family and community relationships.
3. The candidate will demonstrate how to use observations, documentation, and other developmentally appropriate assessment strategies in early childhood settings.
4. The candidate will demonstrate knowledge, understanding, teaching, ethics, research, and leadership in the early childhood profession.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Language, Philosophy, and Culture - 3 hours
PHIL 1301 Introduction to Philosophy (or PHIL 1387 Honors)
Integrative and Experiential Learning - $\mathbf{3}$ hours
Must choose 3 hours from Computer Applications.
B - MAJOR REQUIREMENTS - 56 HOURS (41 advanced)
1 - Early Care and Early Childhood Studies Core- 30 hours ( 21 advanced)
ECEC 2301 Foundations of Early Care and Development
ECEC 2309 Family Care and Education in the Community

> ECEC 2310 Quality Programs for Infants and Toddlers
> ECEC 3302 Math Curriculum for Young Children
> ECEC 3303 Early Literacy Development during Early Childhood
> ECEC 3304 Science Curriculum for Young Children
> ECEC 3305 Role of Play in Early Care and Early Education
> ECEC 3307 Knowledge and Skills of Preschool Teachers: Profession, Standards and Ethics ECEC 3308 Quality and Developmentally Appropriate Environments for Children Ages 0-5 ECEC 4306 Aesthetic Development in Early Care and Early Education
> $\mathbf{2}$ - Advanced Early Care and Early Childhood Studies - $\mathbf{2 6}$ hours (20 advanced)
> ACCT 2301 Introduction to Financial Accounting
> ACCT 2302 Fundamentals of Managerial Accounting
> ECEC 4214 Internship in Early Childhood Settings
> ECEC 4311 Observing, Assessing, and Guiding Behavior of Young Children
> ECEC 4312 Administration of Child Development Centers
> ECEC 4313 Multicultural Perspectives in Early Care and Early Education
> EDBE 3323 The Development of Bilingualism
> ENGL 4360 Fundamentals of Language Development
> Choose one:
> SPED 4310 Inclusion and Differentiated Instruction in Special Education SPED 3390 Introduction to Exceptional Children

## C - FREE ELECTIVES - 22 HOURS ( 9 advanced)

Choose 22 hours of electives, of which 9 hours must be advanced. Recommended areas include: COMD, COMM, DIET, EDBE, HLTH, KINE, MUSI, PSYC, SOCW, SPED, and/or SPAN.

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - $\mathbf{5 0}$ HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Admission requirements
Students must complete an application and a criminal check. Non-certification Program does not require Teacher Certification program admission.

## Progression requirements

A GPA of 2.5 for progression is required.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF INTERDISCIPLINARY STUDIES (BIS) 

WITH A MAJOR IN
INTERDISCIPLINARY STUDIES
(EC - 6 or EC - 12 ELEMENTARY EDUCATION TEACHER CERTIFICATION)

To prepare highly skilled professionals to assume roles and positions in teaching, research, educational leadership, and human development to contribute to the educational achievement of children in elementary settings.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - $\mathbf{3}$ hours
Choose the following or higher: MATH 1314 College Algebra
Creative Arts - 3 hours
Choose one:
MUSI 1313 Teaching Music in the Elementary School
ARTS 1301 Art Appreciation
B - MAJOR REQUIREMENTS - 60 HOURS ( 39 advanced minimum)
1 - Academic Content - 30 hours minimum ( 15 advanced minimum)
Choose one (not completed in General Education Core):
ARTS 1301 Art Appreciation
MUSI 1313 Teaching Music in the Elementary School
Choose one (not completed in General Education Core):
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 3301 Biology Evolution
BIOL 4315 Inquiry-based Science and Laboratory Techniques (or BIOL 4387 Honors)
Choose one (not completed in General Education Core):
GEOL 1403 Physical Geology
ASTR 1401 Introduction to Astronomy I
GEOG 2313 Principles of Geography Physics Elementary
PSCI 3310 Planet Earth and Its Place
HIST 4390 Special Topics in World History
KINE 3355 Health and Motor Development
MATH 1350 Fundamentals of Mathematics I
MATH 1351 Fundamentals of Mathematics II
READ 3320 Early Literacy Development
READ 3324 Reading Comprehension and Assessment
For Bilingual Specialization, complete:
SPAN 4338 Children's Literature in Spanish

For all other specializations, complete:
READ 3350 Literature and Disciplinary Learning in Elementary School
2 - Specialization - 18 hours (18 advanced)
a - Bilingual Education - 18 hours (18 advanced)
Bilingual Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Bilingual Generalist certification and work in schools with children in early childhood through 6th grades.
Area of Certification: Bilingual Generalist (EC-6)
SPAN 3304 Advanced Spanish for Bilingual Teachers
EDBE 3322 Foundations of Bilingual Education and ESL
EDBE 3323 The Development of Bilingualism
EDBE 3324 Early Biliteracy
EDBE 4305 Language Arts in the Bilingual Classroom EDBE 4306 The Bilingual Curriculum in the Content Areas
b - Early Childhood - 18 hours (18 advanced)
Early Childhood Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Generalist certification and work in schools with children in early childhood through 6th grades.
Area of Certification: Generalist (EC-6)
ECED 4315 Linguistically Diverse Early Childhood Students
ECED 4314 Dynamics of Play and Play Environments in Childhood
ECED 4391 Foundations of Early Childhood Education
ECED 4392 Guidance of Young Children
ECED 4393 Cross-Cultural Perspectives in Elementary School Settings
ECED 4394 Principles of Curriculum Design in Early Childhood
c - English as a Second Language (ESL) - $\mathbf{1 8}$ hours (18 advanced)
ESL Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Generalist and ESL Supplement certification and work in schools with children in early childhood through 6th grades.
Area of Certification: Generalist (EC-6) with ESL
EDSL 3322 Foundations of Bilingual Education and ESL EDSL 3326 English as a Second Language EDSL 4306 Content Area Methods in the ESL Classroom EDSL 4308 Assessment in the ESL Classroom ENGL 4360 Fundamentals of Language Development ENGL 4375 Language Acquisition
a - Special Education - 18 hours (18 advanced)
Special Education Specialization allows the student the opportunity to become a teacher in the State of Texas with EC-6 Generalist and EC-12 Special Education certification and work in schools with children in early childhood through 6th grades. Area of Certification: Generalist (EC-6) with Special Education (EC-12) SPED 3390 Introduction to Exceptional Children SPED 4330 Language and Literacy Development of Diverse Exceptional Learners SPED 4350 Assessing Exceptional Learners SPED 4370 Instructional Methods for Students with Low Incidence Disabilities SPED 4380 Instructional Methods for Students with Learning Disabilities SPED 4395 Special Education Practicum in Behavior Techniques

## C - TEACHER CERTIFICATION - $\mathbf{2 4}$ HOURS (24 advanced) <br> Choose one:

EDCI 3331 Human Development and Student Learning EPSY 3331 Human Development and Student Learning
EDCI 3332 Designing and Implementing Instruction and Assessment
EDCI 3333 Teaching Science to Elementary Students
EDCI 3334 Teaching Mathematics to Elementary Students
EDCI 3335 Teaching Social Studies to Elementary Students
EDCI 3336 Teaching English Language Arts and Reading to Elementary Students
EDCI 4637 Student Teaching for Elementary Teachers (EC-6)

## TOTAL CREDIT HOURS FOR GRADUATION - 126 HOURS <br> TOTAL ADVANCED HOURS (MINIMUM) - $\mathbf{6 3}$ HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN <br> EDUCATIONAL TECHNOLOGY

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)

Choose 18 hours of Educational Technology (EDTC), of which 6 hours must be advanced.

## MINOR IN <br> SPECIAL EDUCATION

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)

SPED 4310 Inclusion and Differentiated Instruction in Special Education SPED 3390 Introduction to Exceptional Children
SPED 4330 Language and Literacy Development of Diverse Exceptional Learners SPED 4350 Assessing Exceptional Learners
SPED 4370 Instructional Methods for Students with Low Incidence Disabilities SPED 4380 Instructional Methods for Students with Learning Disabilities

A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)
Choose 18 hours of Technology Education and Corporate Training (TECT), of which 6 hours must be advanced.

# Course Inventory for College of Education and P-16 Integration (CEP) Early Bilingual Education 

EDBE 3322 Foundations of Bilingual Education and ESL
The study of cultural, psychological, socioeconomic, linguistic, cognitive and curricular factors affecting the academic achievement of emergent bilingual students. This course also will investigate the philosophical, legal and sociological aspects of ESL and bilingual education. National, state and local guidelines designed to meet the needs of multilingual and multicultural student populations will be reviewed. Course is taught in Spanish. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDBE 3323 The Development of Bilingualism
This course is designed to investigate the nature of dual language development in a bilingual setting, beginning with early childhood through the sixth grade. Special emphasis is placed on first and second language development and transference of skills and concepts resulting in balanced bilingualism. Course is taught in Spanish. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDBE 3324 Early Biliteracy
This course focuses on early biliteracy development and assessment, specifically how children learn to read and write in the native language and second language. This course will focus on how to provide meaningful biliteracy experiences in the EC to second grade bilingual classrooms. Field experience may be required. Course is taught in Spanish. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDBE 4305 Language Arts in the Bilingual Classroom
This course focuses on the teaching and assessment of language arts in the 3rd through 6th Spanish/English bilingual classroom. Special emphasis will be given to academic language development. Course is taught in Spanish. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDBE 4306 The Bilingual Curriculum in the Content Areas
This course focuses on the current methods and theories of planning, teaching, and assessing math, science and social studies in the bilingual classroom. Students will become familiar with the Texas Essential Knowledge and Skills. Emphasis will be given to thematic planning, language and content objectives, and teaching language through content. Technological tools and resources to facilitate student learning will be explored. Course is taught in Spanish. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

## Early Childhood Education

ECEC 2301 Foundations of Early Care \& Development
This course offers an overview of the field of Early Care and Early Education. It examines the theoretical basis for caring and teaching of all young children from birth through age five. The history, models and goals of early childhood education in relation to issues of diversity and equality will be addressed. It will serve as an introduction to professional standards and organizations in early care and early education that promote quality education for all children.

ECEC 2309 Family Care \& Education in the Community
A course that incorporates different early care and education topics reflecting the changing demographics of the United States. Emphasis will be placed on the importance of caring relationships parenting with parents and families, valuing diversity and providing culturally responsive early care and education. Current research on socio-cultural theory and its application, including integration of children from diverse backgrounds and children with special needs into groups of typically developing children will be studied.

ECEC 2310 Quality Programs for Infants \& Toddlers
This course will introduce students to indicators of high-quality care for infants and toddlers. Topics in this course will include: historical and theoretical basis influencing models for programs, the role of caregivers and parents, designing and managing experiences for developmental domains of infants and toddlers and the importance of in-doors environments.

ECEC 3302 Math Curriculum for Young Children
This course will focus on developmentally appropriate math curriculum and instructional resources for early childhood programs serving young children ages 0-5. The prospective early childhood educators will study curriculum standards from NCTM and NAEYC as basis for determining appropriate mathematics for all young children. The processes of mathematics will be emphasized as significant for creating effective learning environment.

ECEC 3303 Early Literacy Development During Early childhood
This course will serve to provide a foundation of professional knowledge about language and early literacy development in early childhood. Oral language development will be studied as a foundation for early literacy. Topics will include stages of oral language development, aspects of language, theoretical perspectives of literacy and language development, emergent literacy and enhancing language and literacy.

ECEC 3304 Science Curriculum for Young Children
This course will focus on developmentally appropriate science curriculum and instructional resources for early childhood programs serving young children ages $0-5$. The prospective early childhood educators will study curriculum standards from NSTA and NAEYC as basis for determining appropriate Science for all young children. The processes of Science will be emphasized as significant for creating effective learning environment.

ECEC 3305 Role of Play in Early Care \& Early Education
This course will address the benefits and importance of play in the growth and development of all young children ages 0 to 5 . In addition, an overview of play theories as they apply to the total development of young children will be studied. Special attention will be given to organized play experiences, developmentally appropriate learning and play-based opportunities for all young children in early care and early childhood settings.

ECEC 3307 Knowledge \& Skills of Preschool Teachers: Profession, Standard, \& Ethics
This course begins with an overview of a comprehensive interdisciplinary pedagogy that integrates developmental theory, research, and practice with knowledge of children of color, poverty, immigrant, special needs, bilingual learners and children from diverse cultural and ethnic groups. Indepth studies of what teachers who are effective educators know, what they effectively teach, and how their knowledge and skills are assessed will be reviews. Classroom management and planning for instruction will be components in this course.

ECEC 3308 Quality \& Developmentally appropriate Environments for Children Ages 0-5
This course will help prospective early childhood educators develop an understanding of the importance of early learning environment that provide children with opportunities for learning, and challenges that allow development to flourish. Students will learn to integrate early care and childhood theories, child development, up-to-date research, program standards and curriculum outcomes for designing learning environments. The role of teachers as observant facilitators and scaffolders of learning will be studied.

ECEC 4214 Internship in Early Childhood Settings
This course is designed to provide prospective early childhood educators with clinical and practical experiences with children of color, second language learners, low-income children and young children with special needs. Interns will be collaboratively supervised and mentored by faculty, field-based partners and mentor teachers.

ECEC 4306 Aesthetic Development in Early Care \& Early Education
Through this course, prospective early care and early educators will develop an appreciation of the arts (art, music, dance, and drama) and enjoyment of other sensory experiences. They will learn to provide experiences to young children in nature and the arts, how to nurture awareness and foster appreciation of the arts, skills for assessing and evaluating art forms will be researched and practiced.

ECEC 4311 Observing, Assessing and Guiding Behavior of Young Children
This course will focus on techniques for observation of infants and young children to assess cognition, language, social, creative, emotional, and physical development in early care and early education settings, including day care and preschool. It includes assessment of culturally and linguistic diverse populations and children with special needs. An introduction to techniques to appropriately guide young children's behaviors will be included in this course. Emphasis is on guidance techniques and interventions strategies that educators can use to facilitate.

ECEC 4312 Administration of Child Development Centers
This course is aligned with NAEYC's Code of Ethical Conduct for Administrators and to Program Administrators Competencies. Topics of study will include: leadership and management, program marketing, professional ethics, fiscal, personnel and facilities management, law and licensing regulations. Prospective and ins-service programs owners/administrators will learn t plan for, implement, manage, market and evaluate programs serving all young children from 0 to 5 .

ECEC 4313 Multicultural Perspectives in Early Care \& Early Education
Students will be introduced to multicultural education perspectives relating to childcare and development. They will develop their critical thinking as they explore, plan, and implement culturally, linguistically, and developmentally appropriate multicultural activities for infants, toddlers, and preschoolers. Special emphasis will be on analyzing and selecting appropriate children's literature that reflects the diversity that every young child brings into the early care and education settings.

## Early Care and Early Childhood

ECED 4314 Dynamics of Play and Play Environments in Childhood
This course provides an overview of play theories as they apply to the total development of the child. Examines the art and science of critical thinking, including analysis, synthesis, and evaluation in the fields of play, play theories, and outdoor environments through a variety of pedagogies. Special attention is given to organized play experiences through arranging and scheduling developmentally appropriate learning centers for children in the public school setting. Field experiences may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

ECED 4315 Linguistically-Diverse Early Childhood Students
In this course, students will study methods, instructional strategies and materials for teaching early childhood students with linguistically diverse backgrounds. This course will also focus on planning, implementing, and assessing developmentally appropriate instruction in linguistically and culturally responsive classrooms. Field experiences may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

ECED 4391 Foundations of Early Childhood Education
This course addresses the theory of education of young children, issues and trends in early childhood education, including changing beliefs regarding pre-kindergarten and kindergarten programs, and relevant state and federal mandates regarding programs for young children. Field experiences may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

ECED 4392 Guidance of Young Children
This course examines theoretical approaches to guidance practices appropriate to early childhood settings pre-kinder through 3rd grade. Age-appropriate intervention strategies, observation techniques, and group management skills will be studied. Emphasis is on the positive development of a child's self esteem and positive communications with families. Field experiences may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

ECED 4393 Cross-Cultural Perspectives in Elementary School Settings
This course develops awareness of cultural and ethnic issues as they relate to the early childhood and elementary classroom. It addresses the contributions of diverse cultures within the society of the United States. Students will examine and analyze racism, sexism, ageism, and ability levels with the schools and the community. It also focuses on diversity among groups of people and individuals based on ethnicity, socioeconomic status, family structure, exceptionalities, language, religion, sexual orientation, and geographical area. Field experiences may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

ECED 4394 Principles of Curriculum Design in Early Childhood
This course combines a theoretical and experiential investigation of curriculum for children from birth through 8 years, with primary emphasis on prekindergarten through elementary grades. Curriculum planning and implementation; overview of research and theory related to teaching and learning of specific content areas with an emphasis on integrated approaches to early childhood curriculum will be addressed. Field experiences may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

## Early Curriculum and Instruction

EDCI 3331 Human Development and Student Learning
This course focuses on applications of human from birth to preadolescence in children from culturally and linguistically-diverse populations including students with exceptionalities. Topics include major learning and motivational theories as they apply to the teaching and learning process in learnercentered environments. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

EDCI 3332 Designing and Implementing Instruction and Assessment
This course focuses on applications of instructional, management and assessment methods for effective teaching in learner-centered environments and appropriate for culturally and linguisticallydiverse populations, including students with exceptionalities. Topics include principles of curriculum, instruction, assessment, classroom climate, practices for managing student behavior, conflict resolution, and classroom management models. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

EDCI 3333 Teaching Science to Elementary Students
This course focuses on the current research and practice of teaching, learning and assessment of science in the elementary school curriculum and appropriate for culturally and linguistically-diverse populations, including students with exceptionalities. Topics include how children learn science, procedures to plan, implement instruction appropriate to teach and assess the EC-6 science statewide curriculum, the process of scientific inquiry and its role in science instruction. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

EDCI 3334 Teaching Mathematics to Elementary Students
This course focuses on the current research and practice of teaching, learning and assessment of mathematics in the elementary school curriculum for culturally and linguistically-diverse populations, including students with exceptionalities. Topics include how children learn and develop mathematical skills, procedures to plan, implement and assess instruction appropriate to teach the EC-6 mathematics statewide curriculum. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

EDCI 3335 Teaching Social Studies to Elementary Students
This course focuses on the current research and practice of teaching, learning and assessment of social studies in the elementary school curriculum for culturally and linguistically-diverse populations, including students with exceptionalities. Topics include effective instructional strategies to integrate the various social science disciplines and procedures to plan and implement effective instruction and assessment of the EC-6 social studies statewide curriculum. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

EDCI 3336 Teaching English Language Arts and Reading to Elementary Students
This course focuses on the study and implementation of English Language Arts and Reading (ELA/R) methods and strategies for effective elementary teaching of culturally and linguistically-diverse populations, including students with exceptionalities. Topics include promoting student learning with appropriate assessments, effective use of classroom management skills, and the study of relationships between reading, writing, listening, speaking, viewing and representing. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

This course is designed for students seeking elementary (EC-6) teacher certification. Interns/student teachers will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a semester. Focus will be on the integration of pedagogical-content knowledge, development of critical reflection, and wellinformed decision-making for improvement of professional practice with emphasis on the implementation of effective instruction, assessment, technology integration, and classroom management. Prerequisites: Admission to the College of Education Student Teaching Program.

## Early English as a Second Language Education

EDSL 3310 Emergent Bilingual Students in Schools
Students will be introduced to linguistic diversity in schools, basic second language acquisition theories, and ESL and bilingual education programs. Language learning strategies and advocacy for emergent bilingual students will be emphasized. Advocacy for emergent bilinguals and family and community involvement will be stressed. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDSL 3320 Language Acquisition and Development in the ESL Classroom
This course addresses the nature of language, basic concepts of language systems, and functions and registers of language to promote ESL students' learning and English language development. Students will understand theories of first and second language acquisition and their implications for teaching in ESL classrooms. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDSL 3322 Foundations of Bilingual Education and ESL
The study of cultural, psychological, socioeconomic, linguistic, cognitive and curricular factors affecting the academic achievement of emergent bilingual students. This course also will investigate the philosophical, legal and sociological aspects of ESL and bilingual education. National, state and local guidelines designed to meet the needs of multilingual and multicultural student populations will be reviewed. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDSL 3326 English as a Second Language
This course focuses on the teaching of language arts and reading curriculum in the ESL classroom. Students will become familiar with the Texas Essential Knowledge and Skills. Special emphasis will be given to strategies for fostering ESL students' communicative competence and academic language. Field experience may be required Prerequisites: Admission to the COE Teacher Preparation Program.

EDSL 4304 Language, Culture, and Community
This course covers how language and culture impact ESL students' learning in the classroom. Students will learn to design formal and informal learning experiences that facilitate parental and community involvement in education and are responsive to diversity and individual student needs. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDSL 4306 Content Area Methods in the ESL Classroom
This course focuses on the current methods and theories of planning and teaching math, science and social studies in the ESL classroom. Students will become familiar with the Texas Essential Knowledge and Skills. Emphasis will be given to thematic planning, language and content objectives, teaching language through content, and academic language development. Technological tools and resources to facilitate student learning will be explored. Field experience may be required. Prerequisites: Admission to the COE Teacher Preparation Program.

EDSL 4308 Assessment in the ESL Classroom
This course focuses on formal and informal assessments and instruments used in ESL programs. Students will learn to use assessment results to plan and adapt instruction in the ESL classroom. Students will become familiar with standardized tests commonly used in Texas. Relationships among state-mandated standards, instruction, and assessment in the ESL classroom will be emphasized. Field experience may be required Prerequisites: Admission to the COE Teacher Preparation Program.

## Early Mathematics Education

EDSM 3303 Teaching in Today's Diverse Science \& Mathematics Classroom
A critical examination of contemporary first and second language acquisition theories, research, instructional methods, technologies, and assessment of special populations of students in inclusive science and mathematics classrooms including English learners, gifted and talented students, and students with disabilities. Includes emphasis on issues of equity, diversity and social justice for culturally and linguistically diverse student populations.

## Education

EDUC 1301 Introduction to the Teaching Profession
This course introduces students to education in society by analyzing historical, social, political, economic, cultural, global and legal issues in education.

EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
Examination of the teaching profession in today's schools with focus on legal, historical, philosophical, social, political, economic, and cultural forces which impact the context of teaching profession. Prerequisites: Admission to the COE Teacher Preparation Program.

EDUC 3302 Human Development, Learning Theories and Student Learning
Survey of major theories emphasizing human growth and development, and motivation and they relate to the teaching and learning process. Includes individual differences as they relate to needs of special learners, and cultural and linguistic differences. Prerequisites: Admission to the COE Teacher Preparation Program.

EDUC 3303 Teaching in Today's Diverse Classrooms
Examination of contemporary first and second language acquisition theories, research, instructional methods, technologies, and assessment of special populations of students in inclusive classrooms including English learners, gifted and talented students and students with disabilities. Includes emphasis on issues of equity, diversity and social justice for culturally and linguistically diverse student populations. Prerequisites: Admission to the COE Teacher Preparation Program.

EDUC 3304 Instructional Planning, Classroom Management and Assessment to Promote Student Learning
Study of curriculum organization and development, instructional planning, assessment, and classroom management with emphasis on knowledge of students, learning goals and objectives with effective assessments. Understanding of student learning will be applied to effective planning of differentiated instruction and assessment along with technology integration. Prerequisites: Admission to the COE Teacher Preparation Program.

EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
Study and implementation of content-specific methods and strategies for effective secondary teaching. Focus is on promoting student learning with appropriate assessment, classroom management skills and use of technology in respective discipline-specific learning. Prerequisites: Admission to the COE Teacher Preparation Program.
EDUC 4611 Student Teaching Secondary or All-Level
This course is designed for students seeking all-level/secondary (EC-12/4-8/7-12) teacher certification. Interns/student teachers will be placed in a state-accredited public school all day under the guidance of an experienced classroom teacher (mentor) and a university supervisor for a semester. Focus will be on the integration of pedagogical-content knowledge, development of critical reflection, and wellinformed decision-making for improvement of professional practice with emphasis on the implementation of effective instruction, assessment, technology integration, and classroom management. Prerequisites: Admission to the COE Teacher Preparation Program.

## Education Component Pedagogy Core

EDFR 2301 Intercultural Context of Schooling
This education course introduces students to issues related to equity, diversity, and social justice for culturally and linguistically diverse students and exceptional learners as well as classroom strategies for engaging diverse learners.

## Education Technology

EDTC 3310 Introduction to Educational Technology
This course provides an introduction to the field of educational technology and its impact on teaching and learning. Historical and current perspectives are examined, as well as emerging trends and issues. The application of innovative instructional technologies is introduced in this project-based course.

EDTC 3320 Instructional Design for the Corporate Trainer
This train-the-trainer course introduces the learner to the principles of instructional design. Students will explore the complexities of designing instruction in the context of corporate training environments. Students will learn classic ID theory and models and apply these theories in a real context through a major design project.

EDTC 3321 Computer/Web-Based Training
This course provides with the skills necessary to create effective computer/web-based training programs based on proven instructional design concepts.

EDTC 3323 Designing Instructional Multimedia
This course focuses on the development of skills using the latest multimedia tools for instructional technology training. Significant attention is made to interface design, message design, and the appropriate matching of media tools with specific goals and contexts.

EDTC 3325 Computer Mediated Communication and Collaboration The course focuses on the use of computer-mediated communication (CMC) and computer-supported collaboration learning (CSCL) in online learning environment. Students will explore, asses, and utilize a variety of current and emerging Web 2.0 technologies to collaborate, share and deliver effective instructional resources and instruction to virtual learners.

EDTC 3327 Personal Learning Networks for Professional Development and Informal Learning This course explores the role of networked learning for virtual professional development and informal learning. Focusing on developing self-directed and lifelong learning skills, students will identify, assess, and use a variety of technologies and resources to contribute to, and derive knowledge from personal learning networks.

EDTC 3332 Application of Instructional Technology
Students will combine skills and concepts to generate a web/computer-based training solution. Guided observation and practice in the applications of instructional technology to aspecified training/ educational setting are emphasized. Prerequisites: 6 credits from EDTC.

Educational Psychology
EPSY 3331 Human Development and Student Learning
This course focuses on applications of human from birth to preadolescence in children from culturally and linguistically-diverse populations including students with exceptionalities. Topics include major learning and motivational theories as they apply to the teaching and learning process in learnercentered environments. This course integrates educational technology and may require field experiences. Prerequisites: Admission to the College of Education EC-6 Teacher Education Program.

## Reading

READ 3320 Early Literacy Development
This course focuses on emergent literacy from oral language development to fluent reading and writing. Participants explore developmentally appropriate pedagogical strategies, practices, and assessments as they learn about the graphophonetic, semantic, syntactic, and cultural knowledge that diverse children, including students with dyslexia, build as they develop literacy in and out of schools. Included are skills like the alphabetic principle, phonological awareness, and word analysis.

READ 3324 Reading Comprehension and Assessment
This course examines theories, issues and culturally-relevant instructional practices and assessments related to how children actively construct meaning from fiction and nonfiction print and digital texts across all content areas. Participants explore reading comprehension, including assessment, fluency, vocabulary instruction, digital literacies, building and accessing background knowledge, genre organization, and critical analysis of multimodal texts.

READ 3350 Literature and Disciplinary Learning in the Elementary School
This course explores children's literature as the foundation of a strong literacy program and the core of disciplinary learning across the curriculum. Participants will explore various ways to use fiction and nonfiction children's literature to teach and assess reading concepts, fluency, writing, and disciplinary content across the curriculum.

READ 4305 Content Area Literacy
Study of the role of literacy in learning content with a focus on use of explicit strategy instruction in teaching and monitoring content area literacy, vocabulary development and study skills for all learners. Dyslexia and other literacy-related disorders will be addressed. Prerequisites: Admission to COE Teacher Education Program.

READ 4340 Reflective Reading and Writing Assessment
Participants learn the principles of informal and formal assessment and use a variety of literacy assessment practices to plan, implement, and reflect on literacy instruction for multimodal learners from diverse backgrounds. Evaluation of strengths, needs and interests using standardized and alternative assessments are included. Reading and writing are highlighted.

READ 4341 Media Literacies for Secondary ELA/R Teachers
This course focuses on practices related to media literacy including digital literacies for students from diverse linguistic and cultural backgrounds and how these literacies impact formal educational settings. Topics include information sharing, copyright issues, critical analysis of online resources and media messages and writing.

READ 4342 Narrative and Expository Analysis and Critical Literacy This course focuses on using narrative and expository texts and analysis in a multicultural society. It highlights connections between these texts and: reading and composing processes; personal response; literary criticism; critical thinking; culture; society, and education; the arts and humanities; digital texts; inquiry and collaboration. Candidates plan for inclusive instruction and assessment involving literature.

READ 4343 Literacy, Culture, and Diverse Learners
This course offers candidates the opportunity to assess, teach and reflect upon the contextualized, multimodal knowledge, skills and practices of English learners with diverse backgrounds. Explored are the interrelationships between funds of knowledge, culture, social class, geography, language, reading, writing, academic development and acquisition. ELA/R TEKS (Texas Essential Knowledge and Skills) are highlighted.

READ 4344 Writing Methods, Inquiry, and Study Skills for ELA/R Teachers
This course is designed to strengthen diverse learners' understanding of writing development and process-orientated approaches to writing instruction, inquiry and study skills. Prerequisites: READ 3320 (for 4-8 certification only).

## Special Education

SPED 3390 Introduction to Exceptional Children
This course provides an overview of characteristics associated with different disabilities and the special education services available to exceptional children. Emphasis is placed on special education law, the effects of disability on learning, and the role of special educators in ensuring an appropriate education for exceptional learners.

SPED 4310 Inclusion and Differentiated Instruction in Special Education
This course focuses on methods and strategies for differentiating instruction for exceptional learners so that they may be successfully included in general education classrooms. Emphasis is placed on adaptations/accommodations in instructional delivery, content, materials, activities, and assessment to ensure all learners are provided with appropriate supports. Collaboration, Response-toIntervention (RTI), assistive technology, Individualized Education Programs (IEPs), and IEP meetings are also addressed. Prerequisites: Admission to Teacher Prep if education major. No prereq if non education major.

SPED 4330 Language and Literacy Development of Diverse Exceptional Learners
This course addresses monolingual and bilingual language acquisition and literacy development for children at different age levels (EC-12). Both typical and atypical development are covered with a focus on communication disorders and language-related learning disabilities. The interaction among language, culture, and exceptionality is examined, in addition to the use of assistive technology and social skills instruction as ways to assist in developing communication skills. The components of reading development are also covered. Field experience may be required. Prerequisites: Admission to Teacher Prep if education major. No prereq if non education major.

SPED 4350 Assessing Exceptional Learners
This course focuses on knowledge and skills in assessing learners with exceptionalities. It provides a survey of the knowledge base related to appraisal in special education, including formal, normreferenced testing and comprehensive coverage of informal, curriculum-based assessment. Response-to-intervention (RTI) models of service delivery for struggling learners in inclusive classrooms and curriculum-based measures used to monitor the progress of students are also addressed. Prerequisites: Admission to Teacher Prep if education major. No prereq if non education major.

SPED 4370 Instructional Methods for Students with Low Incidence Disabilities
This course discusses instructional methods and strategies for learners of different ages with a variety of low incidence disabilities. Particular focus is given to the medical nature of these disabilities, methods for teaching life skills and aiding childhood development, strategies for inclusion in general education classrooms, and skills needed to successfully transition to adulthood. Collaboration, assistive technology, transition, communication, and social skills are also addressed. Field experience may be required. Prerequisites: Admission to Teacher Prep if education major. No prereq if non education major.

SPED 4380 Instructional Methods for Students with Learning Disabilities
This course examines evidence-based instructional methods and strategies used with children with learning disabilities to promote academic performance in all content areas, including reading, language arts, and math. An emphasis is placed on facilitating achievement in a variety of settings and situations for students at different age levels (EC-12). The integration of assessment and instruction to ensure positive student outcomes is also discussed. Prerequisites: Admission to Teacher Prep if education major. No prereq if non education major.

SPED 4395 Special Education Practicum in Behavior Techniques
This course focuses on increasing positive behavioral outcomes for students with behavior disorders. Principles of applied behavior analysis, positive behavior support systems, and single-case research design are emphasized. The course includes field experience in which candidates demonstrate the ability to affect behavior and academic change with EC-12 students. Prerequisites: Admission to Teacher Prep if education major. No prereq if non education major.

## Technology Training

TECT 3301 Foundations of Technology Training
Study of principles and methods of classroom and laboratory control, teaching and integrating career oriented into educational goals.

TECT 3302 Technology Training Methods and Strategies
In this course, students will apply adult learning theories, training strategies and methods, and innovative technologies to design and deliver effective training that correspond $t$ othe way adults learn.

TECT 3303 Training Methods in Industry
An organized course designed to provide instruction and guidance by trained resource persons in selected topics related to technology. The course may be repeated with different topics. Six hours may be applied to an undergraduate degree.

TECT 4304 Consulting Practice in Technology Training
The course is designed to allow students to apply professional experiences, previously applied education principles, and knowledge along with skills acquired in the BAT and BAAS, to the consultancy process by identifying an instructional need, developing a training plan and implementing training solutions.

TECT 4305 Current Issues in Technology Training
This course introduces learners to a framework for the study of issues in technology training. Students will utilize innovative learning and presentation technologies to identify, analyze, and evaluate issues that impact adult learning and performance in the workplace.

TECT 4306 Multicultural Technology Training
This course provides students with an understanding of learner diversity and its effect on technology training and adult learning. Students will learn how to design and deliver trainings that create inclusive learning environments and incorporate learner's multicultural learning and communication styles.

TECT 4307 Technology Leadership Foundations
This course examines the study of leadership theories and their application to the development of leadership skills. The context of leadership will be described in an in-depth presentation of leadership theory, a discussion of how it applies to real-life situations and the development of individual leadership skills.

## UTeach

UTCH 1101 Inquiry Approaches to Teaching
This one-hour field-based course explores teaching as a career by introducing, modeling and practicing inquiry-based mathematics and science instruction. Field experiences will be completed in an elementary public school at an upper grade level and will consist of preparing, teaching, and assessing three inquiry-based mathematics or science lessons. Students will be introduced to the UTeach pedagogy and technology standards. This course is open to all undergraduate students; registration priority given to freshmen/sophomore mathematics and science majors. Alignment to state curriculum and pedagogy standards will be emphasized. Prerequisites: Criminal background check and TB vaccine.

UTCH 1102 Inquiry-Based Lesson Design
This one-hour field-based course focuses on the basic principles of designing, implementing and assessing inquiry-based mathematics and science instruction for the middle school curricula. Field experiences will be completed in a public middle school and will consist of preparing, teaching, and assessing three inquiry-based mathematics or science lessons. Students will begin developing their UTeach portfolio. Alignment to state curriculum and pedagogy standards will be emphasized. Prerequisites: UTCH 1101 with a grade of 'C' or better or concurrent enrollment with UTCH 1101.

UTCH 3301 Knowing and Learning in Mathematics and Science
This three-hour field-based course introduces the cognitive, psychological and pedagogical principles of learning for effective science and mathematics instruction for all learners. Course emphasis will be on: the use of current technology for classroom learning; novice-expert transfer and understanding of subject matter; equity, diverse and exceptional learners, summative, formative, and authentic assessment; and high stakes testing. Students will develop a model of knowing and learning that will guide their future classroom practice and will continue developing their UTeach portfolio assessment. Alignment to state curriculum and pedagogy standards will be emphasized. Prerequisites: UTCH 1101 and UTCH 1102 with a grade of 'C' or better or concurrent enrollment with UTCH 1101 and/or UTCH 1102 with consent of UTeach advisor.

UTCH 3302 Classroom Interactions
This three-hour field-based course focuses on how the interactions between curriculum, technology, and learning are used to produce a safe and productive learning environment for all students. The review of major instructional models and the delivery of effective instruction will be emphasized. Factors that affect instruction and learning (gender, socio-economic, language acquisition, disabilities, culture, and policy) in mathematics and science education will be discussed. This course has a field component that consists of three observations and two co-teaching events, including a multiple-day connected lesson, in secondary school settings. Alignment of class curriculum to state curriculum, pedagogy and content will be emphasized. A second stage-UTeach portfolio review will be required. Prerequisites: (a) A university grade point average of at least 2.75, (b) UTCH 3301 with a grade of 'C' or better or concurrent enrollment with UTCH 3301 with consent of UTeach advisor, and (c) positive evaluation of stage-one UTeach portfolio.

UTCH 3303 Project-Based Instruction
This three-hour field-based capstone course focuses on the principles of design, instruction, classroom management, and assessment of project-based and case-based curriculum projects in mathematics and science education. Students are expected to explore authentic and meaningful questions and develop through teamwork an interdisciplinary project-based unit of instruction connecting curriculum, pedagogical content, and technology standards. This course has a field component that includes observations and teaching in secondary school settings. Alignment to the state curriculum, pedagogy, and content standards will be emphasized. A third-stage UTeach portfolio will be required and must be approved before applying for admission to the student teaching program. Prerequisites: (a) A university grade point average of at least 2.75 , (b) UTCH 3302 with a grade of 'C' or better or concurrent enrollment with UTCH 3302 with consent of UTeach advisor, and (c) positive evaluation of the second-stage UTeach portfolio.

UTCH 4101 Apprentice Teaching Seminar
This one-credit-hour weekly seminar facilitates the students' integration of the supervised apprentice teaching experiences and the programs' professional curriculum. Topics include classroom management and time management, instructional planning and assessment, parent-teacher communication, school culture and dynamics, legal and logistical issues affecting teaching, and the final UTeach portfolio. The final portfolio must provide evidence that the student has met state standards for teacher certification. Prerequisites: (a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) concurrent enrollment with UTCH 4601, (d) successful completion of PPR and content TExES examinations, and (e) acceptance of the third-stage UTeach portfolio.

UTCH 4601 Apprentice Teaching
This six-credit-hour course is designed for students majoring in mathematics or science seeking middle school or high school teacher certification. Apprentice Teaching students will be placed in a state-accredited middle or secondary school for twelve weeks under the guidance of an experienced mathematics or science classroom teacher (mentor) and a university supervisor. Prerequisites: (a) A university grade point average of at least 2.75, (b) UTCH 3303 with a grade of 'C' or better, (c) successful completion of PPR and content TExES examinations, and (d) acceptance of the third-stage UTeach portfolio.

# COLLEGE OF ENGINEERING AND COMPUTER SCIENCE (CECS) 

# Department of Civil Engineering 

Dr. Jerry Anderson<br>Chair, Department of Civil Engineering<br>Location: ACSB 1202 (UTRGV Edinburg Campus)<br>Phone: 956-665-3038<br>Email: jerry.anderson@utrgv.edu

## BACHELOR OF SCIENCE (BS)

WITH A MAJOR IN
CIVIL ENGINEERING

The Civil Engineering Program prepares graduates for local, regional or world-wide employment in the engineering profession or placement in a graduate school. The program affords students opportunities to meet and interact with practicing engineers, businesses and government agencies; to participate in professional engineering organizations and in research. The faculty endeavor to be accessible, maintain state of the art instruction and facilities, and to provide liberal access to laboratories and academic support.

## STUDENT LEARNING OUTCOMES:

At the time of graduation, students will attain:

1. An ability to apply knowledge of mathematics, science, and engineering.
2. An ability to design and conduct experiments, as well as to analyze and interpret data.
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability.
4. An ability to function on multidisciplinary teams.
5. An ability to identify, formulate, and solve engineering problems.
6. An understanding of professional and ethical responsibility.
7. An ability to communicate effectively.
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context.
9. A recognition of the need for, and an ability to engage in life-long learning.
10. A knowledge of contemporary issues.
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

The program must prepare graduates to:

1. Apply knowledge of mathematics through differential equations, calculus-based physics, chemistry, and at least one additional area of basic science, consistent with the program educational objectives.
2. Apply knowledge of four technical areas appropriate to civil engineering (structures, geotech, water resources, and engineering management).
3. Conduct civil engineering experiments and analyze and interpret the resulting data.
4. Design a system, component, or process in more than one civil engineering context.
5. Explain basic concepts in management, business, public policy, and leadership; and explain the importance of professional licensure.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - 6 hours
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Language, Philosophy, and Culture - 3 hours
PHIL 1310 Ethics, Happiness, and the Good Life (Must be Engineering/Computer Science section)
Integrative and Experiential Learning - 6 hours
Choose any 3 credit hour English Course, and complete: PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab
Choose corresponding lab from Basic Science section below:
CHEM 1107 Chemistry for Engineers Lab CHEM 1111 General Chemistry I Lab

B - MAJOR REQUIREMENTS - 76 HOURS (54 advanced)
1 - Civil Engineering Core - 67 hours (45 advanced)
CIVE 1221 Engineering Graphics
CIVE 2220 Civil Engineering Measurements
CIVE 2240 Materials of Construction
CIVE 3315 Fluid Mechanics and Hydraulics
CIVE 3115 Fluid Mechanics and Hydraulics Laboratory
CIVE 3252 Civil Engineering Systems Analysis
CIVE 3324 Structural Analysis
CIVE 3331 Environmental Engineering
CIVE 3341 Structural Steel Design
CIVE 3345 Transportation Engineering
CIVE 3475 Geotechnical Engineering and Applications
CIVE 4315 Applied Hydrology
CIVE 4335 Water Resources Engineering
CIVE 4346 Reinforced Concrete Design

CIVE 4349 Constructional Planning and Management
MANE 2332 Engineering Statistics
MECE 2301 Statics
MECE 2302 Dynamics
MECE 2340 Engineering Materials
MECE 2140 Engineering Materials Lab
MECE 2350 Numerical Methods for Engineers
MECE 3321 Mechanics of Solids
MECE 3449 Mechanical Engineering Analysis I MECE 3450 Mechanical Engineering Analysis II
2 - Senior Design - 3 hours (3 advanced)
CIVE 4190 Civil Engineering Senior Design Project I
CIVE 4290 Civil Engineering Senior Design Project II
3 - Technical Electives - 6 hours ( 6 advanced) Choose from:

CIVE 4333 Water and Wastewater Treatment
CIVE 4347 Foundation Design
CIVE 4348 Highway Engineering
CIVE 4350 Open Channel Flow
CIVE 4351 Masonry and Timber Design
CIVE 4352 Earthwork Engineering and Design
CIVE 3300 Internship/Co-Op in Civil Engineering

## C - SUPPORT COURSES - 11 HOURS MINIMUM

1- Basic Science - 6 hours minimum
Choose one:
CHEM 1307 Chemistry for Engineers CHEM 1311 General Chemistry I
Choose one:
GEOL 3308 Introduction to Geographic Information Systems GEOL 1403 Physical Geology ENVR 3304 Environmental Approaches to Sustainable Development ENVR 4301 Environmental Regulations BIOL 1406 General Biology I (or BIOL 1487 Honors) GEOL 1401 Earth Sciences I GEOL 1404 Historical Geology ENVR 1401 Environmental Science I ENVR 1402 Environmental Science II
2 - Mathematics - 5 hours
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
TOTAL CREDIT HOURS FOR GRADUATION - 129 HOURS TOTAL ADVANCED HOURS - 54 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Students must receive a grade of ' $C$ ' or better in all courses that are prerequisites for civil engineering courses.

## Graduation requirements

1. Students must receive a grade of ' $C$ ' or better in all civil engineering courses.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.
*The Computational Science program offers students the opportunity to acquire a knowledge in computing integrated with knowledge in one of the following areas of study: (a) bioinformatics, (b) computational physics, (c) computational chemistry, (d) computational mathematics, (e) environmental science informatics, ( $f$ ) health informatics, ( $g$ ) digital forensics and cyber security, (h) business informatics, (i) biomedical informatics, (j) computational engineering physics, and (k) computational engineering technology. Graduates of this program major in computational science with a concentration in one of the above areas of study.
(Amended for clarification 12/7/2018).
*Previous UTRGV language:
Computational science graduates develop emphasis in two major fields, one in computer science and one in another field, in order to integrate an interdisciplinary computing degree applied to a number of emerging areas of study such as biomedical-informatics, digital forensics, computational chemistry, and computational physics, to mention a few examples. Graduates of this program are prepared to enter the workforce or to continue a graduate studies either in computer science or in the second major.

## STUDENT LEARNING OUTCOMES:

1. Knowledge: Be well prepared for a professional career or graduate studies in computer science applied to a second major field of study.
2. Application: Be able to apply computer science principles to real-world problems in a second field of study.
3. Organizational: Have the skills to work effectively within an organization.
4. Ethical: Understand ethical, professional and social issues related to the practice of their profession.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

## Mathematics - $\mathbf{3}$ hours

For all concentrations:
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - $\mathbf{6}$ hours
For Bioinformatics, Biomedical Informatics, and Computational Chemistry concentrations:

CHEM 1311 General Chemistry I CHEM 1312 General Chemistry II
For Computational Physics, Computational Mathematics, and Computational
Engineering Physics concentrations:
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture
PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
For Environmental Science Informatics and Health Informatics concentrations: BIOL 1406 General Biology I three-hour lecture (or BIOL 1487 Honors) BIOL 1407 General Biology II three-hour lecture (or BIOL 1488 Honors) For Digital Forensics and Cyber Security concentration:

BIOL 1406 General Biology I three-hour lecture (or BIOL 1487 Honors)
CHEM 1311 General Chemistry I
For Computational Engineering Technology concentration:
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture CHEM 1311 General Chemistry I
Social and Behavioral Sciences - 3 hours
For Health Informatics, Digital Forensics and Cyber Security, and Biomedical Informatics concentrations:

PSYC 2301 General Psychology
For Business Informatics, Computational Engineering Physics, and Computational Engineering Technology concentrations:

ECON 2301 Principles of Macroeconomics
Integrative and Experiential Learning - 5 hours
For all concentrations:
CSCI 1380 Computer Science I (or CSCI 1387 Honors)
Concentrations with specified Life and Physical Science courses must choose respective labs below:

BIOL 1406 General Biology I one-hour lab (or BIOL 1487 Honors) and BIOL 1407
General Biology II one-hour lab (or BIOL 1488 Honors)

CHEM 1111 General Chemistry I Lab and CHEM 1112 General Chemistry II Lab PHYS 2425 Physics for Scientists and Engineers I one-hour lab and PHYS 2426 Physics for Scientists and Engineers II one-hour lab

## B - MAJOR REQUIREMENTS - 67 HOURS (45 advanced) <br> 1 - Computational Science Core - 28 hours (18 advanced)

CSCl 2333 Computer Organization and Assembly Language
CSCI 2380 Computer Science II (or CSCI 2388 Honors)
CSCI 3310 Discrete Data Structures
CSCI 3333 Algorithms and Data Structures
CSCI 3340 Software Engineering I
CSCI 4333 Database Design and Implementation
CSCI 4345 Computer Networks
CSCl 4390 Senior Project
ELEE 2130 Digital Systems Engineering I Lab
ELEE 2330 Digital Systems Engineering I
2 - Computational Science Electives - 9 hours (9 advanced)
Choose 9 hours of advanced CSCl courses.
3 - Concentration - $\mathbf{3 0}$ hours (18 advanced minimum)
Choose one of the following concentrations:
a - Bioinformatics - $\mathbf{3 0}$ hours (18 advanced)
i-Bioinformatics Core - $\mathbf{2 3}$ hours ( $\mathbf{1 1}$ advanced)
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 2143 General Biology III Lab
BIOL 2343 General Biology III
BIOL 3409 Ecology
BIOL 3413 Genetics
BIOL 4301 Evolution
ii - Bioinformatics Electives $\mathbf{- 7}$ hours ( $\mathbf{7}$ advanced)
Choose 7 hours of advanced BIOL courses.
b - Computational Physics - $\mathbf{3 0}$ hours (19 advanced)
i-Computational Physics Core - $\mathbf{2 3}$ hours (19 advanced)
MATH 2415 Calculus III
MATH 3341 Differential Equations
PHYS 3301 Electromagnetic Theory I
PHYS 3303 Thermodynamics
PHYS 3305 Classical Mechanics
PHYS 3402 Modern Physics
PHYS 4303 Quantum Mechanics I
ii - Computational Physics Electives $\mathbf{- 7}$ hours
Choose 7 hours of PHYS courses.
c - Computational Chemistry - 30 hours (18 advanced)
i-Computational Chemistry Core - 21 hours (13 advanced)
CHEM 2101 Analytical Chemistry Lab
CHEM 2301 Analytical Chemistry
CHEM 2123 Organic Chemistry I Lab
CHEM 2323 Organic Chemistry I CHEM 3103 Biochemistry Lab CHEM 3104 Physical Chemistry Lab CHEM 3202 Inorganic Chemistry Lab CHEM 3301 Inorganic Chemistry CHEM 3303 Biochemistry CHEM 3304 Physical Chemistry
ii - Computational Chemistry Electives $\mathbf{- 9}$ hours (5 advanced)
Choose 9 hours of CHEM or PHYS courses, of which 5 must be advanced.
d - Computational Mathematics - $\mathbf{3 0}$ hours (26 advanced)
i - Computational Mathematics Core $\mathbf{- 1 6}$ hours (12 advanced)
MATH 2415 Calculus III
MATH 3341 Differential Equations
MATH 3350 Introduction to Mathematical Proof
MATH 3352 Modern Geometry I
MATH 3363 Modern Algebra I
ii - Computational Mathematics Electives - MATH 6 hours ( 6 advanced)
Choose 6 hours of advanced MATH courses.
iii - Computational Science Electives - CSCI 8 hours (8 advanced)
Choose 8 hours of advanced CSCI courses.
e - Environmental Science Informatics - $\mathbf{3 0}$ hours (18 advanced)
i-Environmental Science Informatics - $\mathbf{1 8}$ hours (10 advanced)
ENVR 1401 Introduction to Environmental Science I
ENVR 1402 Introduction to Environmental Science II
ENVR 3301 Natural Resources Conservation
ENVR 3303 Research Methodology and Data Analysis in Environmental
Sciences
ENVR 3405 Oceanography
ii - Environmental Science Informatics Electives - $\mathbf{1 2}$ hours (8 advanced)
Choose 12 hours of ENVR or GEOL courses, of which 8 must be advanced.
f - Health Informatics - $\mathbf{3 0}$ hours (22 advanced)
Requires admission to School of Biomedical Informatics from UT Heath Science Center at Houston.
i- Health Informatics - 15 hours ( $\mathbf{7}$ advanced)
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
BIOL 4407 Animal Parasitology
HIUT 4300 Introduction to Health Informatics
ii - Health Informatics Electives - $\mathbf{1 2}$ hours (12 advanced)
HUIT electives must be approved by School of Biomedical Informatics from UT Health Science Center at Houston.
iii - Biological Systems Electives - $\mathbf{3}$ hours ( $\mathbf{3}$ advanced)
Choose one:
BIOL 3310 Neurobiology
BIOL 3345 Animal Nutrition
BIOL 3405 Histology
g - Digital Forensics and Cyber Security - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
CRIJ 3303 Criminology
CRIJ 3304 Criminal Justice Research Methods
CRIJ 3310 The Constitution and Criminal Law
CRIJ 3315 Forensic Investigation I
CRIJ 3316 Criminal Evidence and Proof
CRIJ 3320 Evidence for Forensic Investigation
CRIJ 3416 Forensic Investigation II
CRIJ 4230 Seminar: Forensics Investigation
CRIJ 4321 White-Collar and Organized Crime
CRIJ 4325 Medical-Legal Forensic Investigation
h - Business Informatics - $\mathbf{3 0}$ hours (21 advanced)
ACCT 2301 Intro to Financial Accounting
ACCT 2302 Intro to Managerial Accounting
BLAW 3337 Business Law I
ECON 2302 Principles of Microeconomics
FINA 3380 Introduction Finance
MARK 3300 Principles of Marketing
MGMT 3361 Principles of Management
MGMT 4363 Operations Management
MGMT 4389 Strategic Management
QUMT 3343 Statistical Methods for Business
i - Biomedical Informatics - $\mathbf{3 0}$ hours (18 advanced)
BMED 1101 Introductory Medical Biochemistry
BMED 1102 Introduction to Biomedical I Lab
BMED 1103 Introductory Cell Biology
BMED 1104 Introductory Molecular Biology
BMED 1105 Introductory Medical Genetics
BMED 1106 Introductory Medical Microbiology
BMED 1107 Introductory Immunology
BMED 1108 Introduction Medical Neuroscience
BMED 1110 Introductory Medical Physiology
BMED 1111 Introduction to Biomedical II Lab
BMED 2101 Gross Anatomy
BMED 2102 Molecules, Cells and Tissues
BMED 3101 Pathobiology and Host Defense
BMED 3102 Neurochemistry
BMED 3103 Human Behavior
BMED 3104 Integrated Body Systems I: Cardiovascular and Pulmonary
BMED 3105 Integrated Body Systems II: Gastrointestinal
BMED 3106 Integrated Body System III: Renal, Fluid, and Electrolytes
BMED 3107 Integrated Body System IV: Endocrine and Reproductive System
BMED 3108 Integrated Body System V: Dermatology, Hematology, and Musculoskeletal System
BMED 3109 Medical Syndromes
BMED 4220 Medical Bioinformatics, Genomics, and Systems Biology BMED 4230 Human Genetics and Medical Genomics

> BMED 4240 Medical Microbiology BMED 4310 Medical Biochemistry
> j - Computational Engineering Physics - $\mathbf{3 0}$ hours ( $\mathbf{2 0}$ advanced)
> i- Computational Engineering Physics $\mathbf{- 2 4}$ hours (14 advanced)
> ENGR 2301 Engineering Mechanics I: Statics
> ENGR 2302 Engineering Mechanics II: Dynamics ENGR 2105 Linear Circuits Lab ENGR 2305 Linear Circuits ENGR 3304 Mechanics of Materials ENGR 3321 Electronics I ENGR 4441 Control Systems MATH 3341 Differential Equations
> ii - Computational Engineering Physics - $\mathbf{6}$ hours ( $\mathbf{6}$ advanced). Choose 6 hours of advanced ENGR courses.
> k - Computational Engineering Technology - $\mathbf{3 0}$ hours (18 advanced)
> i- Computational Engineering Technology Core - $\mathbf{2 1}$ hours (12 advanced) ENGT 2307 Engineering Materials I for Engineering Technology ENGT 2310 Intro to Manufacturing Processes ENGT 2321 Basic Electronics ENGT 3312 Renewable Energy Technology ENGT 3321 Solar Energy Systems ENGT 3333 Quality Control ENGT 4340 Robotics and Automation
> ii - Computational Engineering Technology - $\mathbf{9}$ hours ( $\mathbf{6}$ advanced)
> Choose 9 hours of ENGT courses, of which 6 hours must be advanced.

## C - SUPPORT COURSES - 11 HOURS (3 advanced)

MATH 2318 Linear Algebra
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 3331 Applied Statistics I
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS (MINIMUM) - 48 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Graduation requirements
In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF APPLIED TECHNOLOGY (BAT) <br> WITH A MAJOR IN <br> COMPUTER INFORMATION SYSTEMS TECHNOLOGY 

Graduates from the Computer Information Systems Technology degree apply Information Technology (IT) to sustain the performance of a broad range of occupations and daily life situations by operating, configuring, and maintaining software and hardware in computing systems. Areas of application include data center operation, networking and data communications setup, database management systems maintenance, web support, and digital media assistance. Employment opportunities are extensive in the field of IT and include positions such as analyst, specialist, or operation in data centers, networking, database management systems, and IT support services.

## STUDENT LEARNING OUTCOMES:

1. Students are prepared for a professional career or graduate studies in computer information technology.
2. Students are able to apply computer science principles to real-world problems.
3. Students have the skills to work effectively within an organization.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Integrative and Experiential Learning - $\mathbf{3}$ hours
CSCI 1380 Computer Science I (or CSSCI 1387 Honors)
B - AAS DEGREE IN COMPUTER RELATED FIELD - 32 HOURS
Minimum GPA of 2.5 required. AAS Degree must have at least 30 SCH of computer-related coursework. See admissions requirements for additional information.

Degree Major:
Date:
Institution:
C - COMPUTER INFORMATION SYSTEMS TECHNOLOGY CORE - 19 HOURS (15 advanced)
CSCI 2380 Computer Science II
CSCI 3310 Discrete Data Structures
CSCI 3326 Object Oriented Programming in JAVA
CSCI 3340 Software Engineering II
CSCI 4390 Senior Project
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 3331 Applied Statistics I

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# TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS 

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:<br>Admission requirements

AAS Degree requires a minimum GPA of 2.5 , with at least 30 SCH of computer related coursework. Students may document this computer related course work with an official transcript.

## Graduation requirements

1. A grade of 'C' or better in MATH 2413 (or MATH 2487 Honors) is required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE IN COMPUTER SCIENCE (BSCS)

## WITH A MAJOR IN <br> COMPUTER SCIENCE

Computer science is the study of the structure, function and application of computers and is central to the rapidly expanding use of information technology. Computers have traditionally been used in business, engineering and scientific applications, and now applications are found in almost all human activities from art to zoology. Computer science is both an applied and theoretical discipline, supported by the principles of science, engineering, and mathematics that has a direct and profound impact on the quality of life and society at large.

The Department of Computer Science offers three degrees: Bachelor of Science in Computer Science (BSCS), Master of Science in computer science (MSCS), and Master of Science in Information Technology (MSIT). The BSCS degree is accredited by the Accreditation Board for Engineering and Technology Computing Accreditation Commission (CAC/ABET), 111 Market Place, Suite 1050, Baltimore, MD 212024012, telephone: (410) 347-7700. The Department offers a Bachelor of Science in Computer Engineering (BSCE) in cooperation with the Department of Electrical Engineering. The Department also offers service courses to fulfill University core curriculum requirements, and computer science courses required for degree programs in engineering, science, and mathematics. Faculty conduct research in computer science, computer science education, and interdisciplinary fields, and contribute their professional service to student advising, mentoring, professional organizations, University activities, industrial interactions, and to the community through professional expertise.

The undergraduate curricula in computer science are based on the Association for Computing Machinery and the Institute of Electrical and Electronics Engineers Computer Society recommendations for curricula and reflect the goals of a liberal arts education. The graduate curricula provide advanced and specialized
study in the areas of computer science and information technology. The curricula in computer science provide the student with marketable expertise to enter the computing and information technology fields, the skills and education required to adapt to the rapidly changing characteristic of the fields, and the foundation to pursue graduate study in computer science and information technology.

## STUDENT LEARNING OUTCOMES:

1. An ability to apply knowledge of computing and mathematics appropriate to the program's student outcomes and to the discipline.
2. An ability to analyze a problem, and identify and define the computing requirements appropriate to its solution
3. An ability to design, implement, and evaluate a computer-based system, process, component, or program to meet desired needs.
4. An ability to function effectively on teams to accomplish a common goal.
5. An understanding of professional, ethical, legal, security and social issues and responsibilities.
6. An ability to communicate effectively with a range of audiences.
7. An ability to analyze the local and global impact of computing on individuals, organizations, and society.
8. Recognition of the need for and an ability to engage in continuing professional development.
9. An ability to use current techniques, skills, and tools necessary for computing practice.
10. An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems in a way that demonstrates comprehension of the tradeoffs involved in design choices.
11. An ability to apply design and development principles in the construction of software systems of varying complexity.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required

## Mathematics - $\mathbf{3}$ hours

MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture Life and Physical Science - $\mathbf{6}$ hours

Choose one pair:
BIOL 1406 General Biology I (or BIOL 1487 Honors) three-hour lecture and BIOL 1407 General Biology II (or BIOL 1488 Honors) three-hour lecture

BIOL 2401 Anatomy and Physiology I three-hour lecture and BIOL 2402 Anatomy and Physiology II three-hour lecture
CHEM 1311 General Chemistry I (or CHEM 1307) and CHEM 1312 General Chemistry II
PHYS 1401 General Physics I three-hour lecture and PHYS 1402 General Physics II three-hour lecture
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture and PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Language, Philosophy, and Culture - 3 hours
PHIL 1310 Ethics, Happiness, and the Good (Must be Computer Science section)

## Integrative and Experiential Learning - 6 hours

Choose any course from Humanities, except for Professional Ethics, and complete:
CSCI/CMPE 1370 Engineering Computer Science I (or CSCI/CMPE 1378 Honors)
B - MAJOR REQUIREMENTS - 44 HOURS (33 advanced)
1 - Computer Science Core - 29 hours (18 advanced)
CSCI 1101 Introduction to Computer Science
CSCI 1170 Engineering Computer Science I Lab (or CSCI 1178 Honors)
CSCI 2333 Computer Organization and Assembly Language
CSCl 2344 Programming in UNIX / Linux Environment
CSCl 2380 Computer Science II (or CSCI 2388 Honors)
CSCI 3333 Algorithms and Data Structures
CSCI 3334 Systems Programming
CSCI 3336 Organization of Programming Languages
CSCI 3340 Software Engineering I
CSCI 4325 Automata, Formal Languages and Computability CSCl 4390 Senior Project
2 - Computer Science Electives - 15 hours ( 15 advanced)
a - Programming Language - 3 hours ( 3 advanced)
Choose from:
CSCI 3326 Object Oriented Programming in JAVA CSCI 3327 Object Oriented Programming in Visual Basic CSCl 3328 Object Oriented Programming in C\#
b - Databases, Networking, and Operating Systems - 6 hours (6 advanced)
Choose from:
CSCI 4333 Database Design and Implementation CSCI 4334 Operating Systems CSCI 4335 Computer Architecture CSCI 4345 Computer Networks
c - Technical Electives - $\mathbf{6}$ hours ( $\mathbf{6}$ advanced)
Choose from:
CSCI 3300 Internship in Computer Science
CSCI 3341 Software Engineering II
CSCI 3342 Internet Programming
CSCI 3350 Numerical Methods
CSCI 3370 Introduction to Game Development
CSCI 4185 Research Seminar
CSCI 4301 Digital Image Processing
CSCI 4302 Multimedia Systems
CSCI 4303 Computer Vision
CSCI 4310 Design and Analysis of Algorithms
CSCI 4318 Cyber Security
CSCl 4319 Digital Forensics
CSCI 4321 E-Commerce
CSCI 4327 Compiler Construction
CSCI 4336 Parallel and Distributed Computing CSCl 4341 Topics in Computer Science

CSCI 4343 Data Mining
CSCI 4344 Bioinformatics
CSCI 4350 Artificial Intelligence
CSCI 4352 Machine Learning
CSCI 4355 Expert Systems
CSCI 4360 Computer Graphics and Interactive Systems
CSCI 4363 Advanced Databases
CSCI 4365 Computer and Network Security
CSCI 4370 Advanced Game Development
CSCI 4381 Interactive Systems and User Interface Design
CSCI 4382 Computer Visualization
CSCI 4383 Bioinformatics Imaging

## C - SUPPORT COURSES - 41 HOURS (15 advanced)

1 - Oral and Written Communication - 6 hours ( 3 advanced)
COMM 1315 Public Speaking
ENGL 3342 Technical Communication
2 - Mathematics and Engineering - 18 hours ( 6 advanced)
CSCI 3310 Discrete Structures
ELEE 2130 Digital Systems Engineering I Lab
ELEE 2330 Digital Systems Engineering I
MATH 2318 Linear Algebra MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture MATH 2414 Calculus II (or MATH 2488 Honors) Choose one:

MATH 4337 Probability and Statistics I
ELEE 3340 Probability and Statistics for Electrical Engineers
MATH 3331 Applied Statistics I
3 - Laboratory - 2 hours
Choose corresponding pair from Life and Physical Science:
BIOL 1406 General Biology I (or BIOL 1487 Honors) one-hour lab and BIOL 1407 General Biology II (or BIOL 1488 Honors) one-hour lab
BIOL 2401 Anatomy and Physiology I one-hour lab and BIOL 2402 Anatomy and Physiology II one-hour lab
CHEM 1111 General Chemistry I Lab (or CHEM 1107) and CHEM 1112 General Chemistry II Lab
PHYS 1401 General Physics I one-hour lab and PHYS 1402 General Physics II one-hour lab PHYS 2425 Physics for Scientists and Engineers I one-hour lab and PHYS 2426 Physics for Scientists and Engineers II one-hour lab
4 - Basic Science - 4 hours
Choose one:
BIOL 1407 General Biology I (or BIOL 1487 Honors)
BIOL 2401 Anatomy and Physiology I
CHEM 1311 and CHEM 1111 or CHEM 1307 and CHEM 1107
PHYS 1401 General Physics I
PHYS 2425 Physics for Scientists and Engineers I
5 - Free Electives - 11 hours (6 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 127 HOURS TOTAL ADVANCED HOURS - 48 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

1. All courses in the Computer Science Core must be completed with a grade 'C' or better.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

A - MINOR REQUIREMENTS - 20 HOURS (12 advanced)
1 - Computer Science Core - 11 hours (3 advanced)
CSCI 1101 Introduction to Computer Science
CSCI 1370 Engineering Computer Science I (or CSCI 1378)
CSCI 1170 Engineering Computer Science I Laboratory
CSCI 2380 Computer Science II
CSCI 3333 Algorithms and Data Structures
2 - Advanced Computer Science Electives - 9 hours (9 advanced) Choose 9 hours of advanced Computer Science courses.

# Department of Electrical Engineering 

Dr. Heinrich Foltz<br>Interim Chair, Department of Electrical Engineering Location: ENGR 3214 (UTRGV Edinburg Campus)<br>Phone: 956-665-2609<br>Fax: 956-665-3527<br>Email: heinrich.foltz@utrgv.edu

Computer engineering is a broad field with applications in almost all areas of industry including software and hardware computer systems, and computing electronics. The Department of Computer Science and the Department of Electrical Engineering jointly offers the Bachelor of Science in Computer Engineering (BSCE) degree, accredited by ABET since 2009.

The program awards a Bachelor of Science in Computer Engineering (BSCE). Computer engineering is a discipline that embodies the science and technology of design, construction and implementation of software and hardware components of modern computing hardware and software systems and computer-controlled equipment. The body of knowledge for computer engineering includes algorithms, computer architecture and organization, computer systems engineering, circuits and signals, database systems, digital logic, digital signal processing, electronics, embedded systems, computer networks, operating systems, programming, software engineering and discrete structures. The curriculum was designed following the guidelines of ACM and IEEE model curricula to meet ABET standards. This degree provides a broad, solid education in computer engineering fundamentals as well as the opportunity for in-depth study in specialized topics. Students completing the program will have a rigorous foundation for software and hardware engineering practice in industry as well as for graduate studies in computer science, computer engineering and other related disciplines. The program has wellequipped, accessible laboratories and extensive computing facilities.

The Computer Engineering Program is a joint program delivered by the Department of Computer Science and the Department of Electrical Engineering. The Computer Engineering program prepares students to pursue advanced study or to enter the dynamic and interdisciplinary field that continues to experience rapid growth and impacts many aspects of human endeavor. The program is designed to provide students with a balanced perspective of hardware and software, and the analysis, design, and implementation techniques for integrated computer systems. The faculty endeavor to be accessible, maintain state of the art instruction and facilities, and to provide liberal access to laboratories and academic support.

## STUDENT LEARNING OUTCOMES:

1. A knowledge of mathematics and basic sciences necessary for the analysis and design of computer software, hardware, and systems.
2. An understanding of the principles of computer programming, software engineering, algorithms, data structures, computer organization and architecture, operating systems, and computer networking.
3. An understanding of the principles of microprocessor systems, digital electronics, electrical circuits, electronics, and embedded systems, and an understanding of the applications of computer engineering principles.
4. An ability to use analysis and design tools to produce integrated systems containing hardware and software.
5. A depth and breadth of knowledge that goes beyond the basic skills expected of all computer engineering students with further specialization in either the software track or the hardware track.
6. An ability to apply these principles and practices to a variety of computer engineering problems.
7. An ability to successfully complete design projects of substantial complexity.
8. An ability to understand and learn new technological developments in the field.
9. An ability to work effectively in teams.
10. An ability to communicate effectively in graphical, oral, and written media.
11. An understanding of the professional responsibility of an engineer and how engineering solutions impact safety, economics, ethics, politics, and societal and cultural issues.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - 6 hours
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Language, Philosophy, and Culture - $\mathbf{3}$ hours PHIL 1310 Ethics, Happiness, and the Good Life (Must be Engineering/Computer Science section)
Integrative and Experiential Learning - 6 hours
Choose any course from Humanities, except Professional Ethics, and complete: CMPE 1370 Engineering Computer Science I (or CMPE 1378 Honors)

B - MAJOR REQUIREMENTS - 65 HOURS (49 advanced minimum)
1 - Computer Engineering Core - 38 hours (25 advanced)
CMPE 1101 Introduction to Computer Engineering
CMPE 1170 Engineering Computer Science I Lab (or CSCI 1178 Honors)
CMPE 2320 Electrical Circuits I
CMPE 2120 Electrical Circuits I Lab
CMPE 2330 Digital Systems Engineering I
CMPE 2130 Digital Systems Engineering I Lab
Choose one:
CMPE 2380 Computer Science II
CSCI 2380 Computer Science II
CMPE 3333 Algorithms and Data Structures
CMPE 3334 Systems Programming
CMPE 3340 Software Engineering I
CMPE 3403 Electronics for Computer Engineering
CMPE 4303 Digital Systems Engineering II
CMPE 4334 Operating Systems
CMPE 4335 Computer Architecture
CMPE 4375 Introduction to VLSI Design
2 - Senior Design - 6 hours (6 advanced)
Choose one pair:
CMPE 4371 Senior Design I Software and CMPE 4372 Senior Design II Software
CMPE 4373 Senior Design I Hardware and CMPE 4374 Senior Design II Hardware
3 - Technical Electives - 6 hours ( 6 advanced)
Choose from (Additional courses available with Advisor or Program Director Approval):
CMPE 4301 Digital Image Processing
CMPE 4327 Compiler Construction
CMPE 4336 Parallel and Distributed Computing

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            CMPE 4363 Computer and Network Security
            CMPE 4341 Topics in Computer Science
            CMPE 4350 Artificial Intelligence
            CMPE 4365 Digital Signal Processing
            CMPE 4366 Image Processing
            CMPE 4367 Fiber Optics Communications
            CMPE 4378 Signal Integrity and Electromagnetic Compatibility
            CMPE 4381 Interactive Systems and User Interface Design
            CMPE 4382 Computer Visualization
4-Concentrations - }15\mathrm{ hours (12 advanced minimum)
    Choose one concentration:
    a - Software - 15 hours (12 advanced)
            CMPE 2333 Computer Organization and Assembly Language
            CMPE 3341 Software Engineering II
            CMPE 4345 Computer Networks
            CMPE 4333 Database Design and Implementation
            Choose one:
            CMPE 3326 Object Oriented Programming in JAVA
                CMPE 3328 Object Oriented Programming in C#
b - Hardware - 15 hours (15 advanced)
            CMPE 3322 Signals and Systems
            CMPE 3226 Electrical Engineering I Lab
            CMPE 3331 Microcontroller and Embedded Systems Lab
            CMPE 4390 Communication Networks
            CMPE 3437 Microprocessor Systems
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C - SUPPORT COURSES - 19 HOURS (6 advanced)
1 - Physics Lab - 2 hours

PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab
2-Basic Science - $\mathbf{3}$ hours
Choose one:
CHEM 1311 General Chemistry I
CHEM 1307 Chemistry for Engineers
3 - Mathematics - 14 hours (6 advanced)
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture MATH 2414 Calculus II (or MATH 2488 Honors) MATH 2346 Mathematics for Electrical and Computer Engineers MATH 3341 Differential Equations MATH 4337 Probability and Statistics I

TOTAL CREDIT HOURS FOR GRADUATION - 126 HOURS TOTAL ADVANCED HOURS (MINIMUM) - 55 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

1. As part of the degree, all students must complete a two-semester capstone senior design project, represented by CMPE 4371 and CMPE 4372 or CMPE 4372 and CMPE 4374 in the degree plan. This project must be of substantial scope and complexity, demonstrate competencies from across the curriculum (in particular, the ability to design computer software, electronic hardware and integrate the two in systems) and address the social, economic and ethical consequences of the project.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF SCIENCE IN ELECTRICAL ENGINEERING (BSEE) 

## WITH A MAJOR IN ELECTRICAL ENGINEERING

Electrical engineering is a broad field with applications in almost all areas of industry including computer systems, control systems, telecommunications, semiconductors, electronics, and electric power. The Department of Electrical Engineering offers a Bachelor of Science in Electrical Engineering (BSEE) degree that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

This degree provides a broad, solid education in engineering fundamentals as well as the opportunity for in-depth study in specialized topics. Students completing the program will have rigorous foundation for engineering practice in industry as well as for graduate studies in engineering and other disciplines. The program has well-equipped, accessible laboratories and extensive computing facilities.

## STUDENT LEARNING OUTCOMES:

1. Be able to use knowledge of mathematics, basic sciences and engineering to analyze (identify, formulate, and solve) problems in electrical engineering.
2. Be able to design and conduct experiments and interpret the results.
3. Be able to design electrical and electronic devices, systems, or processes that meet given specifications.
4. Be able to function in multi-disciplinary teams.
5. Be able to communicate ideas effectively in graphical, oral, and in written media.
6. Understand the professional responsibility of an engineer and how engineering solutions impact safety, economics, ethics, politics, and societal and cultural issues.
7. Understand the need for life long learning to keep abreast of current practice.
8. Be able to use state of the art computational hardware and software for analysis, design, and documentation (techniques, skills, and modern engineering tools necessary for engineering practice).
9. Demonstrate a knowledge of mathematics and basic sciences necessary for the analysis and design of electrical and electronic circuits and systems.
10. Demonstrate an understanding of the principles of electrical circuits and electronics, and analysis, synthesis, and experimental techniques for both analog and digital electronic circuits.
11. Demonstrate an understanding of the applications of electrical engineering principles in systems for communications, controls, and computation, and power.
12. Demonstrate an ability to create and use software both as an analysis and design tool, and as part of systems containing hardware and software.
13. Demonstrate depth of knowledge beyond the basic level in one or more specific electrical engineering topics elected by the student.
14. Demonstrate the ability to use their engineering and project management knowledge to successfully complete design projects of substantial complexity.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

## Mathematics - 3 hours

MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - $\mathbf{6}$ hours
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Language, Philosophy, and Culture - 3 hours
PHIL 1310 Ethics, Happiness, and the Good Life (Must be Engineering/Computer Science section)
Integrative and Experiential Learning - 6 hours
Choose any course from Humanities, except PHIL, and choose one:
CSCI 1380 Computer Science I
CSCI 1370 Engineering Computer Science I (or CSCI 1378 Honors)

## B - MAJOR REQUIREMENTS - 60 HOURS (48 advanced)

1 - Electrical Engineering Core - 45 hours ( 33 advanced)
ELEE 1101 Introduction to Electrical Engineering
ELEE 2319 Numerical Computation and Data Visualization
ELEE 2330 Digital Systems Engineering I
ELEE 2130 Digital Systems Lab
ELEE 2305 Electrical Circuits I
ELEE 2105 Electrical Circuits Lab
ELEE 3321 Signals and Systems
ELEE 3301 Electronics I
ELEE 3101 Electronics I Lab
ELEE 3225 Electrical Engineering Lab I
ELEE 3230 Electrical Engineering Lab II
ELEE 3302 Electronics II
ELEE 3315 Electromagnetics Engineering
ELEE 3435 Microprocessor Systems
ELEE 4303 Digital Systems Engineering II
ELEE 4321 Automatic Control Systems
ELEE 4351 Communication Theory
ELEE 4328 Solid State Electronic Devices
2 - Senior Design - 6 hours (6 advanced)
ELEE 4361 Senior Design I
ELEE 4362 Senior Design II
3 - Technical Electives - 9 hours (9 advanced)
Choose from:
ELEE 3300 Engineering Coop/Internship
ELEE 3331 Embedded Systems
ELEE 3370 Power Electronics
ELEE 3371 Electrical Power Systems
ELEE 4323 Rapid Control Prototyping
ELEE 4325 Introduction to Robotics
ELEE 4333 Topics in Electrical Engineering
ELEE 4360 High Frequency Engineering

ELEE 4364 Antennas and Propagation
ELEE 4365 Digital Signal Processing
ELEE 4366 Image Processing
ELEE 4367 Fiber Optic Communications
ELEE 4368 Electrokinetics in Microsystems
ELEE 4372 Electrical Machinery and Power System Fundamentals
ELEE 4373 Renewable Energy
ELEE 4375 Introduction to VLSI Design
ELEE 4380 Computer Architecture
ELEE 4390 Communications Networks

## C - SUPPORT COURSES - 23 HOURS ( 6 advanced)

1 - Physics Lab - $\mathbf{2}$ hours
PHYS 2425 Physics for Scientists and Engineers I one-hour lab
PHYS 2426 Physics for Scientists and Engineers II one-hour lab
2 - Basic Science or Engineering Electives - $\mathbf{3}$ hours
Choose from:
CHEM 1307 Chemistry for Engineers
CHEM 1311 General Chemistry I
MECE 2301 Statics
3 - Mathematics - 18 hours (6 advanced)
ELEE 3340 Probability and Statistics for Electrical Engineers MATH 2346 Mathematics for Electrical and Computer Engineers MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 2415 Calculus III
MATH 3341 Differential Equations

## TOTAL CREDIT HOURS FOR GRADUATION - 125 HOURS TOTAL ADVANCED HOURS - 54 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> ENGINEERING TECHNOLOGY 

Engineering Technology is the profession in which knowledge of mathematics and natural science, gained by higher education, experience, and practice, is devoted primarily to the implementation and extension of existing technology for the benefit of humanity. Engineering Technology education focuses primarily on the applied aspects of science and that portion of the technological spectrum closest to product improvement, industrial practices, and engineering operational functions.

## STUDENT LEARNING OUTCOMES:

1. An ability to select and apply the knowledge, techniques, skills, and modern tools of the discipline to broadly-defined engineering technology activities;
2. An ability to select and apply a knowledge of mathematics, science, engineering, and technology to engineering technology problems that require the application of principles and applied procedures or methodologies;
3. An ability to conduct standard tests and measurements; to conduct, analyze, and interpret experiments; and to apply experimental results to improve processes;
4. An ability to design systems, components, or processes for broadly-defined engineering technology problems appropriate to program educational objectives;
5. An ability to function effectively as a member or leader on a technical team;
6. An ability to identify, analyze, and solve broadly-defined engineering technology problems;
7. An ability to apply written, oral, and graphical communication in both technical and nontechnical environments; and an ability to identify and use appropriate technical literature;
8. An understanding of the need for and an ability to engage in self-directed continuing professional development;
9. An understanding of and a commitment to address professional and ethical responsibilities including a respect for diversity;
10. A knowledge of the impact of engineering technology solutions in a societal and global context; and
11. A commitment to quality, timeliness, and continuous improvement.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours MATH 1314 College Algebra
Life and Physical Sciences - 6 hours
PHYS 1401 General Physics I three-hour lecture CHEM 1311 General Chemistry I
Integrative and Experiential Learning - 5 hours
PHYS 1401 General Physics I one-hour lab
CHEM 1111 General Chemistry I Lab CSCI/CMPE 1370 Engineering Computer Science I (or CSCI/CMPE 1378 Honors)

B - MAJOR REQUIREMENTS - 67 HOURS (45 advanced)
1 - Engineering Technology Core - 59 hours ( 37 advanced)
ENGT 1101 Introduction to Engineering Technology
ENGT 1310 Design Graphics I
ENGT 1320 Design Graphics II
ENGT 1321 Basic Architectural CAD
ENGT 2307 Engineering Materials I for Engineering Technology
ENGT 2310 Introduction to Manufacturing Processes
ENGT 2321 Basic Electronics
ENGT 2350 Residential Architectural CAD
ENGT 3310 Fundamentals of Product Design
ENGT 3311 Statics and Strength of Materials
ENGT 3312 Renewable Energy Technology
ENGT 3320 Computer Integrated Manufacturing
ENGT 3321 Solar Energy Systems
ENGT 3330 Green Building Design I
ENGT 3333 Quality Control
ENGT 3350 Commercial Architectural CAD
ENGT 4210 Senior Project I
ENGT 4220 Senior Project II
ENGT 4311 Wind Energy Systems
ENGT 4312 Production Planning and Control
ENGT 4322 Machine Design
2 - Advanced Engineering Technology Electives - 8 hours (8 advanced)
Choose 8 hours of advanced Engineering Technology or courses approved by faculty advisor.

## C - SUPPORT COURSES - 11 HOURS

MATH 2412 Precalculus
MATH 2413 Calculus I (or MATH 2487 Honors)
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS <br> TOTAL ADVANCED HOURS - 45 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours.
Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
COMPUTER ENGINEERING

## A - MINOR REQUIREMENTS - 22 HOURS (6 advanced)

1 - Computer Engineering Core - 16 hours
CMPE 1101 Introduction to Computer Engineering
CMPE 1370 Engineering Computer Science I (or CSCI 1370)
CMPE 1170 Engineering Computer Science I Laboratory (or CSCI 1170)
CMPE 2330 Digital Systems Engineering I (or ELEE 2330)
CMPE 2130 Digital Systems Engineering I Lab (or ELEE 2130)
CMPE 2380 Computer Science II
CMPE 2320 Electric Circuits I
CMPE 2120 Electric Circuits I Lab
2 - Computer Engineering Electives - 6 hours (6 advanced)
Choose 6 hours of advanced CMPE courses.

## MINOR IN

ELECTRICAL ENGINEERING

A - MINOR REQUIREMENTS - 18 HOURS (7 advanced minimum)
This minor is suitable for students who wish to have a general introduction to applications of electricity and electronics.

1 - Electrical Engineering Core - 12 hours (4 advanced)
ELEE 2305 Electric Circuits I
ELEE 2105 Electric Circuits I Lab
ELEE 2330 Digital Systems Engineering I
ELEE 2130 Digital Systems Engineering I Lab
ELEE 3301 Electronics I
ELEE 3101 Electronics I Lab
2 - Electrical Engineering Electives - 6 hours ( 3 advanced minimum)
Choose 6 hours of ELEE courses, of which at least 3 hours must be advanced.
Note: Students who take courses equivalent or similar to those in the elective engineering core (CMPE 2320, CMPE 2120, CMPE 2330, CMPE 2130, or CMPE 3403) as part of their major may not count them toward the minor. These students should instead take additional electrical engineering elective courses, to make a total of 18 hours, of which at least 7 hours must be advanced.

# Department of Manufacturing and Industrial Engineering 

Dr. Rajiv Nambiar<br>Chair, Department of Manufacturing and Industrial Engineering Location: ENGR 3258 (UTRGV Edinburg Campus)<br>Phone: 956-665-7056<br>Fax: 956-665-3527<br>Email: rajiv.nambiar@utrgv.edu

## BACHELOR OF SCIENCE IN MANUFACTURING ENGINEERING (BSMFGE)

WITH A MAJOR IN MANUFACTURING ENGINEERING

The Manufacturing Engineering Department will provide a quality engineering education to prepare students for the practice of engineering. A strong laboratory component in the curriculum, with opportunities for industrial internships and research experiences will provide engineering skills that enhance the understanding of the applications of engineering sciences and the realization of the importance of lifelong learning. A strong emphasis on verbal and written communications will be stressed.

## STUDENT LEARNING OUTCOMES:

1. Able to use knowledge of mathematics, basic sciences and engineering to analyze problems in electrical/mechanical/manufacturing engineering.
2. Able to design and conduct experiments and interpret the results.
3. Able to design electrical/mechanical/manufacturing devices, systems or processes that meet given specifications.
4. Able to use computers and software for analysis, design and documentation.
5. Able to communicate ideas effectively in graphical, oral and in written media.
6. Able to function as a team member to solve engineering problems.
7. Understands the professional responsibility of an engineer and how engineering solutions impact safety, economics, ethics, politics, society and cultural issues.
8. Understands the need for life long learning to keep abreast of current engineering practice.
9. Able to function in multi-disciplinary teams.
10. Has proficiency in the areas of: materials and manufacturing processes, process and product engineering, manufacturing productivity and quality, and manufacturing systems engineering.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Required

## Life and Physical Science - 6 hours

PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Language, Philosophy, and Culture - 3 hours PHIL 1310 Ethics, Happiness, and the Good Life (Must be Engineering section)
Integrative and Experiential Learning - 6 hours
PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab Choose one:

CSCI 1380 Computer Science (or CSCI 1387 Honors)
CSCI/CMPE 1370 Engineering Computer Science I (or CSCl 1378 Honors)
Choose corresponding lab from Support Courses:
CHEM 1107 Chemistry for Engineers Lab
CHEM 1111 General Chemistry I Lab
B - MAJOR REQUIREMENTS - 64 HOURS (54 advanced)
1 - Manufacturing Engineering Core - 49 hours ( 39 advanced)
MANE 1101 Introduction to Manufacturing Engineering
MANE 1204 Manufacturing Engineering Graphics
MANE 2332 Engineering Statistics
MANE 2403 Engineering Mechanics
MANE 3164 Manufacturing Processes Lab
MANE 3364 Manufacturing Processes
MANE 3300 Computer-Aided Design
MANE 3302 Computer-Aided Manufacturing
MANE 3337 Engineering Economics
MANE 3340 Fundamentals of Industrial Engineering
MANE 3351 Manufacturing Engineering Analysis
MANE 3437 Thermal and Fluid Sciences
MANE 4173 Production Design and Mass Customization
MANE 4311 Quality Control
MANE 4365 Tool Design
MANE 4331 Manufacturing Planning and Control MANE 4340 Operations Research MANE 4352 Manufacturing Simulation
2 - Senior Design - 6 hours (6 advanced)
MANE 4361 Senior Design I
MANE 4362 Senior Design II
3 - Technical Electives - 9 hours (9 advanced)
Choose any advanced MANE course.

## C - SUPPORT COURSES - 25 HOURS (6 advanced)

Choose one:
CHEM 1307 Chemistry for Engineers
CHEM 1311 General Chemistry I
ELEE 2317 Electrical and Electronic Systems
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture

MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 2415 Calculus III
MATH 3341 Differential Equations
MECE 2140 Engineering Materials Lab
MECE 2340 Engineering Materials
MECE 3321 Mechanics of Solids

## TOTAL CREDIT HOURS FOR GRADUATION - 131 HOURS <br> TOTAL ADVANCED HOURS - $\mathbf{6 0}$ HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

A - MINOR REQUIREMENTS - $\mathbf{1 8}$ HOURS (15 advanced)
This minor provides a background in manufacturing engineering. It is intended to support business majors and other engineering majors and will be especially valuable for those who will be involved in manufacturing enterprises. It requires 18 hours in engineering, of which 6 hours must be advanced. The minor requires certain support courses as prerequisites. Check with the department for more information.

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1 - Manufacturing Engineering Core - 9 hours (6 advanced)
            MANE 2332 Engineering Statistics
            MANE 3364 Manufacturing Processes
            MANE 3340 Fundamentals of Industrial Engineering
2 - Advanced Manufacturing Engineering Electives -9 hours (9 advanced)
        Choose from:
            MANE 3300 Computer-Aided Design
            MANE 3302 Computer-Aided Manufacturing
            MANE 4311 Quality Control
            MANE 4340 Operations Research
            MANE 4331 Manufacturing Planning and Control
            MANE 4352 Manufacturing Simulation
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# Department of Mechanical Engineering 

Dr. Robert Freeman<br>Chair, Department of Mechanical Engineering<br>Location: ENGR 3222 (UTRGV Edinburg Campus)<br>Phone: 956-665-2394<br>Email: robert.freeman@utrgv.edu<br>Dr. Arturo Fuentes<br>Undergraduate Program Coordinator, Department of Mechanical Engineering<br>Location: ENGR 3.256<br>Phone: 956-665-7099<br>Email: arturo.fuentes@utrgv.edu<br>\section*{BACHELOR OF SCIENCE (BS)}<br>WITH A MAJOR IN ENGINEERING PHYSICS

The Engineering Physics Program offers the Bachelor of Science in Engineering Physics. Engineering Physics program covers a broad field with applications in most of engineering areas to meet student demand as well as regional, national, and international needs. The program seeks to improve the human condition through the education of skilled engineers to succeed and lead in industry, government, and commerce, and through development and establishment of internationally recognized research. $A$ spectrum of programs will provide a palette of engineering skills, by educating a broad base of engineering applicants to the various engineering tracks.

With this degree, students will be eligible for a variety of positions in engineering, technology, sciences and graduate school in many disciplines including engineering, science, business, and medicine. Graduates of this program are also qualified to be high school math and science teachers with a short alternative certification program for which scholarships are available. Engineering Physics Program is accredited by the Engineering Accreditation Commission of ABET, 111 Market Place, Suite 1050, Baltimore, MD 21202-4012.

## STUDENT LEARNING OUTCOMES:

1. An ability to apply knowledge of mathematics, science, and engineering
2. An ability to design and conduct experiments, as well as to analyze and interpret data
3. An ability to design a system, component, or process to meet desired needs within realistic constraints such as economic, environmental, social, political, ethical, health and safety, manufacturability, and sustainability
4. An ability to function on multi-disciplinary teams
5. An ability to identify, formulate, and solve engineering problems
6. An understanding of professional and ethical responsibility
7. An ability to communicate effectively
8. The broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
9. A recognition of the need for, and an ability to engage in, life-long learning
10. A knowledge of contemporary issues
11. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Sciences - 6 hours
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture Language, Philosophy, and Culture - $\mathbf{3}$ hours PHIL 1310 Ethics, Happiness, and the Good Life (Must be Engineering section) Integrative and Experiential Learning - 6 hours

CHEM 1111 General Chemistry I Lab PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab CSCI 1380 Computer Science I (or CSCl 1387 Honors)

B - MAJOR REQUIREMENTS - 86 HOURS MINIMUM (44 advanced minimum) 1 - Engineering Physics Core - 56 hours (27 advanced)
a - Engineering Core - 35 hours (18 advanced)
ENGR 1201 Introduction to Engineering ENGR 1206 Introduction to Engineering Design ENGR 2105 Linear Circuits Lab ENGR 2301 Engineering Mechanics I: Statics ENGR 2302 Engineering Mechanics II: Dynamics ENGR 2305 Linear Circuits ENGR 2308 Engineering Economics ENGR 3121 Electronics I Lab ENGR 3303 Engineering Thermodynamics ENGR 3304 Mechanics of Materials ENGR 3321 Electronics I ENGR 4242 Senior Design Project I ENGR 4243 Senior Design Project II ENGR 4441 Control Systems
b - Physics Core - 6 hours (6 advanced)

Choose one:
CSCI 3350 Numerical Methods MATH 3343 Introduction to Mathematical Software

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    c - Mathematics Support Courses - 12 hours (3 advanced)
                        MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
                        MATH 2414 Calculus II (or MATH 2488 Honors)
                MATH 2415 Calculus III
                MATH 3341 Differential Equations
    d - Chemistry Support Course - 3 hours
        CHEM 1311 General Chemistry I
2- Engineering Concentrations - 30 hours minimum (17 advanced minimum)
    a - Bioengineering - 34 hours (18 advanced)
        BENG 4120 Molecular Bioengineering Lab
        BENG 4320 Molecular Bioengineering
        BIOL }1406\mathrm{ General Biology I (or BIOL 1487 Honors)
        BIOL 1407 General Biology II (or BIOL }1488\mathrm{ Honors)
        CHEM 1112 General Chemistry II Lab
        CHEM 1312 General Chemistry II
        CHEM 2123 Organic Chemistry I Lab
        CHEM 2323 Organic Chemistry I
        ENGR 4406 Engineering Mechanics III: Fluid Mechanics
        PHYS 3315 Physics of Biological Systems
        PHYS 3402 Modern Physics
        PHYS 4315 Analysis of Biomolecules by Physical Methods
b - Computer Engineering - 31 hours (21 advanced)
        CSCI 2333 Computer Organization and Assembly Language
        CSCI 2380 Computer Science II
        CSCI 3310 Discrete Data Structures
        CSCI 3326 Object Oriented Programming in JAVA
        CSCI 3333 Algorithms and Data Structures
        CSCI 3334 Systems Programming
        CSCI 4310 Design and Analysis of Algorithms
        CSCI 4335 Computer Architecture
        ENGR 2130 Digital Systems I Lab
        ENGR 2330 Digital Systems I
        MATH 3331 Applied Statistics I
        c - Electrical Engineering - 30 hours (20 advanced)
        i - Electrical Engineering - 24 hours (20 advanced)
            ENGR 2130 Digital Systems I Lab
            ENGR 2330 Digital Systems I
            ENGR 3330 Linear Signals and Systems
            ENGR 4322 Electronics II
            ENGR 4423 High Frequency Engineering
            ENGR 4326 Power Electronics
            ENGR 4425 Analog and Digital Communications
            Choose one:
                    ENGR 3327 Engineering Electromagnetics
                    PHYS 3301 Electromagnetic Theory I
ii - Electrical Engineering Electives - 6 hours
            Courses must be approved by engineering advisor.
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# d - Mechanical Engineering Track - 30 hours (17 advanced) <br> i - Mechanical Engineering Core - $\mathbf{2 4}$ hours (17 advanced) <br> ENGR 1304 Engineering Graphics I <br> ENGR 2340 Engineering Materials <br> ENGR 2140 Engineering Materials Lab <br> ENGR 4309 Mechanical Subsystem Design <br> ENGR 4310 Heat and Mass Transfer <br> ENGR 4406 Engineering Mechanics III: Fluid Mechanics ENGR 4407 Manufacturing Process Technologies Choose one: <br> ENGR 3327 Engineering Electromagnetics <br> PHYS 3301 Electromagnetic Theory I <br> PHYS 3305 Classical Mechanics <br> ii - Mechanical Engineering Electives - $\mathbf{6}$ hours <br> Courses must be approved by engineering advisor. 

## TOTAL CREDIT HOURS FOR GRADUATION (MINIMUM) - 128 HOURS TOTAL ADVANCED HOURS (MINIMUM) - 44 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

Completion of ENGR 2301 with a minimum grade of ' $C$ '.
Progression requirements
To begin ENGR 4242, students must pass the Upper Division Engineering Exam, after which the program will submit documentation to the Office of the Registrar.
Graduation requirements

1. A grade of ' $C$ ' or better is required in MATH 2413 (or MATH 2487 honors), MATH 2414 (or MATH 2488 Honors), MATH 2415, ENGR 2301, ENGR 2305, ENGR 2105, and a composite GPA of 2.2 or better is required in all major coursework.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE IN MECHANICAL ENGINEERING (BSME) <br> WITH A MAJOR IN MECHANICAL ENGINEERING

Mechanical engineering is a broad field with applications in almost all areas of industry including aviation and aerospace, alternative energy, automotive, automated manufacturing and robotics, chemical, computer, electronics, petroleum, nanotechnology, materials, textiles, and heavy equipment and machinery. The Department of Mechanical Engineering offers a Bachelor of Science in Mechanical

Engineering (BSME) degree that is accredited by the Engineering Accreditation Commission of the Accreditation Board for Engineering and Technology (ABET).

This degree provides a broad, solid education in engineering fundamentals as well as the opportunity for in-depth study in specialized topics. Students completing the program will have rigorous foundation for engineering practice in industry as well as for graduate studies in engineering and other disciplines. The program has well-equipped, accessible laboratories and extensive experimental and computing facilities.

## STUDENT LEARNING OUTCOMES:

1. Be able to use knowledge of mathematics, basic sciences and engineering to analyze (identify, formulate, and solve) problems in mechanical engineering.
2. Be able to design and conduct experiments and interpret the results.
3. Be able to design mechanical devices, systems or processes that meet given specifications.
4. Be able to function in multidisciplinary teams.
5. Be able to communicate ideas effectively in graphical, oral and in written media.
6. Understand the professional responsibility of an engineer and how engineering solutions impact safety, economics, ethics, politics, societal, cultural and contemporary issues.
7. Understand the need for life long learning to keep abreast of current practice.
8. Be able to use state of the art computational hardware and software for analysis, design and documentation (techniques, skills, and modern engineering tools necessary for engineering practice).

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - $\mathbf{6}$ hours
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Language, Philosophy, and Culture - 3 hours PHIL 1310 Ethics, Happiness, and the Good Life (Must be Engineering section) Integrative and Experiential Learning - 6 hours Choose ENGL from Humanities section, and complete: PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab Choose one:

CHEM 1107 Chemistry for Engineers Lab
CHEM 1111 General Chemistry I Lab
B - MAJOR REQUIREMENTS - 79 HOURS (54 advanced)
1 - Mechanical Engineering Core - 64 hours (39 advanced)
ELEE 2317 Electrical and Electronics Systems
MANE 2332 Engineering Statistics
MANE 3164 Manufacturing Processes Lab
MANE 3364 Manufacturing Processes
MECE 1101 Introduction to Mechanical Engineering
MECE 1204 Engineering Graphics
MECE 2140 Engineering Materials Lab
MECE 2301 Statics
MECE 2302 Dynamics
MECE 2335 Thermodynamics I
MECE 2340 Engineering Materials
MECE 2350 Numerical Methods for Engineers
MECE 3115 Fluid Mechanics Lab
MECE 3160 Heat Transfer Lab
MECE 3304 System Dynamics
MECE 3315 Fluid Mechanics
MECE 3320 Measurements and Instrumentation
MECE 3321 Mechanics of Solids
MECE 3336 Thermodynamics II
MECE 3360 Heat Transfer
MECE 3380 Kinematics and Dynamics of Machines
MECE 3449 Mechanical Engineering Analysis I
MECE 3450 Mechanical Engineering Analysis II
MECE 4101 Fundamentals of Engineering
MECE 4350 Machine Elements
2 - Senior Design - 6 hours (6 advanced)
MECE 4361 Senior Design Project I (or MANE 4361)
MECE 4362 Senior Design Project II (or MANE 4362)
3 - Technical Electives - 9 hours (9 advanced)
Students may choose MECE 3100, 33XX, or 43XX course. Students may only receive a
maximum of 3 hours of technical elective credit from MECE 3100, MECE 3300, or any other
approved non-MECE advanced science or math course. In addition, to receive technical
elective credit for MECE 3300, the student must complete 2 terms of internship/co-op and
submit a formal report to the department, and to receive technical elective credit for MECE
3100, the student must complete 3 terms/enrollments performing research in the same
technical area.
Choose one:
CHEM 1307 Chemistry for Engineers
CHEM 1311 General Chemistry I
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
TOTAL CREDIT HOURS FOR GRADUATION - 129 HOURS
TOTAL ADVANCED HOURS - 54 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements <br> Admission into the Lower Division of the Mechanical Engineering Major

Admission to the university, and a 3.0 or better composite GPA in the foundation courses MATH 2413, MATH 2414, CHEM 1307 (or CHEM 1311), CHEM 1107 (or CHEM 1111), PHYS 2425, MECE 1101, and MECE 1204, or a 2.5 or better composite GPA in the foundation courses and a passing score of 70 or above in an exam covering the essential student outcomes of the above listed foundation courses. Note that while MECE 2340 and MECE 2140 are considered lower division Major courses they can be taken before entrance to the Major is granted.

## Progression requirements

Admission into the Upper Division of the Mechanical Engineering Major
Admission to the Lower Division of the Mechanical Engineering Major, and a 3.0 or better composite GPA in MECE 2140, MECE 2340, MECE 2350, MECE 3449, MECE 2301, MECE 2302, and MECE 2335, or a 2.5 or better composite GPA and a passing score of 70 or above in an exam covering the essential student outcomes of the above listed group of lower division courses.
Note that while MECE 3336 and MECE 3450 are considered upper division Major courses they can be taken before entrance to the upper division of the Major is granted.

## Graduation requirements

1. A composite GPA of 2.5 or better in Mechanical Engineering coursework is required. Also, all Mechanical Engineering coursework must be passed with a grade of ' $C$ ' or better.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN ENGINEERING PHYSICS

## A - MINOR REQUIREMENTS - $\mathbf{2 3}$ HOURS (7 advanced minimum)

This minor is suitable for STEM students who wish to have a general introduction to applications of engineering. Minor criteria: completion of MATH 2414 Calculus II (or MATH 2488 Honors) and PHYS 2426 Physics for Scientists and Engineers II. A grade of ' $C$ ' or better is required for ENGR 2301 and ENGR 2305/2105.

1 - Engineering Physics Core - 17 hours (7 advanced)
MATH 3341 Differential Equations
ENGR 2301 Engineering Mechanics I: Statics
ENGR 2302 Engineering Mechanics II: Dynamics
ENGR 2305 Linear Circuits

ENGR 2105 Linear Circuits Lab
ENGR 3321 Electronics I
ENGR 3121 Electronics I Lab
2 - Engineering Physics Electives - 6 hours
Choose from:
ENGR 1304 Engineering Graphics I
ENGR 2342 Renewable Energy Fundamentals
ENGR 2330 Digital Systems I
ENGR 2130 Digital Systems I Lab
ENGR 3304 Mechanics of Materials
ENGR 3331 Digital VLSI Circuits
ENGR 3330 Linear Signals and Systems
ENGR 2340 Engineering Materials
ENGR 2140 Engineering Materials Lab
ENGR 4322 Electronics II
ENGR 4326 Power Electronics
ENGR 4406 Engineering Mechanics III: Fluid Mechanics

MINOR IN
MECHANICAL ENGINEERING

A - MINOR REQUIREMENTS - 18 HOURS (11 advanced)
1 - Mechanical Engineering Core - 18 hours (11 advanced)
MECE 2335 Thermodynamics I
MECE 2140 Engineering Materials Lab
MECE 2340 Engineering Materials
MECE 3315 Fluid Mechanics
MECE 3115 Fluid Mechanics Laboratory
MECE 3336 Thermodynamics II
MECE 3360 Heat Transfer
MECE 3160 Heat Transfer Laboratory

## Course Inventory for College of Engineering and Computer Science (CECS) Civil Engineering

CIVE 1221 Engineering Graphics
This course provides an introduction to computer-aided drafting techniques for Civil Engineering. Topics include methods of graphical communication, two-and three-dimensional drawing presentation, civil engineering design, and specifications.

CIVE 2220 Civil Engineering Measurements
Principles of measurement and error analysis; introduction to plane surveying. Prerequisites: Minimum grade of 'C' in CIVE 1221.

CIVE 2240 Materials of Construction
Introduction to scientific concepts of civil engineering materials; physical, mechanical, surface, fracture, and rheological properties of civil \& construction engineering materials; proportioning of concrete mixtures including admixtures; origin, production, specifications and tests of bituminous materials and paving mixtures used in construction and maintenance of roads and pavements. Materials tested include: aggregates, Portland cement concrete, bituminous materials, wood, and masonry units. Students will perform laboratory testing using related ASTM/AASHTO test specifications. Prerequisites: Minimum grade of 'C' in CHEM 1307/1107 or CHEM 1311/1111.

CIVE 3115 Fluid Mechanics and Hydraulics Lab
Introduction to basic fluid mechanics instrumentation; computerized data acquisition and analysis. Experimental verification and reinforcement of analytical concepts introduced in CIVE 3315. Prerequisites: Concurrent enrollment in CIVE 3315.

CIVE 3252 Civil Engineering Systems Analysis
Systems approach to problem solving using fundamental optimization theories and engineering economics with civil engineering applications. Topics include graphical method and simplex method. Students will experience the system analysis process through class project. Prerequisites: Minimum grade of 'C' in MECE 3449.

CIVE 3300 Internship/Co-op in Civil Engineering
This course is designed to give students in civil engineering an opportunity to gain practical work experience by working in an civil engineering trainee or related position with a participating employer. The student will be advised and mentored by a faculty member or staff person who will also serve as a liaison between the university and the employer. The employment period may be during the summer or an academic semester. Each student will be required to write a report on his/her work experience. The course may be repeated for each continuous work period and may count toward the International Endorsement if the work assignment is outside the United States. Prerequisites: Advisor's consent.

CIVE 3315 Fluid Mechanics and Hydraulics
The course covers topics of fluid mechanics fundamentals, fluid properties, flow classification, dimensions and unit, fluid statics, conservation of mass, momentum equation and its application, dimensional analysis, model similitude, and internal and external incompressible viscous flow including pipe flow and boundary layer. Prerequisites: Minimum grade of 'C' in MECE 3449.

CIVE 3324 Structural Analysis
Forces and deflections in structural systems; considers stationary and moving loads and exact and approximate methods, analysis of statically indeterminate structures by consistent deformation, slope-deflection, and moment distribution methods. Prerequisites: Minimum grade of ' C ' in MECE 3321.

CIVE 3331 Environmental Engineering
Principles, analysis, and design related to environmental monitoring, protection, and remediation systems. Topics include environmental quality and legislation, modeling, water treatment, wastewater treatment, solid and hazardous waste management, air and noise pollution, and radioactive waste management. Prerequisites: Minimum grade of 'C' in PHYS 2425 and either CHEM 1307/1107 or CHEM 1311/1111, CIVE 3315/3115

CIVE 3341 Structural Steel Design
Analysis and design of steel tension members, beams, columns, and bolted or welded connections. Emphasis on AISC structural codes and computer tools to assist the designer. Introduction to plastic design. Prerequisites: Minimum grade of 'C' in CIVE 2240 and CIVE 3324.

CIVE 3345 Transportation Engineering
Fundamental principles and methods in planning, design, and operation of transportation systems; highway geometric and pavement design principles; geometric design of intersections; traffic analysis and transportation planning; level of service and signalized intersections; fundamental concepts for performing traffic safety analyses. Students will use related transportation AASHTO/TRB design manuals and policies. Prerequisites: Minimum grade of 'C' in CIVE 2220.

CIVE 3475 Geotechnical Engineering and Applications
Exploration, sampling, and in-situ measurements; laboratory testing; review of fundamental properties of soil and rock; flow through porous media; the effective stress principle and computation of in-situ stress distributions; shear strength of soils and one-dimensional consolidation settlement; introduction to slope stability. Emphasis in laboratory on ASTM and AASHTO testing standards. Prerequisites: Minimum grade of 'C' in MECE 3321.

CIVE 4190 Civil Engineering Senior Design I
This course is the capstone of the undergraduate civil engineering program. As such, it covers all expected learning outcomes of a Civil Engineering education. Students are expected to work in teams to select, research, design, and document a comprehensive project. The goal of this course is to provide students the experience of developing a project which closely mimics what they will face in their professional life. Prerequisites: Civil Engineering major and consent of faculty advisor.

CIVE 4290 Civil Engineering Senior Design II
This course is a continuation of CIVE 4190. Student will take lectures of composing project proposal, project planning and management skills, and presentation techniques. In addition, student will conduct a comprehensive engineering design of the concept generated in CIVE 4190, and report on the results. Periodic progress reports and final oral and written reports will be required. Synthesis using past coursework and outside reference material, field works, e.g., land survey and monitoring, and building model will be expected. Prerequisites: Advisor's consent.

CIVE 4315 Applied Hydrology
Engineering applications of hydrologic circulations on earth. Topics include hydrologic circle and budget, precipitation, infiltration, evapotranspiration, surface runoff, hyetograph and hydrograph, unit hydrograph, synthetic hydrograph, hydrologic routing, and hydrologic computer modeling. Prerequisites: Minimum grade of 'C' in CIVE 3331.

CIVE 4333 Water and Wastewater Treatment
Principles, analysis, and design related to water and wastewater treatment systems. Topics include water treatment process of coagulation, flocculation, sedimentation, filtration, disinfection, and wastewater treatment process of chemical, biological, and physical system. Prerequisites: Minimum grade of 'C' in CIVE 3315/3115 and CIVE 3331.

CIVE 4335 Water Resources Engineering
Topics include the thermodynamic properties of materials, the first and second law of thermodynamics; one dimensional steady state and lumped mass unsteady heat transfer; hydrostatics, conservation of mass, energy and momentum in inviscid fluid flow, and viscous flow in pipes. Prerequisites: Minimum grade of 'C' in CIVE 3315 and CIVE 3331. Concurrently enrollment with CIVE 4315.

CIVE 4346 Reinforced Concrete Design
Analysis and design of reinforced concrete (RC) elements such as beams, columns and slabs. Topics include the introduction to LRFD design philosophy, flexural and shear design of RC beams, introduction to design of one-way RC slabs, constructing interaction diagrams for RC columns and design of short and slender columns. Prerequisites: Minimum grade of 'C' in CIVE 2240 and CIVE 3324.

CIVE 4347 Foundation Design
As Schedule Design of footings, mats and slab-on-grade; earth pressures and design of retaining walls, piles and drilled piers, soil improvement and ground modification; pre-stressed slab design.
Prerequisites: Minimum grade of 'C' in CIVE 3475.
CIVE 4348 Highway Engineering
Theory and practice in highway design; advanced concepts of the design of streets and highways; highway classification and design criteria; location studies; advanced concepts of the design of vertical and horizontal alignment; intersections and highway drainage elements design criteria; theory and practice in pavement design; pavement performance; structural design of pavement layers; types of materials used in pavement layers; characterization of pavement layer materials; introduction to pavement management concepts. Prerequisites: Minimum grade of 'C' in CIVE 3345 and CIVE 3475.

CIVE 4349 Construction Planning and Management
Civil engineering design process, construction planning and management. Topics include construction industry, design and delivery process, project schedule, project budget and revenue recognition, construction materials and equipment, construction administration, and construction contract. Prerequisites: Minimum grade of 'C' in CIVE 3252

CIVE 4350 Open Channel Flow
It is an advanced hydraulics course covering gravity driven free surface flow. Topics includes fundamentals of fluid motion, specific energy and specific momentum, channel transition, water surface elevation analysis, hydrodynamic channel routing, fundamentals of sediment transport and control, flood analysis and control, and computer aided design. Prerequisites: Minimum grade of 'C' in CIVE 3315 and CIVE 3115.

CIVE 4351 Masonry and Timber Design
Analysis and design of wood structures, wood and masonry beams and columns, Properties of Masonry Concrete, design of Masonry gravity and shear walls, load and resistance factors for design of timber structures. Prerequisites: Minimum grade of 'C' in CIVE 3324.

CIVE 4352 Earthwork Engineering and Design
The class will cover advanced topics of shear strength, steady state seepage, effective stress, ground modification and improvement, soil stabilization, chemical additives, geosynthetics, and drainage systems. Prerequisites: Minimum grade of 'C' in CIVE 3475.

## Computer Engineering

CMPE 1101 Introduction to Computer Engineering
This course is an introduction to computer engineering concepts and vision, the history of computer systems, societal and ethical issues, binary values and number systems, analog and digital data representation, gates and circuits, Boolean algebra and circuit simplification, basic computer architecture, low-level, high-level programming languages and pseudo code, and communications skills.

CMPE 1170 Engineering Computer Science I Lab
The course includes hands-on instruction and laboratory exercises in developing programs written in a high-level object oriented programming language applying the principles taught in the CSCI 1370 lecture course. Equivalence course: CSCI 1170. A student may receive credit in only one course. Prerequisites: Co-requisite: CMPE 1370.

CMPE 1178 Engineering Computer Science I Lab (Honors)
The course includes hands-on instruction and laboratory exercises in developing programs written in a high-level object oriented programming language applying the principles taught in the CMPE 1378 lecture course. Co-requisite: CMPE 1378. Equivalence course: CSCI 1178. A student may receive credit in only one course. Prerequisites: Admission to the honors program. Co-requisite: CMPE 1378 (Honors).

CMPE 1370 Engineering Computer Science I
An introduction to computer science and computer engineering. The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of procedural and object-oriented programming will be emphasized. Societal and social issues related to computer science/engineering will be introduced. Equivalent course: CSCI 1370. Will replace a grade received in CSCI 1380 . Cannot receive credit for both CSCI 1380 or CMPE 1370. Prerequisites: Grade of 'C' or better in MATH 1314 or placement in a higher level Math course; and CMPE 1101. Co-requisite: CMPE 1170.

CMPE 1378 Engineering Computer Science I (Honors)
An introduction to computer science and computer engineering. The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of procedural and object-oriented programming will be emphasized. Societal and social issues related to computer science/engineering will be introduced. Equivalent course: CSCI 1378 . Will replace a grade received in CSCI 1380 . Cannot receive credit for both CSCI 1380 and CMPE 1378. Prerequisites: Grade of 'C' or better in MATH 1314 or placement in a higher level Math course; and CMPE 1101; and admission to the honors program. Co-requisite: CMPE 1178.

CMPE 2120 Electric Circuits I Lab
This course covers fundamental circuit measurement techniques and reinforces concepts from ELEE 2305, Electrical Circuits I. Topics include basic instrumentation; measurement of voltage, current, resistance, power, frequency and phase; analysis of experimental data; and reporting of technical results. Cross listed with ELEE 2105. Prerequisites: Credit/registration for CMPE 2320 or ELEE 2305.

CMPE 2130 Digital Systems Engineering I Lab
Basics of digital logic and hardware combinational circuits, flip-flops, resistors, sequential circuits and state machines. Cross listed with ELEE 2130. Prerequisites: Credit/registration for CMPE/ELEE 2330.

CMPE 2320 Electric Circuits I
This course covers fundamentals of electrical circuits, including basic definitions, Kirchhoff's laws, nodal and loop analysis, superposition, Thevenin and Norton equivalents, time-varying circuits, simple transient response, sinusoidal steady-state analysis using phasors and power in sinusoidal steadystate circuits. Crosslisted with ELEE 2305. Prerequisites: MATH 2414 (or MATH 2488) and credit/registration for PHYS 2426.

CMPE 2330 Digital Systems Engineering I
Boolean algebra; analysis and synthesis of combinational and sequential switching network; applications to computer design. Credit or registration in MATH 1460 is recommended but not required. Crosslisted with ELEE 2330.

CMPE 2333 Computer Organization and Assembly Language
An introduction to computer organization, use of assembly language programming, basic instruction sets, arithmetic and logical operations, addressing modes and macro definition. Several computer programming projects are included. Equivalent course: CSCl 2333. A student may receive credit in only one course. Prerequisites: CSCI 1370 (or CSCI 1378) or CMPE 1370 (or CMPE 1378).

CMPE 2380 Computer Science II
A second programming course includes problem solving by structured design; provides an introduction to elementary data structures, including linked lists, stacks, queues, trees and graphs, and advanced programming techniques, including recursion, sorting and searching. Equivalent course: CSCI 2380. A student may receive credit in only one course. Prerequisites: CSCI 1370 (or CSCI 1378), or CMPE 1370 (or CMPE 1378), or consent of instructor.

CMPE 2388 Computer Science II (Honors)
A second programming course includes problem solving by structured design; provides an introduction to elementary data structures, including linked lists, stacks, queues, trees and graphs, and advanced programming techniques, including recursion, sorting and searching. Equivalent course: CSCl 2388. A student may receive credit in only one course. Prerequisites: Admission to the honors program. CSCI/CMPE 1378, CSCI/CMPE 1370, or consent of instructor.

CMPE 3226 Electrical Engineering I Lab
This course covers basic measurement and instrumentation techniques, limitations of theoretical models, design of basic analog and digital circuits, and reporting of technical results. Crosslisted with CMPE 3226; students will be assigned specific projects appropriate to their major. Prerequisites: Credit/registration for CMPE 3403 and MATH 3341.

CMPE 3300 Internship in Computer Science
This course is designed to give students an opportunity to gain practical experience in the computer science career field by working with a participating employing firm or organization. The student will be supervised by a faculty member acting as a liaison between the university and the employing organization to ensure compliance with specific learning and experience requirements. The employment can be either paid or unpaid, and normally would include practical experience spread over one academic term or summer. May be repeated once. A maximum of three hours of credit from CMPE 3300 can be used toward the computer science major. Prerequisites: Junior standing, minimum 12 hours of computer science (CSCI) completed, and approval by both the department and employer providing the practicum/internship experience.

CMPE 3322 Signals and Systems
Response of LTI networks by Fourier and Laplace transform methods, frequency-domain techniques and time-domain techniques, discrete signal representation and z-transforms. Cross listed with ELEE 3321. Prerequisites: CMPE 2320 or ELEE 2305; and credit/registration for MATH 3341.

CMPE 3326 Object Oriented Programming in JAVA
The Java programming language and environment will be introduced with an emphasis on objectoriented programming. Application areas will include Internet-based programming, applets, and HTML, and topics will include control structures, classes, methods, inheritance, Java libraries and packages. Objected-oriented aspects will include graphics, GUI, exception handling, multithreads, multimedia and networking. Prerequisites: CSCI 1380 (or CSCI 1387), or CSCI 1370 (or CSCI 1378), or CMPE 1370 (or CMPE 1378), or consent of instructor.

CMPE 3327 Object Oriented Programming in Visual Basic
The Visual Basic programming language and environment will be introduced with an emphasis on window-based programming and the use of objects in Visual Basic. Topics will include control structures, graphical user interface concepts, classes, methods, inheritance and the Visual Basic interface and libraries. Prerequisites: CSCI 1380 (or CSCI 1387), or CSCI 1370 (or CSCI 1378), or CMPE 1370 (or CMPE 1378), or consent of instructor.

CMPE 3328 Object-Oriented Programming In C\#
The C\# programming language and .NET environment will be introduced with an emphasis on widows-based, event driven programming and the use of objects, LINQ and XML. Topics may include UML, generic collections, database connections, XML, inheritance and polymorphism, exception handling, event driven programming, concurrent programming, windows forms, files and streams, databases, and Web Services. Prerequisite: CSCI 1380 or CSCI 1370 or CMPE 1370 or consent of instructor. Prerequisites: CSCI 1380 (or CSCI 1387), or CSCI 1370 (or CSCI 1378), or CMPE 1370 (or CMPE 1378), or consent of instructor.

CMPE 3331 Microcontroller and Embedded Systems Lab
Design projects of progressively increasing complexity including mixed signal design, computer interfacing, embedded microcontrollers and distributed systems. Cross listed with ELEE 3331. Prerequisites: CMPE 3437 or ELEE 3435.

CMPE 3333 Algorithms and Data Structures
This course is a continuation of data structures topics covered in CMPE 2380. Content includes theoretical topics in algorithmic efficiency and complexity, along with abstract data types, including graphs, networks, trees, and priority queues. Search topics, including hashing, trees, external search trees (B-trees), and sorting algorithms including external sorting are introduced and compared. Computational complexity topics include the class P and NP, NP-completeness and reducibility, NPcompleteness proofs, and NP-complete problems. Equivalent course: CSCI 3333. A student may receive credit in only one course. Prerequisites: CSCI/CMPE 2380 (or CSCI/CMPE 2388); and MATH 2346 or CSCI 3310 or MATH 2305.

CMPE 3334 Systems Programming
This course covers the design and implementation of system software. It investigates the relationship between software design and machine architecture. Topics may include assemblers, macroprocessors, compilers, loaders, debugging environments, program development and archival tools, command language interpreters (shells), file systems, I/O support, processes, threads, and interprocess communication. Equivalent course: CSCI 3334 , a student may receive credit in only one course. Prerequisites: CSCI/CMPE 2380; and CSCI/CMPE 2333, ELEE 3435, or CMPE 3437.

CMPE 3336 Organization of Programming Languages
This course describes the fundamental concepts of programming languages by discussing the design of the various language constructs, examining the design choices for these constructs, critically comparing design alternatives and discussing implementation techniques. The underlying theory and formal modes of describing the syntax and semantics including finite automata and regular expressions, context-free grammars, context-sensitive languages and the Chomsky Hierarchy are included. Prerequisites: CSCI 2380 (or CSCI 2388) or CMPE 2380 (CMPE 2388).

CMPE 3340 Software Engineering I
A formal approach to the state-of-the-art techniques in software design and development. Emphasis will be on Project Planning, Requirements, Specification, and System Design and includes object design, testing, and implementation. Provides the student with the opportunity to work on large projects in a group situation. Equivalent course: $\operatorname{CSCI} 3340$. A student may receive credit in only one course. Prerequisites: 3 advanced hours in CSCI (or CMPE equivalent); and CSCI/CMPE 2380 (or CSCI/CMPE 2388).

CMPE 3341 Software Engineering II
The course will cover the analysis of requirements and software architecture with a major emphasis on object design, implementation, testing and validation, maintenance and software re-engineering. Methods for evaluating software for correctness, and reliability, system testing techniques, testing tools and limitations of testing, Advance Software Engineering topics such as Design Patterns, Aspect Oriented Engineering, Interactive Design Methods, and Formal Specification are included. Students will work a large group projects. Equivalent course: $\operatorname{CSCI} 3341$. A student may receive credit in only one course. Prerequisites: CSCI 3340 or CMPE 3340.

CMPE 3342 Internet Programming
Introduction to web application programming. Covers the fundamentals of developing applications for web browsers, within the dominant HTTP-based client/server model. A wide range of technologies and development methodologies are covered, including database and server architectures, serverside frameworks, client-side languages/libraries, remote invocation models and web application security. Specific topics in web development change rapidly, but some examples include SQL, HTML, TLS, PHP, Java EE (servlets, JSP, etc.), ASP.NET. Prerequisites: CSCI/CMPE 2380 (or CSCI/CMPE 2388); and either CSCI/CMPE 3326, CSCI/CMPE 3327, or CSCI/CMPE 3328.

CMPE 3343 Probability and Statistics for Electrical Engineers
Probability, random variables, distribution and density functions, statistical estimators, correlation, regression techniques, system response to random inputs. Crosslisted with ELEE 3340. Prerequisites: MATH 2414.

CMPE 3350 Numerical Methods
This course studies the numerical solutions to various problems occurring in engineering, science and mathematics. These problems include finding solutions to nonlinear equations, solutions to linear and nonlinear systems of equations, interpolation of data, approximation of functions, numerical integration and solutions to differential equations. It also studies the influence of data representation and computer architecture on the choice and development of algorithms. Equivalent course: MATH 3349 A student may receive credit in only one course. Prerequisites: MATH 2413 (or MATH 2487) and either CSCI 1380, CSCI 1387, CSCI 1370, CSCI 1378, CMPE 1370, or CMPE 1378.

CMPE 3403 Electronics for Computer Engineering
An intensive one-semester introduction to electronics, emphasizing topics specific to computer engineering. Basic semiconductor devices, device characteristics and models, amplifier circuits, device level design of switching and logic circuits, operational amplifiers and power supplies. Prerequisites: CMPE 2320 or ELEE 2305 and CMPE 2330 or ELEE 2330 with a grade of C or better.

CMPE 3437 Microprocessor Systems
Basic microprocessor programming and principles of assembly language programming; microprocessor organization and interfacing; applications, including data acquisition, control and communication. Crosslisted with ELEE 3435. Prerequisites: CMPE/ELEE 2330; and CMPE/CSCI 1370 (or CMPE/CSCI 1378).

CMPE 4185 Research Seminar
Students will have the opportunity to conduct faculty-sponsored research in the area of mutual interest resulting in oral and written presentation of their work to other students and faculty. May be repeated up to 6 credit hours. Up to three credit hours can be used to meet CMPE degree requirements. Cross-listed with CSCl 4185. Prerequisites: Consent of instructor.

CMPE 4301 Digital Image Processing
The course presents fundamental concepts and applications of digital image processing. Topics include basic color, image perception and transformation, image enhancement and compression, and image analysis, and computer vision. Equivalent course: CSCI 430 Prerequisites: CSCI 3333 or CMPE 3333.

CMPE 4303 Digital Systems Engineering II
Hardware implementation of arithmetic and other algorithmic processes；organization，design and simulation of digital systems；asynchronous sequential switching networks．Equivalent Course：ELEE 4303．A student may not receive credit for both CMPE 4303 and ELEE 4303．Prerequisites：CMPE／ELEE 2330 or consent of instructor．

CMPE 4327 Compiler Construction
Syntax analysis and semantic processing for a block－structured language．Compilation vs． interpretation；lexical analysis based on finite automata；syntax－directed translation；symbol tables； run－time storage allocation；error detection and recovery；code generation and optimization． Students are required to write a compiler．Equivalent course：CSCl 4327．A student may receive credit in only one course．Prerequisites：CSCI 3334，or CMPE 3334，or consent of the instructor．

CMPE 4333 Database Design and Implementation
Study of logical（hierarchical，network，relational）and physical（sequential，indexed，relative） organization of databases．Database management systems and their features，querying databases， distributed databases，and data compression．Equivalent course：CSCI 4333，a student may receive credit in only one course．Prerequisites：CSCI 3333 or CMPE 3333.

CMPE 4334 Operating Systems
This course provides a study of the basic concepts of operating systems：process management， memory management，file systems，resource allocation，and protection．Equivalent course：CSCI 4334. A student may receive credit in only one course．Prerequisites：CSCI／CMPE 3333 and CSCI／CMPE 3334 or consent of the instructor．

CMPE 4335 Computer Architecture
A study of the operational units and their interconnections of a modern computer as well as the theory behind the design of the instruction set，control unit，registers，memory hierarchy and addressing modes，bus structures，input／output，and storage units．Similarities between CISC and RISC architectures and related issues such as instruction level parallelism and superscalar processors are discussed．Students may receive credit for only one of CSCI 4335，CMPE 4335，CMPE 4380，or ELEE 4380．Equivalent course：CSCI 4335．Prerequisites：CSCI／CMPE 3333；and either CSCI／CMPE 2333， CMPE 3437，or ELEE 3435.

CMPE 4336 Parallel and Distributed Computing
Presents principles and practices of parallel and distributed computing．Topics include parallel and distributed computation models and architectures；design，analysis and implementation of parallel algorithms；and methods of parallel and distributed programming．Equivalent course：CSCI 4336．A student may receive credit in only one course．Prerequisites：CSCI／CMPE 4335.

CMPE 4341 Topics in Computer Science
Topics or problems in computer engineering；subject matter changes from semester to semester．May be repeated for credit as topic varies．Prerequisites：Consent of instructor．

CMPE 4345 Computer Networks
An introduction to data communication topics，including data transmission，encoding，data link control，switching，network topologies，protocols，internet working and data security．Examples of existing networks and network architectures are studied．Equivalent course： CSCl 4345 ．A student may receive credit in only one course．Prerequisites：CSCI 3333 or CMPE 3333.

CMPE 4350 Artificial Intelligence
Study of intelligent machines and machine learning. Includes problem solving and heuristic search, natural language understanding, game playing, database and expert systems. Artificial Intelligence projects will be implemented using an AI language such as LISP, Prolog, C++ or Ada. Equivalent course: CSCI 4350. A student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333.

CMPE 4363 Computer and Network Security
This course examines the internetworking architecture and routing, design and implementation issues related to secure and reliable networks, cryptography, firewalls, digital signatures, worms, viruses, logic bombs and spyware. Equivalent course: CSCI 4363. A student may receive credit only in one course. Prerequisites: CSCI 4345 or CMPE 4345.

CMPE 4365 Digital Signal Processing
Sampling theory, discrete processing of analog signals, discrete Fourier transforms, signal analysis, ztransforms, digital filter design, real-time digital signal processing and applications. Crosslisted with CMPE 4365. Prerequisites: CMPE 3322 or ELEE 3321; and credit/registration for MATH 3341.

CMPE 4366 Image Processing
This course provides an introduction to image processing topics and design of image processing software. It covers methods for computer analysis of images, and processing of images including image formation, spatial resolution, preprocessing techniques, image filtering, image enhancement and image segmentation methods. Crosslisted with ELEE 4366. Prerequisites: CSCI/CMPE 1170 (or CSCI/CMPE 1178); and CSCI/CMPE 1370 (or CSCI/CMPE 1378)

CMPE 4367 Fiber Optic Communications
Introduction to optics, photonics, and optoelectronics; fiber optic devices; and communication systems. Topics include ray optics, electromagnetic optics, resonator optics, dielectric waveguides and filters, semiconductor and laser light sources and detectors, modulators, amplifiers, connectors and optical fiber communication systems. Crosslisted with CMPE 4367. Prerequisites: CMPE 3322 or ELEE 3321.

CMPE 4371 Senior Design I Software
Apply the knowledge and skills gained in previous courses to synthesize a solution to a significant and realistic problem, integrating software and hardware design. Participate in team project activities including problem formulation and proposal, project analysis, software and hardware requirements specification, project planning and software and hardware design. Software design documentation and oral presentation are an integral part of the course. Can receive credit for only one of CSCl 4390, CMPE 4371 and CMPE 4373. Prerequisites: Consent of instructor and either CSCI 3340 or CMPE 3340.

CMPE 4372 Senior Design II Software
Continuation of CMPE 4371. Team project activities include software and hardware design reviews, implementation, quality assurance, software and hardware testing, integration, project documentation, presentations and demonstration. Also covers social and ethical implications of the computer engineering profession. Cannot receive credit for both CMPE 4372 and CMPE 4374. Prerequisites: CMPE 4371 and consent of instructor.

CMPE 4373 Senior Design I Hardware
Apply the knowledge and skills gained in previous courses to synthesize a solution to a significant and realistic problem integrating software and hardware design. Participate in team project activities including problem formulation and proposal, project analysis, software and hardware requirements specification, project planning and software and hardware design. Software design documentation and oral presentation are an integral part of the course. Prerequisites: Consent of instructor and either CSCI 3340 or CMPE 3340.

CMPE 4374 Senior Design II Hardware
Continuation of CMPE 4373. Team project activities include software and hardware design reviews, implementation, quality assurance, software and hardware testing, integration, project
documentation, presentations and demonstration. Also covers social and ethical implications of the computer engineering profession. Cannot receive credit for both CMPE 4372 and CMPE 4374.
Prerequisites: CMPE 4373 and consent of instructor.
CMPE 4375 Introduction to VLSI Design
This course provides an introduction to the area of CMOS VLSI design and design of VLSI circuits, including CMOS logic circuits, integrated circuit layout and design tools and overview of integrated circuit fabrication. Crosslisted with ELEE 4375. Prerequisites: CMPE/ELEE 2330 and CMPE 3403.

CMPE 4378 Signal Integrity and Electromagnetic Compatibility
Distortion of digital signals analyzed via lumped element and transmission line models, power distribution in electronic systems, printed circuit layout guidelines, basic electromagnetic principles as applied to shielding and grounding, EMI regulations. Prerequisites: CMPE 3322 or ELEE 3321; and PHYS 2425.

CMPE 4381 Interactive Systems and User Interface Design
Presents principles and practice of information communication between user and system. The course examines results of past research, as well as evolving trends in interface design and implementation. Equivalent course: CSCl 4381. A student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333, or consent of the instructor.

CMPE 4382 Computer Visualization
Focuses on design and implementation of computer graphics systems to provide visual representation of large data sets. Presents current theory and practice of computer visualization systems and advanced display techniques. Prerequisites: CSCI 3333 or CMPE 3333 or consent of the instructor

CMPE 4390 Communications Networks
This course covers engineering principles of data communications, including the following topics: communication media and signal encoding schemes, point-to-point communication standards, layering concepts, data link protocols, network protocols, transport layer protocols, error control, flow control, congestion control, routing algorithms, virtual circuits, call setup procedure, TCP/IP protocol, internetworking, switching and switching fabric, frame relays, ATM and emerging technologies. Crosslisted with ELEE 4390. Prerequisites: CMPE 3437 or ELEE 3435.

## Computer Science

CSCI 1101 Introduction to Computer Science
An introduction to the breadth of the field of computer science. Topics include an introduction to computer science as a career, overviews of various computer science areas and topics, and foundations of computational problem solving.

CSCI 1105 Digital Technology in the Modern World
The course will consider the power and limitations of modern day technology, what technology can and cannot do, and personal responsibility related to digital technology. The course emphasizes active learning to enhance critical thinking, critical analysis of information gained from technical sources, and life-long learning competencies. Students use digital technology to support and enhance communication, using current productivity technologies and exploring emerging technologies.

CSCI 1170 Engineering Computer Science I Laboratory
The course includes hands-on instruction and laboratory exercises in developing programs written in a high-level object oriented programming language applying the principles taught in the CSCI 1370 lecture course. Equivalence course: CMPE 1170. A student may receive credit in only one course. Corequisite: CSCI 1370 (or CSCI 1378).

CSCI 1178 Engineering Computer Science I Laboratory (Honors)
The course includes hands-on instruction and laboratory exercises in developing programs written in a high-level object oriented programming language applying the principles taught in the CSCI 1378 lecture course. Co-requisite: CSCI 1378. Equivalence course: CSCI 1170. A student may receive credit in only one course. Corequisite: CSCI 1378 (Honors).

CSCI 1201 Introduction to Computer and Information Technology
A computer literacy course to develop awareness of the expanding role of computer and information technology and to provide knowledge and skills related to personal and social uses of computers. Topics include applications of computers, societal and ethical issues involving computers, history, the Internet, packaged software and hardware and software terminology. Assignments will be given to provide hands-on experience in personal software packages and information networks.

CSCI 1301 Introduction to Computing
This course provides an overview of computer information systems and introduces computer hardware, software, the Internet, and Office applications. Current issues such as the effect of computers on society, business, education, etc., are also studied. This course does not count toward major in business or computer science.

CSCI 1370 Engineering Computer Science I
An introduction to computer science and computer engineering. The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of procedural and object-oriented programming will be emphasized. Societal and social issues related to computer science/engineering will be introduced. Equivalent course: CMPE 1370. Will replace a grade received in CSCI 1380. Cannot receive credit for both CSCI 1380 or CMPE 1370. Prerequisites: Grade of 'C' or better in MATH 1314 or placement in a higher level Math course. Co-requisite: CSCI 1170 (or CSCI 1178).

CSCI 1378 Engineering Computer Science I (Honors)
An introduction to computer science and computer engineering. The fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of procedural and object-oriented programming will be emphasized.. Societal and social issues related to computer science/engineering will be introduced. Equivalent course: CMPE 1378. Will replace a grade received in CSCI 1380. Cannot receive credit for both CSCI 1380 and CMPE 1378. Prerequisites: Grade of 'C' or better in MATH 1314 or placement in a higher level Math course; and CSCI 1101; and admission to the honors program. Co-requisite: CSCI 1178.

CSCI 1380 Computer Science I
An introduction to computer science and computer programming is given, in which the fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of structured object-oriented programming will be emphasized. For degree programs requiring a three hour course in computer science. Two hours will fulfill Computer Literacy Core requirement. Equivalent courses: CSCI 1370 or CMPE 1370. A student may receive credit for only one course from CSCI 1380, CSCI 1370 or CMPE 1370 . Will replace a grade received in CSCI 1370 or CMPE 1370. Prerequisites: Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.

CSCI 1387 Computer Science I (Honors)
An introduction to computer science and computer programming is given, in which the fundamentals of a high-level programming language will be introduced. Methods of problem solving, techniques of algorithmic development and concepts of structured object-oriented programming will be emphasized. For degree programs requiring a three hour course in computer science. Two hours will fulfill Computer Literacy Core requirement. Equivalent courses: CSCI 1370 or CMPE 1370 or CSCI 1380. A student may receive credit for only one course from CSCI 1380, CSCI 1370 or CMPE 1370. Will replace a grade received in CSCI 1370 or CMPE 1370. Prerequisites: Concurrent enrollment or credit for MATH 1314 or higher level mathematics course.

CSCI 2333 Computer Organization and Assembly Language
An introduction to computer organization, use of assembly language programming, basic instruction sets, arithmetic and logical operations, addressing modes and macro definition. Several computer programming projects are included. Equivalent course: CMPE 2333. A student may receive credit in only one course. Prerequisites: CSCI 1370 (or CSCI 1378) or CMPE 1370 (or CMPE 1378) or CSCI 1380 (or CSCI 1387).

CSCI 2344 Programming in Unix/ Linux Environment
The course presents the UNIX file system, the commonly used utilities, editors, shell programming and scripting. It includes instruction in software development in the UNIX/Linux environment. In addition, a brief overview of the internal components of the operating system will be covered. Prerequisites: CSCI 1370 (or CSCI 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.

CSCI 2380 Computer Science II
A second programming course includes problem solving by structured design; provides an introduction to elementary data structures, including linked lists, stacks, queues, trees and graphs, and advanced programming techniques, including recursion, sorting and searching. Equivalent course: CMPE 2380. A student may receive credit in only one course. Prerequisites: CSCl 1370 (or CSCl 1378) or CMPE 1370 (or CMPE 1378) or CSCI 1380 (or CSCI 1387) or consent of instructor.

CSCI 2388 Computer Science II (Honors)
A second programming course includes problem solving by structured design; provides an introduction to elementary data structures, including linked lists, stacks, queues, trees and graphs, and advanced programming techniques, including recursion, sorting and searching. Equivalent course: CMPE 2388. A student may receive credit in only one course. Prerequisites: CSCI 1378 or CSCI 1370 or CMPE 1370 or consent of instructor.

CSCI 3300 Internship in Computer Science
[0-0-3]
This course is designed to give students an opportunity to gain practical experience in the computer science career field by working with a participating employing firm or organization. The student will be supervised by a faculty member acting as a liaison between the university and the employing organization to ensure compliance with specific learning and experience requirements. The employment can be either paid or unpaid, and normally would include practical experience spread over one academic term or summer. May be repeated once. A maximum of three hours of credit from CSCI 3300 can be used toward the computer science major. Prerequisites: Junior standing, minimum 12 hours of Computer Science (CSCI) completed and approved by both the department and employer providing the practicum/internship experience.

CSCI 3310 Discrete Data Structures
An introduction to some of the more important concepts, techniques, and structures of discrete mathematics. It provides a bridge between computer science and mathematics. Topics include functions and relations, sets, countability, groups, graphs, propositional and predicate calculus, and permutations and combinations. Students will be expected to develop simple proofs for problems drawn primarily from computer science and applied mathematics. Prerequisites: MATH 2413 with grade of 'C' or better; and CSCI/CMPE 1370 (or CSCI/CMPE 1378).

CSCI 3326 Object Oriented Programming in JAVA
The Java programming language and environment will be introduced with an emphasis on objectoriented programming. Application areas will include Internet-based programming, applets, and HTML, and topics will include control structures, classes, methods, inheritance, Java libraries and packages. Objected-oriented aspects will include graphics, GUI, exception handling, multithreads, multimedia and networking. Prerequisites: CSCI 1380 (or CSCI 1387) or CSCI 1370 (or CSCI 1378) or CMPE 1370 (or CMPE 1378) or consent of instructor.

CSCI 3327 Object Oriented Programming in Visual Basic
The Visual Basic programming language and environment will be introduced with an emphasis on window-based programming and the use of objects in Visual Basic. Topics will include control structures, graphical user interface concepts, classes, methods, inheritance and the Visual Basic interface and libraries. Prerequisites: CSCI 1380 (or CSCI 1387) or CSCI 1370 (or CSCI 1378) or CMPE 1370 (or CMPE 1378) or consent of instructor.

CSCI 3328 Object-Oriented Programming In C\#
The C\# programming language and .NET environment will be introduced with an emphasis on widows-based, event driven programming and the use of objects, LINQ and XML. Topics may include UML, generic collections, database connections, XML, inheritance and polymorphism, exception handling, event driven programming, concurrent programming, windows forms, files and streams, databases, and Web Services. Prerequisite: CSCI 1380 or CSCI 1370 or CMPE 1370 or consent of instructor. Prerequisites: CSCI 1380 (or CSCI 1387) or CSCI 1370 (or CSCI 1378) or CMPE 1370 (or CMPE 1378) or consent of instructor.

CSCI 3333 Algorithms and Data Structures
This course is a continuation of data structures topics covered in CSCI 2380. Content includes theoretical topics in algorithmic efficiency and complexity, along with abstract data types, including graphs, networks, trees, and priority queues. Search topics, including hashing, trees, external search trees (B-trees), and sorting algorithms including external sorting are introduced and compared. Computational complexity topics include the class P and NP, NP-completeness and reducibility, NPcompleteness proofs, and NP-complete problems. Equivalent course: CMPE 3333. A student may receive credit in only one course. Prerequisites: CSCI/CMPE 2380 (or CSCI/CMPE 2388); and credit/registration for MATH 2346 or CSCI 3310 or MATH 2305.

CSCI 3334 Systems Programming
This course covers the design and implementation of system software. It investigates the relationship between software design and machine architecture. Topics may include assemblers, macroprocessors, compilers, loaders, debugging environments, program development and archival tools, command language interpreters (shells), file systems, I/O support, processes, threads, and interprocess communication. Equivalent course: CMPE 3334, a student may receive credit in only one course. Prerequisites: CSCI/CMPE 2380; and CSCI/CMPE 2333, ELEE 3435, or CMPE 3437.

CSCI 3336 Organization of Programming Languages
This course describes the fundamental concepts of programming languages by discussing the design of the various language constructs, examining the design choices for these constructs, critically comparing design alternatives and discussing implementation techniques. The underlying theory and formal modes of describing the syntax and semantics including finite automata and regular expressions, context-free grammars, context-sensitive languages and the Chomsky Hierarchy are included. Prerequisites: CSCI 2380 (or CSCI 2388) or CMPE 2380 (CMPE 2388).

CSCI 3340 Software Engineering I
A formal approach to the state-of-the-art techniques in software design and development. Emphasis will be on Project Planning, Requirements, Specification, and System Design and includes object design, testing, and implementation. Provides the student with the opportunity to work on large projects in a group situation. Equivalent course:CMPE 3340. A student may receive credit in only one course. Prerequisites: CSCI 2380 (or CSCI 2388) or CMPE 2380 (CMPE 2388), and 3 advanced hours in CSCl courses.

CSCI 3341 Software Engineering II
The course will cover the analysis of requirements and software architecture with a major emphasis on object design, implementation, testing and validation, maintenance and software re-engineering. Methods for evaluating software for correctness, and reliability, system testing techniques, testing tools and limitations of testing, Advance Software Engineering topics such as Design Patterns, Aspect Oriented Engineering, Interactive Design Methods, and Formal Specification are included. Students will work a large group projects. Equivalent course: CMPE 3341. A student may receive credit in only one course. Prerequisites: CSCI 3340 or CMPE 3340.

CSCI 3342 Internet Programming
Introduction to web application programming. Covers the fundamentals of developing applications for web browsers, within the dominant HTTP-based client/server model. A wide range of technologies and development methodologies are covered, including database and server architectures, serverside frameworks, client-side languages/libraries, remote invocation models and web application security. Specific topics in web development change rapidly, but some examples include SQL, HTML, TLS, PHP, Java EE (servllets, JSP, etc), ASP.NET. Prerequisites: CSCI 2380 (or CSCI 2388) or CMPE 2380 (CMPE 2388), and CSCI 3326 or CSCl 3327 or CSCI 3328.

CSCI 3350 Numerical Methods
This course studies the numerical solutions to various problems occurring in engineering, science and mathematics. These problems include finding solutions to nonlinear equations, solutions to linear and nonlinear systems of equations, interpolation of data, approximation of functions, numerical integration and solutions to differential equations. It also studies the influence of data representation and computer architecture on the choice and development of algorithms. Equivalent course: MATH 3349. A student may receive credit in only one course. Prerequisites: MATH 2413 (or MATH 2487) and CSCI 1380 (or CSCI 1387) or CSCI 1370 (or CSCI 1378) or CMPE 1370 (or CMPE 1378).

CSCI 3370 Introduction to Game Development
This is a project based course in which programmers and designers collaborate to create a video game. The course investigates theory and practice of developing computer games from a variety of perspectives. Prerequisites: CSCI/CMPE 3333; and CSCI/CMPE 3326 or CSCI/CMPE 3327 or CSCI/CMPE 3328 or consent of instructor.

CSCI 4185 Research Seminar
Students will have the opportunity to conduct faculty-sponsored research in the area of mutual interest resulting in oral and written presentation of their work to other students and faculty. May be repeated up to 6 credit hours. Up to three credit hours can be used to meet CSCI degree requirements. Cross-listed with CMPE 4185. Prerequisites: Consent of instructor.

CSCI 4301 Digital Image Processing
The course presents fundamental concepts and applications of digital image processing. Topics include basic color, image perception and transformation, image enhancement and compression, and image analysis, and computer vision. Equivalent course: CMPE 4301. A student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333.

CSCI 4302 Multimedia Systems
This course presents the broad field of multimedia systems. Topics include the digital interactive multimedia, creation of multimedia, and various issues involving technology, design and effectiveness of multimedia applications. Students will have the opportunity to learn programming techniques for integrating video, sound, animation and graphics for multimedia systems. Prerequisites: CSCI 3333 or CMPE 3333 or consent of instructor.

CSCI 4303 Computer Vision
This course covers the fundamental and advanced ideas of developing computerized procedures to extract numeric and symbolic information from images. Prerequisites: CSCI 3333 or CMPE 3333 or consent of instructor.

CSCI 4310 Design and Analysis of Algorithms
The course presents elements of the design and analysis of computer algorithms. Topics include indepth study of algorithms' design strategies such as dynamic programming, divide-and-conquer and greedy methods; algorithms for graph problems, geometric problems and other selected problems; and computational complexity. Prerequisites: CSCl 3333 or consent of instructor.

CSCI 4318 Cyber Security
This course explores cyber security fundamentals, standards of good practice, and basic theory in depth. Topics will include privacy, confidentiality, integrity, and encryption. Key areas include network attacks and defenses, operating systems flaws, malware, social engineering and digital rights management. Prerequisites: CSCI 2344; and CSCI/CMPE 3333.

CSCI 4319 Digital Forensics
This course explores the science, technology, procedures and laws of acquiring and analyzing evidence from digital media and computing devices. Current forensic tools will be surveyed. Topics include volatile and nonvolatile data analysis, network based evidence collection, forensic analysis techniques, web, email, and registry activity reconstruction and study of available tools. Prerequisites: CSCI 2344; and CSCI/CMPE 2380.

CSCI 4321 E-Commerce
This course covers e-commerce implementation including e-commerce security and prevention, ecommerce scalable architecture design, Internet infrastructure, web server administration, epayment, mobile commerce systems, and business to business systems. Prerequisites: CSCl 3333 or CMPE 3333 or consent of instructor.

CSCI 4325 Automata, Formal Languages, and Computability
The course presents formal computation models. Topics include finite state machine, pushdown state machine, Turing machine, halting problem, definition and properties of formal grammars and their languages as well as theory of computability and complexity including the complexity of optimization and approximation problems. Prerequisites: CSCI 3333 or CMPE 3333 and CSCI 3336 .

CSCI 4327 Compiler Construction
Syntax analysis and semantic processing for a block-structured language. Compilation vs. interpretation; lexical analysis based on finite automata; syntax-directed translation; symbol tables; run-time storage allocation; error detection and recovery; code generation and optimization. Students are required to write a compiler. Equivalent course: CMPE 4327. A student may receive credit in only one course. Prerequisites: CSCI 3334 or CMPE 3334 or consent of the instructor.

CSCI 4333 Database Design and Implementation
Study of logical (hierarchical, network, relational) and physical (sequential, indexed, relative) organization of databases. Database management systems and their features, querying databases, distributed databases, and data compression. Equivalent course: CMPE 4333, a student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333.

CSCI 4334 Operating Systems
This course provides a study of the basic concepts of operating systems: process management, memory management, file systems, resource allocation, and protection. Equivalent course: CMPE 4334. A student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333 and CSCl 3334 or consent of the instructor.

CSCI 4335 Computer Architecture
A study of the operational units and their interconnections of a modern computer as well as the theory behind the design of the instruction set, control unit, registers, memory hierarchy and addressing modes, bus structures, input/output, and storage units. Similarities between CISC and RISC architectures and related issues such as instruction level parallelism and superscalar processors are discussed. Students may receive credit for only one of CSCI 4335, CMPE 4335, CMPE 4380, or ELEE 4380. Equivalent course: CMPE 4335. Prerequisites: CSCI 2333 or CMPE 2333 or CMPE 3437, and CSCI 3333 or CMPE 3333.

CSCI 4336 Parallel and Distributed Computing
Presents principles and practices of parallel and distributed computing. Topics include parallel and distributed computation models and architectures; design, analysis and implementation of parallel algorithms; and methods of parallel and distributed programming. Equivalent course: CMPE 4336. A student may receive credit in only one course. Prerequisites: CSCI 4335 or CMPE 4335 or CMPE 4380.

CSCl 4341 Topics in Computer Science
Topics or problems in computer science; subject matter changes from semester to semester. May be repeated for credit as topic varies. Prerequisites: Consent of instructor.

CSCI 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 and data processing, pattern recognition, attribute relevance analysis, class discrimination, rule association, correlation analysis, classification, prediction, cluster analysis and query languages. Prerequisites: CSCI 4333.

CSCI 4344 Bioinformatics
This course will provide and introduction to the rapidly evolving field of bioinformatics with the overarching goal of understanding how computer science plays an integral part both in application and algorithmic aspects. Prerequisites: CSCI/CMPE 3333 or consent of instructor.

CSCI 4345 Computer Networks
An introduction to data communication topics, including data transmission, encoding, data link control, switching, network topologies, protocols, internet working and data security. Examples of existing networks and network architectures are studied. Equivalent course: CMPE 4345. A student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333.

CSCI 4350 Artificial Intelligence
Study of intelligent machines and machine learning. Includes problem solving and heuristic search, natural language understanding, game playing, database and expert systems. Artificial Intelligence projects will be implemented using an Al language such as LISP, Prolog, C++ or Ada. Equivalent course: CMPE 4350. A student may receive credit in only one course. Prerequisites: CSCI 3333 or CMPE 3333.

CSCI 4352 Machine Learning
This course provides an introduction to machine learning, data mining, and statistical pattern recognition. Topics include: supervised learning, unsupervised learning, reinforcement learning and best practices in machine learning. Prerequisites: CSCI 3333 or CMPE 3333 or consent of instructor.

CSCI 4355 Expert Systems
This course covers the theoretical and practical principles of modern expert systems. Prerequisites: CSCI 3333 or CMPE 3333.

CSCI 4360 Computer Graphics and Interactive Systems
Presents fundamental concepts of computer graphics. Topics include display hardware, transformations, geometric modeling, shading two- and three-dimensional display algorithms and graphics software systems. Prerequisites: CSCI 3333 or CMPE 3333 or consent of instructor.

CSCI 4363 Advanced Databases
This course will cover a number of advanced topics in modern data intensive systems. Topics may include non-relational databases (nosql), spatial databases and data warehousing. Prerequisites: CSCI 4333 or consent of instructor.

CSCI 4365 Computer and Network Security
This course examines the internetworking architecture and routing, design and implementation issues related to secure and reliable networks, cryptography, firewalls, digital signatures, worms, viruses, logic bombs and spyware. Equivalent course: CMPE 4363. A student may receive credit only in one course. Prerequisites: CSCI 4345 or CMPE 4345.

CSCI 4370 Advanced Game Development
This course in advanced game development covers core techniques in 3D game development. Students explore industry-standard engines and middleware, and develop independent engine components using low-level technologies. Topics include: real-time 3D pipelines, collision detection and response, animation, particle effects, scripting and networking. Prerequisites: CSCI 3370 or consent of instructor.

CSCI 4381 Interactive Systems and User Interface Design
Presents principles and practice of information communication between user and system. The course examines results of past research, as well as evolving trends in interface design and implementation. Equivalent course: CMPE 4381. A student may receive credit in only one course. Prerequisites: CSCI 3333 , or CMPE 3333 or consent of the instructor.

CSCI 4382 Computer Visualization
Focuses on design and implementation of computer graphics systems to provide visual representation of large data sets. Presents current theory and practice of computer visualization systems and advanced display techniques. Prerequisites: CSCI 3333 or CMPE 3333 or consent of the instructor.

CSCI 4383 Bioinformatics Imaging
This course provides an introduction to the physical and computational principles of medical imaging systems. Topics covered include fundamentals of $x$-ray radiography, $x$-ray computed tomography, ultrasound imaging and magnetic resonance imaging. Current techniques for visualization, segmentation, and analysis of medical image data will be discussed. Prerequisites: CSCI 3333 or CMPE 3333 or consent of the instructor

CSCl 4390 Senior Project
Students will construct a software product, following it through the stages from initial specification to the final completed project, including user manual. Prerequisites: CSCI 3340 or CMPE 3340 and consent of instructor.

## Electrical Engineering

ELEE 1101 Introduction to Electrical Engineering
Introduction to electrical engineering as a career, fundamentals of analysis and graphical presentation of data using software tools, approaches to problem solving, and a basic design project.

ELEE 2105 Electric Circuits I Lab
This course covers fundamental circuit measurement techniques and reinforces concepts from ELEE 2305 Electrical Circuits I. Topics include: basic instrumentation; measurement of voltage, current, resistance, power, frequency and phase; analysis of experimental data; and reporting of technical results. Crosslisted with CMPE 2105. Prerequisites: Credit/registration in ELEE 2305.

ELEE 2130 Digital Systems Engineering I Lab
Basics of digital logic and hardware combinational circuits, flip-flops, resistors, sequential circuits, and state machines. Crosslisted with CMPE 2130. Prerequisites: Credit/registration in ELEE 2330.

ELEE 2305 Electric Circuits I
This course covers fundamentals of electrical circuits, including basic definitions, Kirchoff's laws, nodal and loop analysis, superposition, Thevenin and Norton equivalents, time-varying circuits, simple transient response, sinusoidal steady-state analysis using phasors, and power in sinusoidal steadystate circuits. Cross listed with CMPE 2305. Prerequisites: MATH 2414 (or MATH 2488) and credit/registration in PHYS 2426.

ELEE 2317 Electrical and Electronic Systems
An introductory survey of electrical engineering topics including principles of DC and AC circuits; electric motor types and characteristics; basic operation of diodes, transistors, and operational amplifiers; logic circuits; and electrical measurements. This course is intended for nonmajors and may not be counted for credit toward a degree in electrical engineering. Prerequisites: PHYS 2426.

ELEE 2319 Numerical Computation and Data Visualization
Topics in this course include performing engineering numeric calculations using computation tools, introduction to mathematics software languages, writing programs to solve scalar and multivariable problems using matrix algebra, numerical solution of linear equations, relational and logical operators, and plotting and visualization of data. Prerequisites: CSCl 1380 (or CSCl 1387) and credit/registration in MATH 2346.

ELEE 2330 Digital Systems Engineering I
Boolean algebra; analysis and synthesis of combinational and sequential switching network; applications to computer design. Credit/registration in MATH 2413 is recommended, but not required. Cross listed with CMPE 2330.

ELEE 3101 Electronics I Lab
Measurement and modeling of semiconductor device characteristics. Design, construction, and testing of basic electronic circuits for rectification, switching, and amplification. Prerequisites: Credit/registration in ELEE 3301.

ELEE 3225 Electrical Engineering Lab I
This course covers basic measurement and instrumentation techniques, limitations of theoretical models, design of basic analog and digital circuits, and reporting of technical results. Cross listed with CMPE 3226; students will be assigned specific projects appropriate to their major. Prerequisites: ELEE 2330 and ELEE 2130, plus credit or registration for ELEE 3301, ELEE 3321, and ELEE 2319.

ELEE 3230 Electrical Engineering II Lab
Experimental solution of engineering problems, including design, optimization, evaluation and simulation, applied to projects of progressively increasing complexity. Prerequisites: ELEE 3225.

ELEE 3300 Electrical Engineering Coop/Internship
[0-0-3]
Supervised technical employment in industry or government as an engineering intern or as part of a cooperative program. Prior approval of instructor is required. A report approved by both the instructor and the industry/government supervisor must be completed at the end of the semester. The course may be repeated for credit but may only count once toward the technical elective requirement in the BSEE degree plan. Prerequisites: Approval of instructor.

ELEE 3301 Electronics I
A course in the physical principles of electronic devices with emphasis on semiconductor electronics. Includes the analysis and design of electronic circuits such as rectifiers, amplifiers and switching circuits using diodes, bipolar transistors, field effect transistors and operational amplifiers. Prerequisites: ELEE 2305 and credit/registration in ELEE 3321.

ELEE 3302 Electronics II
Provides further study in electronic circuits. Includes analysis and design of differential and multistage amplifiers, feedback and frequency response techniques in amplifier, design of circuits for waveform generation, power conversion, and data conversion. Prerequisites: ELEE 3301 and ELEE 3321.

ELEE 3315 Electromagnetics Engineering
Introduction to electrostatics and magnetostatics; properties of conductive, dielectric, and magnetic materials; time varying-fields; Maxwell's equations; transmission lines and transmission line circuits; fundamentals of electromagnetic radiation. Prerequisites: ELEE 2305, MATH 2415 and PHYS 2426.

ELEE 3321 Signals and Systems
Response of LTI networks by Fourier and Laplace transform methods, frequency-domain techniques and time-domain techniques, discrete signal representation, and z-transforms. Crosslisted with CMPE 3322. Prerequisites: ELEE 2305 and credit/registration in MATH 3341.

ELEE 3331 Microcontroller and Embedded Systems Lab
Design projects of progressively increasing complexity including mixed signal design, computer interfacing, embedded microcontrollers, and distributed systems. Crosslisted with CMPE 3331. Prerequisites: CMPE 3437 or ELEE 3435.

ELEE 3340 Probability and Statistics for Electrical Engineers
Probability, random variables, distribution and density functions, statistical estimators, correlation, regression techniques, and system response to random inputs. Crosslisted with CMPE 3343.
Prerequisites: MATH 2414.
ELEE 3370 Power Electronics
Topics include switching characteristics and losses of MOSFETS and diodes. Fundamental architecture of the power pole. Buck, Boost and Buck-Boost converters. PWM circuits. Standard model of DC converters. Voltage mode controller. Fly backs and forward converters. Software simulations. Laboratory implementation of DC-DC Converters. Three-phase power rectifiers. Prerequisites: ELEE 3301 and ELEE 3225.

ELEE 3371 Electrical Power Systems
This course covers practical design of electrical power and lighting distribution for commercial, industrial and residential buildings, based on National Electrical Code (NEC) standards. The NEC, regulatory considerations, industry standards and the Texas Engineering Practice Act are discussed. Current commercial, industrial and residential projects are analyzed, and students will have the opportunity to complete designs for sample residential and office buildings. Prerequisites: ELEE 2305 or ELEE 2317.

ELEE 3435 Microprocessor Systems
Basic microprocessor programming and principles of assembly language programming; microprocessor organization and interfacing; applications, including data acquisition, control, and communication. Crosslisted with CMPE 3437. Prerequisites: ELEE 2330 and CSCI 1380 (or CSCI 1387).

ELEE 4303 Digital Systems Engineering II
Hardware implementation of arithmetic and other algorithmic processes; organization, design and simulation of digital systems; asynchronous sequential switching networks. Crosslisted with CMPE 4303. Prerequisites: ELEE 2330.

ELEE 4321 Automatic Controls
Dynamic system modeling; system stability; time-domain analysis; root-locus technique; frequencydomain analysis; control system design. Prerequisites: ELEE 3321 and MATH 3341.

ELEE 4323 Rapid Control Prototyping
This course introduces students to the design and implementation of control software using rapid control prototyping technology. The course discusses the requirements for real-time control of systems, and focuses on the methodology of computer-aided software development for real-time control and hardware interfacing using data acquisition systems. Students will acquire skills, through laboratory activities, in the use of an integrated environment for designing, simulating, and real-time testing of control strategies on a number of physical systems. Examples of laboratory projects include: temperature control, motor position control, motor speed control, and trajectory tracking of an industrial robot manipulator. Prerequisites: Junior standing in electrical engineering.

ELEE 4325 Introduction to Robotics
This course uses a system engineering approach to introduce students to robotic science and technology. Topics include the fundamentals of robot manipulators, sensors, actuators, effectors, Denavit-Hartenberg parameterization of robot kinematics, motion planning in the joint space and in the Cartesian space, and programming of manipulators. The laboratory will provide experiences with computer simulation and animation of robot manipulators, and developing and testing motion and manipulation applications on an actual six degree-of-freedom (6DOF) robot arm. Prerequisites: ELEE 2319 and ELEE 3225.

ELEE 4328 Solid State Devices
Semiconductor materials and carrier transport; p-n junctions and Schottky barriers; bipolar and field effect transistors; integrated circuits. Prerequisites: ELEE 3301.

ELEE 4333 Topics in Electrical Engineering
Intermediate level elective topics in electrical engineering. Course may be repeated for credit if topics vary. Prerequisites: Junior standing in electrical engineering.

ELEE 4351 Communication Theory
Signals, systems and analog modulation techniques; effects of noise in modulation systems, signal-tonoise ratio; digital data transmission; probability of error. Prerequisites: ELEE 3340 and ELEE 3321.

ELEE 4360 High Frequency Engineering
Ideal and lossy transmission lines; waveguides; s-parameters; couplers, isolators, circulators and filters; behavior of active devices and high frequencies; RF and microwave amplifier and oscillator circuits; RF and microwave system specifications. Prerequisites: ELEE 3315 and ELEE 3301.

ELEE 4361 Senior Design I
This is the first semester of a capstone design experience, drawing from previous engineering, science, and general education coursework. The first semester includes project selection, definition, and specification; background research; periodic written and oral reports; and preparation of a detailed proposal including a preliminary design. Crosslisted with CMPE 4373. Students will be assigned to projects appropriate for their majors. Prerequisites: ELEE 3230 ELEE 3435, and credit/registration in at least 9 credits of 4000 level ELEE coursework.

ELEE 4362 Senior Design II
This is the second semester of a capstone design experience, drawing from previous engineering, science, and general education coursework. The second semester includes preliminary test and evaluation, design optimization and revision, and final test and evaluation. Periodic written and oral reports, and a final demonstration of a working project are required. Crosslisted with CMPE 4374. Students will be assigned to projects appropriate for their majors. Prerequisites: ELEE 4361.

ELEE 4364 Antennas and Propagation
Review of basic electromagnetic wave propagation; antenna definitions and specifications; analysis of basic radiating structures including dipoles, loops, and apertures; array antennas; survey of practical antenna types; propagation models for free space, ground reflection, urban areas, and atmospheric reflection. Prerequisites: ELEE 3315.

ELEE 4365 Digital Signal Processing
Sampling theory, discrete processing of analog signals, discrete Fourier transforms, signal analysis, ztransforms, digital filter design, real-time digital signal processing and applications. Crosslisted with CMPE 4365. Prerequisites: ELEE 3321 and credit/registration in MATH 3349.

ELEE 4366 Image Processing
This course provides an introduction to image processing topics and design of image processing software. It covers methods for computer analysis of images, and processing of images including image formation, spatial resolution, preprocessing techniques, image filtering, image enhancement and image segmentation methods. Crosslisted with CMPE 4366. Prerequisites: ELEE 2319.

ELEE 4367 Fiber Optic Communications
Introduction to optics, photonics, and optoelectronics; fiber optic devices; and communication systems. Topics include ray optics, electromagnetic optics, resonator optics, dielectric waveguides and filters, semiconductor and laser light sources and detectors, modulators, amplifiers, connectors and optical fiber communication systems. Crosslisted with CMPE 4367. Prerequisites: ELEE 3321.

ELEE 4368 Electrokinetics for Microsystems
The course provides a state-of-the-art knowledge on both theoretical and applied aspects of the electrical manipulation of colloidal particles and fluids in microsystems and covers the following topics: dielectrophoresis, electrohydrodynamics in microsystems, and electrokinetics of fluids and particles. Prerequisites: ELEE 3301.

ELEE 4372 Electrical Machines and Power Systems Fundamentals
This course covers principles of electrical machines \& power systems; including AC and DC rotating machinery and transformers, with emphasis on their losses and energy conversion characteristics. It includes basic modeling of power systems components, using traditional analytical tools of electrical engineering. Laboratory projects are included outside of scheduled class hours. Prerequisites: ELEE 2305 and PHYS 2426.

ELEE 4373 Renewable Energy
This course covers principles of electric generation focusing on (a) the efficient utilization of electric energy, and (b) renewable energy sources. The course concentrates on the study of wind energy and solar photovoltaics. It covers the analytical methods used to evaluate the available resources, and the technologies used today to integrate distributed generation to electric grids and energy storage systems. Laboratory projects and simulations are included.
Performance evaluation of campus photovoltaic resources
will be included. Prerequisites: ELEE 2305 or ELEE 2317.
ELEE 4375 Introduction to VLSI Design
This course provides an introduction to the area of CMOS VLSI design and design of VLSI circuits, including CMOS logic circuits, integrated circuit layout and design tools, and overview of integrated circuit fabrication. Crosslisted with CMPE 4375. Prerequisites: ELEE 2330 and ELEE 3301.

ELEE 4380 Computer Architecture
This course presents an overview of digital computer architecture, including architectural issues for processors, instruction sets, microprogramming, memory hierarchy and interleaving, cache and virtual memory mapping, RISC principles, and principles of pipelining and pipeline hazards, as well as input/output devices. Crosslisted with CMPE 4380. Prerequisites: ELEE 3435 or CMPE 3437.

ELEE 4390 Communications Networks
This course covers engineering principles of data communications, including the following topics: communication media and signal encoding schemes, point-to-point communication standards, layering concepts, data link protocols, network protocols, transport layer protocols, error control, flow control, congestion control, routing algorithms, virtual circuits, call setup procedure, TCP/IP protocol, internetworking, switching and switching fabric, frame relays, ATM and emerging technologies. Crosslisted with CMPE 4390. Prerequisites: ELEE 3435 or junior standing.

## Engineering Physics

ENGR 1101 Introduction to Engineering
This course is an introduction to engineering as a discipline and a profession. The course includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefits of society. Prerequisites: MATH 2412 or consent of the Instructor.

ENGR 1201 Introduction to Engineering
Engineering as a career and profession, considering the various fields of engineering, engineering ethics, and professionalism . Basic engineering analysis, design process and problem solving, introducing computer literacy. Prerequisites: MATH 2412 or consent of the Instructor.

ENGR 1206 Introduction to Engineering Design
This course covers introduction to engineering design process; assessing engineering problems and customer needs; acquiring, documenting; engineering project planning; effects of economic, environmental, ethical, safety, and social issues in design; writing design specifications, project financial analyses, accounting and depreciation, risk analysis, and decision models. Prerequisites: ENGR 1101 or ENGR 1201.

ENGR 1304 Engineering Graphics I
This course is an introduction to spatial relationships, multiview projection and sectioning, geometric dimensioning and tolerancing, graphical presentation of data, and fundamentals of computer graphics and solid modeling. Prerequisites: Consent of the instructor.

ENGR 2105 Linear Circuits Lab
This course provides laboratory experiences associated with ENGR 2305 Linear Circuits. Topics include multimeter, oscilloscopes, circuit laws, parallel and serial circuits, passive components, first and second order ac circuits, ac filters and design of circuits. Prerequisites: Departmental approval required. Credit/registration in ENGR 2305.

ENGR 2130 Digital Systems I Lab
Basics of digital logic and hardware combinational circuits, flip-flops, sequential circuits, and state machines. Prerequisites: Credit/registration in ENGR 2330

ENGR 2140 Engineering Materials Laboratory
This is the lab session of Engineering Materials. The laboratory includes mechanical and physical testing, metallographic procedures, heat treatment, surface treatment and failure analysis. An emphasis is placed on material selection, testing, and validation. Prerequisites: Credit/registration in ENGR 2340.

ENGR 2301 Engineering Mechanics I: Statics
This course is a calculus-based study of composition and resolution of focuses, equilibrium of forces system, friction, centroids, and moments of inertia. Prerequisites: MATH 2414 (or MATH 2488) and PHYS 2425.

ENGR 2302 Engineering Mechanics II: Dynamics
This course is a calculus-based study of dynamics of rigid bodies, force-mass-acceleration, workenergy, and impulse-momentum computation. Prerequisites: ENGR 2301 with minimum grade of 'C'.

ENGR 2305 Linear Circuits
Signal and device models and laws used in the analysis of linear circuits are introduced. Topics include Ohm's Law, Kirchoff's Laws, the power law, node and mesh analysis, superposition, Thevinin and Norton equivalents, phasor representation, Laplace transform analysis, and frequency- and s-domain analysis, including pole/zero plots and transfer functions. Prerequisites: MATH 2321 or MATH 3341. Credit/registration in PHYS 2426 and ENGR 2105.

ENGR 2308 Engineering Economics
This course introduces methods of economic analysis in planning, developing, constructing, and managing engineering projects. Topics include: cost-driven design economics, money-time relationships and equivalent worth, cost estimation, selection rules for alternatives, dealing with uncertainty, probabilistic risk analysis, depreciation, taxes and inflation, life cycle analysis, financial statement analysis, and case study. Prerequisites: MATH 2414 (or MATH 2488).

ENGR 2330 Digital Systems I
This course covers fundamentals of analysis, design, and simulation of combinational and sequential systems using classical Boolean algebra techniques and laboratory hardware experiments. Topics include logic gates, Boolean algebra; flip-flops, and digital system fundamentals. Prerequisites: Consent of the instructor.

ENGR 2332 Mechanics of Materials
Stresses, deformations, stress-strain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses are the main topics of this course. Prerequisites: MATH 3341, ENGR 2301.

ENGR 2340 Engineering Materials
This course is an introduction to the structure, properties, processing, destructive and nondestructive testing, and engineering applications of ferrous and non-ferrous metals, plastics, polymers, composites and ceramics. Prerequisites: MATH 2413 (or MATH 2487), CHEM 1311, and CHEM 1111.

ENGR 2342 Renewable Energy Fundamentals
The course introduces the basic concepts, working principles, and selected state-of-the-art developments of various renewable energy technologies. The energy sources covered are solar, wind, ocean, and geothermal. Solar includes thermal and photovoltaic technologies, and flat plate and concentrating geometries. Ocean includes wave and tidal sources. Prerequisites: PHYS 2425.

ENGR 3103 Engineering Thermodynamics Lab
This course is the lab session of ENGR 3303. Topic includes experiments in laws of thermodynamics, heat transfer, and problem solving. Prerequisites: MATH 2414 (or MATH 2488), PHYS 2425 and credit/registration in ENGR 3303.

ENGR 3121 Electronics I Lab
This course provides laboratory support for Electronics I. Topics include operational amplifier circuits, diode circuits, voltage regulators, MOSFET and BJT transistors, and amplifier circuits. Student designed circuits will be built, tested and analyzed. Prerequisites: Credit/registration in ENGR 3321.

ENGR 3300 Engineering Internship
Supervised technical employment in industry or government as an engineering intern or as part of a cooperative program. Prior approval of instructor is required. A report approved by both the instructor and the industry/government supervisor must be completed at the end of the semester. The course may be repeated for credit but may only count once toward the track elective requirement. Prerequisites: Consent of the instructor.

ENGR 3303 Engineering Thermodynamics
The course introduces basic principles and applications of classical thermodynamics. The topics covered include basic concepts, zeroth, first and second laws of thermodynamic, thermodynamic properties of substance, and cycle analysis of some power and refrigeration systems. Prerequisites: PHYS 2426, MATH 2415, and engineering advisor approval.

ENGR 3304 Mechanics of Materials
This course is on stresses, deformations, stress-stain relationships, torsions, beams, shafts, columns, elastic deflections in beams, combined loading, and combined stresses. Prerequisites: ENGR 2301 and MATH 3341.

ENGR 3310 Mechatronics I
This course exposes students for the first time in the program to the combination of mechanical engineering, electronic control and systems thinking in the design of products and manufacturing processes. Prerequisites: ENGR 2301, ENGR 2305, MATH 2415, and MATH 2321 or MATH 3341.

ENGR 3312 Engineering of Nanomaterials
The main objective of this course is to introduce various types of nanomaterials, nanostructures, and characterization techniques used in nanotechnology engineering. Emphasis will be placed on handson training with modern instrumentation techniques as used in design and production of nanoscale components.

Operational amplifiers (op-amps), electrical characteristics of silicon, operation of bipolar junction diodes, and metal-oxide field effect transistors are the main topics of this course. Analysis and design of circuits and applications containing op-amps, diodes, and transistors are performed. Prerequisites: ENGR 2305/2105, minimum grade C and engineering advisor approval; Credit/registration in ENGR 3121.

ENGR 3327 Engineering Electromagnetics
This course covers introduction to electrostatics and magnetostatics; properties of conductive, dielectric, and magnetic materials; Maxwell's equations; uniform plane wave propagation; frequencyand time-domain analyses of transmission lines. Prerequisites: PHYS 2426, MATH 2415, MATH 3341.

ENGR 3330 Linear Signals and Systems
This course discusses the concepts of linear systems and mathematical models for signal processing. The content of this course has practical application in communications, signal processing, control systems, circuit design, and biomedical engineering. Prerequisites: ENGR 2305, MATH 3341.

ENGR 3331 Digital V.L.S.I. Circuits
The course starts with fundamentals of digital circuits. It continues with computer simulation and layout of digital circuits. A small 1-bit adder circuit will be simulated, fabricated, and tested in the laboratory. Prerequisites: ENGR 3321/3121.

ENGR 3421 Electronics I
This course covers operational amplifiers (Op-amp), electrical characteristics of silicon, operation of bipolar junction diodes, and metal-oxide field effect transistor are the main topics of this course. Analysis and design of circuits and applications containing op-amp, diode, and transistors are carried out both in the classroom and in the laboratory. Prerequisites: ENGR 2305/2105, MATH 2413 (or MATH 2487), CHEM 1311/1111.

ENGR 4122 Electronics II Lab
This is a laboratory course to accompany Electronics II with in-depth experimental studies of operational and discrete amplifiers. Prerequisites: Credit/registration in ENGR 4322.

ENGR 4150 Engineering Special Project
This lab course provides engineering students special projects in engineering. Prerequisites: ENGR 2302, ENGR 2305/2105, and consent of instructor.

ENGR 4242 Senior Design Project I
This course begins with project definition, task analysis and planning, and project control, for an industry-based major design project. It concludes with the beginning of work on the project. Prerequisites: Senior standing, pass Engineering Upper Division Exam, and consent of engineering advisor.

ENGR 4243 Senior Design Project II
This course is the continuation of ENGR 4242. Completion of industry-based design project.
Prerequisites: ENGR 4242 with minimum grade of C.
ENGR 4308 Design Graphics with Solid Modeling
This course is an introduction to special relationships, multiview projection and sectioning, geometric dimensioning and tolerancing, graphical presentation of data, and fundamentals of computer graphics, and solid modeling. Prerequisites: Consent of engineering advisor.

ENGR 4309 Mechanical Subsystem Design
This course deals with the selection and computer-aided graphical representation of mechanicals 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. Prerequisites: ENGR 2302, ENGR 3304, ENGR 2340/2140.

ENGR 4310 Heat and Mass Transfer
This course provides an introduction to the fundamentals of heat and mass transfer processes. Topics include conduction, convection, and radiation heat transfer processes with various applications and diffusion mass transfer. Prerequisites: ENGR 4406, ENGR 3303, and engineering advisor approval.

ENGR 4311 Nanofabrication and Nanoelectronics
This course presents techniques of basic fabrication and characterization of silicon based nanostructures used in nanoelectronics. The course will focus on nanotechnology material processing techniques and design, including photolithography, electron beam lithography, scanning electron microscopy, chemical vapor deposition, etc. with hands-on demonstrations and exercises.

ENGR 4322 Electronics II
Electronics II deals with the analysis and design of complex analog integrated circuits(ICs). The course covers single stage IC amplifiers, differential and multistage amplifiers, feedback, frequency response, signal generators and an overview of output stages and power amplifiers. Prerequisites: ENGR 3321, ENGR 3121.

ENGR 4326 Power Electronics
Power Electronics deals with power diodes and transistors, basic switching circuits, silicon-controlled rectifiers, modern switch mode power converters, and analysis and design of basic AC/DC, DC/DC, DC/AC power converters. Prerequisites: ENGR 3321, ENGR 3121.

ENGR 4360 Special Topics in Engineering
This course covers special topics in engineering. Prerequisites: ENGR 2302, ENGR 2305, and consent of instructor.

ENGR 4406 Engineering Mechanics III: Fluid Mechanics
This course introduces principles of continuity, momentum, and energy applied to fluid motion. The topic include hydrostatics, integral relations for control-volume analysis, laminar and turbulent flows in ducts, boundary layer flows, and dimensional analysis. The course includes hands-on experiments and design problems. Prerequisites: ENGR 2302, ENGR 3304.

ENGR 4407 Manufacturing Process Technologies
This course is an introduction to manufacturing process including metal cutting, measurements and metrology, deformation processes, casting, welding, joining, and composites. Prerequisites: ENGR 1304, ENGR 3304, ENGR 2340, and ENGR 2140.

ENGR 4423 High Frequency Engineering
High Frequency Engineering deals thoroughly with the particular problems faced when working with microwave frequencies. Topics include ideal and lossy transmission lines, waveguides, s-parameters, Smith chart, couplers, isolators, circulators, microwave filters and oscillator circuits, amplifier, and behavior of active devices and high frequencies. Prerequisites: PHYS 3301 or ENGR 3327, and ENGR 3321/3121.

ENGR 4424 Electric Power and Machinery
Topics of this course will include: an overview of electric power systems from energy sources to end user motors! principles of electromagnetism, analysis of three phase systems, a selection of in-depth studies of transformers, induction and synchronous motors and generators, distribution fault analysis, and alternative energy and design problems. Prerequisites: ENGR 2305/2105, and MATH 2414 (or MATH 2488).

ENGR 4425 Analog and Digital Communications
This course is an introduction to telecommunications principles including analysis of modulation and multiplexing, transmission media, switching techniques, and modern communications models and standards. Prerequisites: PHYS 3311, ENGR 2330/2130, and ENGR 3321/3121.

ENGR 4441 Control Systems
This course exposes students to the solution of feedback control problems involving mechanical, thermal and electrical systems and their couplings via computational methods (math CAD and MATLAB) laboratory experimentation. Prerequisites: MATH 2321 or MATH 3341, and ENGR 2302, ENGR 3321/3121.

ENGR 4450 Computational Mechanics
This course is an introduction to numerical methods in engineering. It covers solutions of classical heat transfer and solid mechanics problems using the finite element method. Prerequisites: ENGR 3303, ENGR 4406, ENGR 3304, and MATH 3341 or MATH 2321.

## Engineering Technology

ENGT 1101 Introduction to Engineering Technology
This course is an introduction to a broad range of engineering technology topics and fields.
ENGT 1310 Design Graphics I
This course is an introduction to solid modeling, includes sketching, CAD modeling, geometric construction, shape description, orthographic projection, sectional views, auxiliary views, threads, fasteners, and an introduction to working drawings.

ENGT 1320 Design Graphics II
This is an advanced CAD course that emphasize surface and solid modeling catering to industry standards, which includes ANSI/ASME CAD standards, fits and tolerances, GD\&T, product assembly, and simulation. Prerequisites: ENGT 1310.

ENGT 1321 Basic Architectural CAD
This course introduces basic 2D computer-aided drafting. Emphasis is placed on: drawing setup creating/modifying geometry, storing/retrieving predefined shapes, placing, rotating, scaling objects, adding text/dimensions, using layers.

ENGT 2307 Engineering Materials I for Engineering Technology
This course covers forming and classification of steel, cast iron, and aluminum. Topics include mechanical and physical properties, testing, alloying, selection, iron carbon diagrams, heat treatment, polymers, composites and ceramics. Prerequisites: CHEM 1311 and MATH 2413 (or MATH 2487).

ENGT 2310 Introduction to Manufacturing Processes
This course is an exploration of a variety of manufacturing methods. Also processes covered include but not limited to metal forming, joining, machining, heat treating, and casting. Prerequisites: ENGT 2307.

This course is an introduction to the fundamentals of electronic devices, circuits, and systems. Topics include AC/DC, transistors and integrated circuits, amplifiers and oscillators, transmitters and receivers, digital logic circuits, electronic memory, and computers. Prerequisites: PHYS 1401 and MATH 2413 (or MATH 2487).

ENGT 2350 Residential Architectural CAD
This course covers residential architectural drafting/design standards, procedures, and practices, emphasizing slab-on-grade, wood framed construction. Students will use 2D CAD \& 3D BIM software to develop construction documents. Prerequisites: ENGT 1321.

ENGT 3310 Fundamentals of Product Design
This course emphasizes the profitable conversion of product manufacture. Advanced CAD is extensively used. Prerequisites: ENGT 1320 and ENGT 2310.

ENGT 3311 Statics and Strength of Materials
This course studies the principles of forces, moments, resultants and static equilibrium of force systems, center of gravity, friction, free body diagrams, stress, strain, shear, bending moments torsion, bending stresses. Prerequisites: ENGT 2307 and PHYS 1401.

ENGT 3312 Renewable Energy Technology
This course is an introduction to renewable energy. Topics include photovoltaics, solar thermal, green building, fuel-cells, biofuels, wind, wave, tidal and hydroelectric power. Economic, environment, and social policy are discussed. Prerequisites: ENGT 2310 and ENGT 2321.

ENGT 3320 Computer Integrated Manufacturing
This course will introduce concepts in Computer-Integrated-Manufacturing (CIM). Students will learn CNC part programming, CAD-CAM Interface, CNC Machining, FMS, and Rapid Prototyping. Prerequisites: ENGT 1320 and ENGT 2310.

ENGT 3321 Solar Energy Systems
This course is an introduction to solar energy systems for residential, commercial and industrial applications. Topics included are solar resource and site assessments, PV system components, concentrating collectors, heating and cooling, solar thermal, and economic considerations. Prerequisites: ENGT 3312.

ENGT 3330 Green Building Design I
This architectural engineering course studies the design of Residential Structures, covering residential green building construction methods/materials, high wind design of hurricane-resistant structures, and basic surveying concepts. Prerequisites: ENGT 2350, ENGT 3312, and ENGT 3311.

ENGT 3333 Quality Control
This course familiarizes students with Total Quality Management principles, methods and practices. Statistical Quality Control, including probability and statistics, control charts for variables and attributes, and acceptance sampling are covered. Prerequisites: ENGT 2310 and MATH 1342 (or MATH 1387).

ENGT 3350 Commercial Architectural CAD
This course covers commercial architectural drafting/design standards, procedures, and practices, emphasizing steel and concrete construction. Students use 2D CAD and 3D BIM software to develop construction documents. Prerequisites: ENGT 2350.

This is a capstone course spanning two consecutive semesters. This course includes application of skills, knowledge, techniques, and concepts to design and manufacturing. Emphasis is placed on project management, documentation, and presentation. Prerequisites: ENGT 3320, ENGT 4322, ENGT 3321, and ENGT 3330.

ENGT 4220 Senior Project II
This course is the continuation and completion of project on design and manufacturing initiated in ENGT 4210. Prerequisites: ENGT 4210.

ENGT 4311 Wind Energy Systems
This course is an introduction to power production from wind resources. Physics of wind power also included are vertical and horizontal axis turbines and its aerodynamics, large-scale turbine farms and siting, commercial development, economics, and environmental impacts. Prerequisites: ENGT 3312 and ENGT 4322.

ENGT 4312 Production Planning and Control
This course introduces design, analysis, and management of production systems. Topics include productivity measurement, forecasting, project planning, line balancing, inventory systems, aggregate, master scheduling, operations scheduling, and Just-In-Time production. Prerequisites: ENGT 3310 and ENGT 3320.

ENGT 4322 Machine Design
This course deals with the application of engineering technology fundamentals to machine design. Techniques involved in designing and selecting individual machine parts such as gears, cams, and transmissions are included. Prerequisites: ENGT 3310 and ENGT 3311.

ENGT 4330 Green Building Design II
This architectural engineering course studies the design of Commercial Structures, covering commercial green building construction methods/materials, design/detailing of steel and reinforced concrete structures, and foundation systems. Prerequisites: ENGT 3350 and ENGT 3330.

ENGT 4340 Robotics and Automation
This course deals with the technology and application of robots in a Computer Integrated Manufacturing (CIM) environment by studying of robotic hardware, software, automation, and cell design. Prerequisites: ENGT 2321, ENGT 3310, and ENGT 3320.

## Manufacturing Engineering

MANE 1101 Introduction to Manufacturing Engineering
An introduction to Manufacturing Engineering as a career. Topics include approaches to engineering problem solving and engineering design with teams.

MANE 1204 Manufacturing Engineering Graphics
An introduction to computer-aided modeling of solid objects and graphical communication using the conventions of engineering drawings including dimensioning and tolerancing. Students will use industrial software to make computer models of solids and assemblies.

MANE 2332 Engineering Statistics
Fundamentals of probability, commonly encountered density functions, distribution functions, statistical tests and experimental designs as used in manufacturing and product design. Includes use of microcomputer-based statistical analysis software. Prerequisites: MATH 2413 (or MATH 2487).

MANE 2403 Engineering Mechanics
Topics in statics include vectors, free body diagrams, equilibrium, centroids and moments of inertia. Topics in dynamics include kinematics and kinetics applied to particles. Prerequisites: Grade of 'C' or better in PHYS 2425.

MANE 3101 Projects in Manufacturing Engineering I
Supervised manufacturing engineering internship. Prerequisites: Consent of instructor.
MANE 3102 Projects in Manufacturing Engineering II
Supervised manufacturing engineering research or special projects. Prerequisites: Consent of instructor.

MANE 3164 Manufacturing Processes Lab
Provides hands-on experience in various manufacturing processes. Prerequisites: Credit for MECE 2140 and credit/registration in MANE 3364. MECE 2340 may not be taken concurrently.

MANE 3300 Computer-Aided Design
Curve and surface definition, geometric transformation and solid modeling, projections and visualization and numerical analysis. Prerequisites: Either MANE 1204 or MECE 1221.

MANE 3302 Computer-Aided Manufacturing
Programmable logic controllers, sensors, robotics, computer control of manufacturing processes and integration. Prerequisites: Credit/registration in MANE 3364.

MANE 3337 Engineering Economics
Application of economics and decision theory to engineering alternatives in planning, developing, constructing and managing engineering projects. Discounted cash flow mechanics, economic analysis, management of money and economic decisions including inflation and utility theory. Prerequisites: Credit/registration in MANE 2332.

MANE 3340 Fundamentals of Industrial Engineering
Introduction to economics analysis, industrial and project management, ergonomics, human factors, work recording techniques, time and motion study and line balancing. Prerequisites:
Credit/registration in MANE 2332.
MANE 3351 Manufacturing Engineering Analysis
Topics include linear algebra, numerical methods and programming with engineering analysis software. Prerequisites: MATH 2414 (or MATH 2488) and CSCI 1380 (or CSCI 1387).

MANE 3364 Manufacturing Processes
An introduction to manufacturing processes for metals, including metal cutting, nontraditional machining, force analysis, casting, deformation and joining processes, and the manufacturing processes for plastics, composites, and ceramics. Prerequisites: Course or Test: MECE 2140. May not be taken concurrently. AND Course or Test: MECE 2340. May not be taken concurrently.

MANE 3437 Thermal and Fluid Sciences
Topics include the thermodynamic properties of materials, the first and second law of thermodynamics; one dimensional steady state and lumped mass unsteady heat transfer; hydrostatics, conservation of mass, energy and momentum in inviscid fluid flow, and viscous flow in pipes. Prerequisites: Grade of 'C' or better in either MANE 2403, or MECE 2301, and credit/registration in MATH 3349.

MANE 4173 Product Design and Mass Customization
Students will participate in international engineering design projects emphasizing principles of teamwork, communication and collaboration. They will investigate strategies to improve competitiveness of manufacturing In a global economy. Prerequisites: MANE 3337.

MANE 4311 Quality Control
Study of statistical methods applied to the assurance of product quality. Foundational principles developed by Juran, Deming and others will be applied. Sampling techniques and control charts will be applied. Concepts of statistical process control will be emphasized throughout. Design of experiments and Taguchi-type methodologies will be introduced. Prerequisites: MANE 2332.

MANE 4321 Automation Systems
Modeling of mechanical, thermal, fluid, electrical and electromechanical systems; time response analysis, block diagram and signal flow representation; stability analysis and design of compensators. Prerequisites: Credit for or enrollment in MATH 3349.

MANE 4331 Manufacturing Planning and Control
A capstone course covering the principles of manufacturing process and plant design and control emphasizing the interrelationship between product design, process design and the firm's operating plan. Computer models will be used extensively. Prerequisites: Credit/registration in MANE 4340.

MANE 4333 Topics in Manufacturing Engineering
Topics selected from current issues of concern in manufacturing industries. May be repeated for credit when topics change. Prerequisites: Consent of instructor.

MANE 4340 Operations Research
An introduction to basic concepts in mathematical modeling, stochastic processes, linear programming and optimization. Applications include inventory system and control, plant location and network analysis. Prerequisites: MANE 3351.

MANE 4352 Manufacturing Simulation
This course develops skills in applying discrete computer simulation and modeling techniques for facility layout design and production planning. Topics include data collection, input analysis, distribution fitting, model development, verification and output analysis. Prerequisites: Grade of 'C' or better in MANE 2332.

MANE 4361 Senior Design I
This course is a preparation for a capstone design experience drawing from all previous coursework, and involves problem definition, assumptions, methods of analysis, testing, and reporting of results. Classroom discussions will consider professional responsibility, technology and society, entrepreneurship, team building and lifelong learning. The project to be undertaken In the Senior Design II class will be selected. Prerequisites: (MANE 3337 and credit/registration in MECE 3321) or (Grade of 'C' or better in MECE 3304 and MECE 3320, and credit/registration in MECE 3380, MECE 3360 and MECE 4350).

MANE 4362 Senior Design II
This course is a continuation of ENGR 4361. Students will conduct a comprehensive engineering design of a project related to their major and report on the results. Synthesis using past coursework and outside reference material will be expected. Periodic progress reports and final oral and written reports will be required. Prerequisites: MANE 4361.

MANE 4365 Tool Design
Tool making, tool materials, cutting tools, locating and clamping, jigs and fixtures. Prerequisites: MANE 3300.

## Mechanical Engineering

MECE 1101 Introduction to Mechanical Engineering Introduction to mechanical engineering as a career, the requirements for registration as a professional engineer and the fields of specialization within mechanical engineering. Approaches to engineering problem solving and the graphical presentation of data. Introduction to the main software packages used in engineering. Engineering design stages and implementation within design teams.

MECE 1221 Engineering Graphics
This course provides an introduction to computer-aided drafting techniques. Topics include methods of graphical communication, two- and three-dimensional drawing presentation, working drawing, data analysis, design synthesis and production methods.

MECE 2140 Engineering Materials Laboratory
This lab is an introduction to the characterization of crystallographic and microstructural properties of solids and the relationship of these characteristics to the mechanical behavior of metallic, polymeric, and composite materials. Course focus is on the use of industrial and research grade instrumentation to solve realistic problems in materials selection and materials engineering. Prerequisites: A grade of 'C' or better in CHEM 1307 and CHEM 1107 or CHEM 1311 and CHEM 1111, and credit/registration in MECE 2340.

MECE 2301 Statics
The study of forces, moments, friction, centers of mass, gravity and pressure using the equations of equilibrium in vector algebraic and calculus forms. Prerequisites: A grade of 'C' or better in MECE 1101 and PHYS 2425, and credit/registration in MATH 2414 (or MATH 2488).

MECE 2302 Dynamics
Kinematics, dynamics, work-energy and impulse-momentum methods applied to engineering problems involving particles and rigid bodies. Prerequisites: A grade of 'C' or better in MECE 2301 and MATH 2414 (or MATH 2488).

MECE 2335 Thermodynamics I
Classical thermodynamics with primary emphasis on application of the first and second laws of thermal systems. Introduction to physical and chemical equilibria. Prerequisites: A grade of 'C' or better in CHEM 1307 or CHEM 1311, MATH 2414 (or MATH 2488) and PHYS 2425.

MECE 2340 Engineering Materials
An introduction to the atomic crystallographic and microstructural characteristics of solids and the relationship of these characteristics to the engineering properties and behavior of metallic, polymeric, and composite materials. Course focus is on engineering applications of materials science and includes an introduction to fracture mechanics, corrosion, and composite micromechanics. Prerequisites: A grade of 'C' or better in CHEM 1307 and CHEM 1107 or CHEM 1311 and CHEM 1111, and credit/registration in MECE 2140.

MECE 2350 Numerical Methods for Engineers
This course offers students an in-depth exposure to the use of numerical methods and programming to solve engineering problems in addition to teaching them the basics of probability theory and statistics in engineering. It covers the following topics: basic programming (including data structure, if-then-else statements, loops, etc.), numerical solutions to linear and nonlinear equations, optimization, curve fitting, numerical calculus, and statistics. The course content assumes only an introductory previous exposure to engineering concepts and focuses on exposing students to the programming skills commonly used in later engineering courses to solve problems numerically. Prerequisites: Credit/registration in MATH 2414 (or MATH 2488).

MECE 3100 Undergraduate Research
This course is adapted to technological research with an emphasis in mechanical engineering. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. The topic of research is chosen by the student with the approval of the instructor prior to registration. This course may be repeated for credit up to three times. Prerequisites: Engineering major and consent of faculty advisor.

MECE 3115 Fluid Mechanics Laboratory
Introduction to basic fluid mechanics instrumentation, computerized data acquisition and analysis. Experimental verification and reinforcement of analytical concepts introduced in MECE 3315. Prerequisites: Credit/registration in MECE 3315.

MECE 3160 Heat Transfer Laboratory
Measurements in basic heat transfer design and heat exchangers; computerized data acquisition and analysis, experimental verification on the theoretical and semiempirical results developed in MECE 3360. Prerequisites: Credit/registration in MECE 3360.

MECE 3300 Mechanical Engineering Coop/Internship
Internship/Co-Op In Mechanical Engineering. Prerequisites: Mechanical Engineering Major.
MECE 3304 System Dynamics
The course covers lumped-parameter modeling of mechanical, electrical, fluid and thermal systems. An energetic approach based on bond graph techniques, invented in 1959 by Henry M. Paytner, is introduced. Primary focus is on analysis of linear first- and second-order systems with some exposure to analysis of higher-order systems. Transient and steady-state responses are examined. Time and frequency-domain analysis methods are covered. Advanced topics include state-space modeling and feedback control of dynamic systems. Prerequisites: A grade of 'C' or better in MECE 2302 and MECE 3450.

MECE 3315 Fluid Mechanics
Laws and theory relative to incompressible fluids, continuity, momentum and energy relations; internal and external flow in laminar and turbulent regimes; design of piping systems and aircraft parameters. Prerequisites: A grade of 'C' or better in MECE 2335, MATH 2415 or MECE 3449, and MATH 3349 or MECE 3450.

MECE 3320 Measurements and Instrumentation
Fundamentals of measurement systems are covered including; standards, treatment of data, statistics, uncertainty analysis, data acquisition, transducers, strain, force, acceleration, pressure, temperature, and fluid flow. Prerequisites: A grade of 'C' or better in ELEE 2317, MANE 2332, and MECE 3450.

MECE 3321 Mechanics of Solids
This course covers internal forces and deformation in solids, concepts of stress and strain, formulas for stress and deflection for elastic bars, shafts, and beams, stress and strain transformation and theories of failure. Prerequisites: A grade of C or better in MATH 2414 (or MATH 2488) and MECE 2301 or MANE 2403.

MECE 3336 Thermodynamics II
Gas and two-phase power and refrigeration cycles, gas mixtures, chemical reactions, chemical equilibrium. The basic laws and concepts of thermodynamics are viewed as their use is encountered in the course. Prerequisites: A grade of 'C' or better in MECE 2335.

MECE 3360 Heat Transfer
Steady and unsteady one- and two-dimensional heat conduction. Forced and free convection, radiation and heat exchangers. Prerequisites: A grade of 'C' or better in MECE 3315.

MECE 3380 Kinematics and Dynamics of Machines
Kinematic and dynamic modeling and analysis of mechanisms and machines; study of machine components such as linkages, cams, gears, gear trains, and differentials. Prerequisites: A grade of 'C' or better in MECE 1221 and MECE 2302.

MECE 3385 Mechanical Vibrations
Undamped and damped, free and forced vibrations of single degree of freedom systems with design applications to base excitation, unbalance, rotating shafts, isolation and absorption; multi-degree of freedom systems, continuous systems; transient response; numerical techniques used to analyze alternate designs and propose optimum solutions. Prerequisites: A grade of 'C' or better in MECE 2302 and MATH 3349 or MECE 3450.

MECE 3449 Mechanical Engineering Analysis I
The course offers engineering students an in-depth look into the following topics: linear algebra including matrices, vectors, determinants, linear systems and matrix eigenvalue problems; vector differential calculus and vector integral calculus including integral theorems; complex numbers and functions including complex integration; power series and Taylor series; numeric linear algebra; and probability and statistics. Prerequisites: A grade of 'C' or better in MATH 2414 (or MATH 2488) and credit/registration in MECE 2450.

MECE 3450 Mechanical Engineering Analysis I
The course offers engineering students an in-depth look into the following topics: first-order ODEs, second-order linear ODEs, higher-order ODEs and systems of ODEs; series solutions of ODEs and special functions; Laplace transforms; Fourier series, integrals and transforms; partial differential equations (PDEs); and numeric for ODEs and PDEs. Prerequisites: A grade of 'C' or better in MECE 2450 and MECE 3449.

MECE 4101 Fundamentals of Engineering
This course is a review of major engineering topics to prepare students for the Fundamentals of Engineering (FE) exam. Assignments are given to each topic covered, and students are required to take a practice exam. Prerequisites: Junior standing in engineering and within two semesters of graduation.

MECE 4304 Automatic Control Systems
Classical control methods for linear-time-invariant systems are investigated including lead-lag, PID and state-feedback controllers. Time- and frequency-domain methods including transfer functions, stability analysis, time and frequency response, root locus and Bode plots are used to design and analyze automatic controllers for mechanical systems. The course also includes an introduction to modern control theory. Prerequisites: A grade of 'C' or better in MECE 3304.

MECE 4305 Vehicle Systems Modeling and Control
This course teaches the essentials of modeling and control principles needed to enable students to apply basic mathematics and physics concepts to derive models for numerical simulation of ground vehicle systems and to virtually prototype automatic controls for automotive applications.
Prerequisites: A grade of 'C' or better in MECE 3304.
MECE 4315 Compressible Fluid Flow
Analysis of the flow of compressible fluids by means of the momentum equation, continuity equation and the laws of thermodynamics and some application of thermodynamic laws to incompressible fluids. Prerequisites: A grade of 'C' or better in MECE 3315.

MECE 4316 Introduction to Acoustics
Course is designed to develop an understanding of the fundamentals of acoustics, such as traveling waves in one-and two-dimensions, the derivation and nature of the fundamental fluid acoustic equations, the phenomena associated with reflection, transmission, radiation, reception, absorption and attenuation of sound, and the phenomena associated with cavities and waveguides, including sound propagation in pipes, resonators and filters. Prerequisites: A grade of 'C' or better in MECE 3315.

MECE 4317 Introduction to Corrosion
The course will introduce students to the basic principles behind the corrosion of metals, the results of corrosive action and the methods for corrosion prevention, control and experimentation. The fundamentals of thermodynamics and electrochemistry will be used to describe destructive chemical interactions of materials with their environment. The effects of various types of corrosion will be presented and the importance of corrosion problems will be addressed in relation to material cost, reliability, reduced performance and impact on the environment. Examples of corrosion in water, soils, and in various atmospheres will be used to introduce the prevention techniques and control measures such as alloy selection, cathodic protection, protective coatings and inhibitors. Prerequisites: A grade of 'C' or better in MECE 2340.

MECE 4320 Introduction to Mechatronics
This course will introduce students to the analysis, design and implementation of mechatronics systems. Mechatronics is an interdisciplinary engineering area that comprises the integration of mechanical engineering, electronics, control systems and computer science, which together contribute to design smart products and processes. Different topics in mechatronics, such as DC motors, stepper motors, H-bridges, PIC microcontrollers and others will be covered in class and complementary experiments will be performed in the laboratory. Prerequisites: A grade of ' C ' or better in ELEE 3307.

MECE 4322 Introduction to Finite Elements
This course is an introduction to finite element theory, and truss, beam and plate element formulation for linear static analysis. Application of boundary conditions, element convergence, isoparametric formulation and gauss quadrature are also examined. This course is design oriented, with a substantial component involving the use of a commercial software package. Prerequisites: A grade of 'C' or better in MECE 3321 and MATH 3349 or MECE 3450.

MECE 4323 Introduction to Combustion Engineering
The topics covered in this course include: role of combustion in energy, environment and fire problems, thermodynamics of combustion (thermochemistry), fuels (gas, liquid, and solid), chemical kinetics, combustion of gaseous and vaporized fuels (flames), pollutant emissions, and modern measurements. Prerequisites: A grade of 'C' or better in MECE 3315.

MECE 4324 Thermal Systems Design and Optimization
This course combines the fundamental theories of thermodynamics, fluid mechanics, and heat transfer to model various thermal-fluid and energy systems, with a particular focus on design optimization. Topics covered by the course are: component selection under system performance requirements; computational modeling; system simulation; optimization techniques; and investment economics and statistical combinations of operating conditions. Prerequisites: Credit/registration in MECE 3360.

MECE 4325 Composite Material Design
An introduction to the theory of mechanics of solids for elastic and viscoelastic composite materials. Emphasis on analysis and design of structural laminate composite including failure mechanism, e.g., fatigue, delamination and dynamics of composites including effective moduli and material damping. Prerequisites: A grade of 'C' or better in MECE 2340 and MECE 3321.

MECE 4326 Introduction to Ceramics Engineering
An introduction to the science and engineering of ceramic materials. Basic chemistry, structure and properties of engineering ceramics are covered. The unique, probability based, design rules for engineering with these brittle materials are a special focus. Extensive time is devoted to special topics including electronic ceramics, distinctives of ceramic applications and bioceramics. Prerequisites: A grade of 'C' or better in MECE 2340 and MECE 3321.

MECE 4327 Intermediate Materials Engineering
The course explores advanced topics in materials science and engineering. Coverage includes ceramic materials, electronic and electrical properties of materials and the newest nanoscale materials. Prerequisites: A grade of 'C' or better in MECE 2340 and MECE 3321.

MECE 4328 Polymer Engineering
Introductory course designed to provide engineering students with a polymer materials science background that will enable them to design polymer components. Prerequisites: A grade of ' C ' or better in MECE 2340.

MECE 4329 Introduction to Nanotechnology
Course designed to introduce nanotechnology and nanoscience as well as to study the wide variety of technologies and potential applications that fall under the nanotech umbrella. This course provides an opportunity for the students to foster creative thinking given the vast potential in the area. Prerequisites: A grade of 'C' or better in MECE 2340.

MECE 4330 Introduction to Physical Metallurgy
Structure, properties, and selection of alloys; Significance of heat treatments and the effect on mechanical and other properties of materials; steel, phase transformation in steel (equilibrium, nonequilibrium), heat treatment of steel; Surface hardening: Aluminum alloys (heat treatable and nonheat treatable), Titanium, Magnesium, Zinc, Copper Alloys. Prerequisites: A grade of ' $C$ ' or better in MECE 2340 and PHYS 2426.

MECE 4333 Topics in Mechanical Engineering
Intermediate topics in the Mechanical Engineering disciplines will be presented. The topics will be changed by demand. Prerequisites: Junior standing in engineering or consent of Instructor.

MECE 4350 Machine Elements
Stress and deflection analysis, failure theories, design of machine elements for static and fatigue strength, design of welded and bonded connections and computer modeling applications. Prerequisites: A grade of 'C' or better in MECE 2302, MECE 2340, and MECE 3321.

MECE 4360 Solar Energy
Fundamentals of solar energy system modeling, analysis, design and testing. Solar radiation, design and analysis of low and high temperature applications, passive and active solar thermal engineering, solar properties of materials, design of solar collectors, experimental testing of collector performance, energy storage systems. Prerequisites: A grade of 'C' or better in ELEE 2317 and credit/registration in MECE 3360.

MECE 4361 Senior Design Project I
This course is a preparation for a capstone design experience drawing from all previous coursework and involves engineering analysis methods, problem definition, assumptions and testing and reporting results. Classroom discussions will consider professional responsibility, ethics, technology and society, team building and lifelong learning. The project to be undertaken in Senior Design Project II (MECE 4362) will be selected, and a final design concept generated. The laboratory associated with this course will involve implementation of design methodologies and engineering science into a realworld design. Periodic progress reports and final oral and written reports will be required. Students may not receive credit for both MECE 4361 and MANE 4361. Prerequisites: A grade of 'C' or better in MECE 3304 and credit/registration in MECE 3315, MECE 3320, MECE 3360, MECE 3380, and MECE 4350.

MECE 4362 Senior Design Project II
This course is a continuation of MECE 4361. Students will have the opportunity to conduct a comprehensive engineering design of the concept generated in MECE 4361 and report on the results. Synthesis using past coursework and outside reference material will be expected. Periodic progress reports and final oral and written reports will be required. Student may not receive credit for both MECE 4362 and MANE 4362. Prerequisites: A grade of 'C' or better in MECE 4361.

MECE 4365 Heating, Air Conditioning, and Refrigeration Design
Heating, ventilation and air conditioning of buildings for human comfort or industrial processes; design selection, construction equipment and refrigeration systems. Prerequisites: Credit/registration in MECE 3360.

MECE 4380 Introduction to Computational Biomechanics
This course is designed to provide an introduction to the anatomy and functional anatomy of the human upper and lower extremities. The material is covered in a modular, challenge-based format in which the investigation of the musculoskeletal mechanics of the various joints comprising the upper and lower extremities follows a specific sequence of learning activities designed to answer a challenge(s) concerning the joint(s). Challenges include: What strength is required to hold the iron cross position in gymnastics? How do your leg muscles activate when you walk? How high can you jump? Can you tear your ACL in a voluntary knee extension exercise? Prerequisites: A grade of 'C' or better in MECE 2302.

MECE 4381 Experimental Orthopaedic Biomechanics
This course covers the following topics on musculoskeletal system: statics, dynamics, kinematics data and processing, anthropometry, kinetics (forces and moments), mechanical work, energy and power, synthesis of human movement forward solutions, three-dimensional kinematics and kinetics, muscle mechanics, kinesiological electromyography, utilization of computational packages in orthopedic biomechanics to include finite element analysis. Labs for investigating muscle activity, ground reaction forces, and kinematic data for tasks such as walking, squatting, and running are included in the course. Prerequisites: A grade of 'C' or better in MECE 2302 and MECE 3450.

MECE 4382 Introduction to Nonlinear Dynamics
This course is an introduction to nonlinear dynamics and stresses analytical methods, examples and geometric intuition. The course covers the following topics: mechanical engineering systems described by differential equations and their bifurcations, phase plane analysis, limit cycles and their bifurcations, Lorenz equations, chaos, iterated maps, period doubling, renormalization, fractals, and strange attractors. The course has an emphasis on engineering applications. Some of these applications include mechanical vibrations, lasers, superconducting circuits, chemical oscillators, and chaotic waterwheels. Software packages such as MATLAB are used for numerical simulations of mechanical engineering applications related to nonlinear dynamics and chaos. Prerequisites: A grade of 'C' or better in MECE 2302 and MECE 3450.

MECE 4383 Introduction to Micro and Nano Structures
This course is an introduction to micro/nano structures (MNS) and covers the following topics: nanoand micro- engineering; current developments and needs; MN systems, structures and devices; classification and scaling laws; fundamentals of microfabrication, synthesis of MNS; micro- and nanoelectromechanical systems; quantum mechanics; carbon nano-tubes (CNTs); dynamics and control of MNS; analysis, design and fabrication of MNS for certain engineering applications. Software packages such as MATLAB are used for numerical simulations of mechanical engineering MNS applications. Prerequisites: A grade of 'C' or better in MECE 2302 and MECE 3450.

# COLLEGE OF FINE ARTS (COFA) 

## School of Art

Mr. Alberto Kernz<br>Administrative Assistant II, School of Art Location: VABL 1.201 (UTRGV Edinburg Campus)<br>Phone: 956-665-7030<br>Fax: 956-665-5072<br>Email: alberto.kernz@utrgv.edu

## BACHELOR OF FINE ARTS (BFA)

## WITH A MAJOR IN

ART
(FOCUS IN GRAPHIC DESIGN)

A Bachelor of Fine Arts with Graphic Design Concentration at UTRGV prepares students for serious professional work in the field. The curriculum emphasizes concept development and application, work with clients and professional development, including the establishment of a working portfolio. Students who graduate from the program are equipped for a broad range of practices in the design field. Our alumni have worked in a number of design-related areas such as interactive design, art direction, publication design, including print and advertising, multimedia and web design, motion graphics, photography and social service design in a variety of settings, including small boutique design studios, multi-national advertising agencies, and start-up consultancies. UTRGV Graphic Design alumni follow a wide range of individual paths, including running their own design studios, working for large corporations or specializing in web and interactive media. Some students also choose to earn a master's degree in the field or pursue other professional degrees, opening many possible horizons.

## STUDENT LEARNING OUTCOMES:

1. Students will identify the chronology and the impact of the major periods of the differing aesthetic movements, styles, periods and concerns of design history broadly and graphic design history more specifically.
2. The students' work will exhibit a high level of craftsmanship and creative activity.
3. Students will show the ability to conduct advanced problem solving with regard to each stage of their production process.
4. Students will show the ability to critically discuss and defend their field of study and their personal work.
5. Students shall demonstrate a serious work ethic as well as the ability to incorporate constructive critical feedback.
6. For the capstone course ARTS 4396, the concepts and intentions behind the students' work will be convincingly manifest in the final product, piece or installation, including a grammatically and semantically articulate artist's statement in English that is not general but instead specific to the motivations and steps taken to arrive at the exhibited display.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.
Required
Creative Arts - 3 hours
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II

## B - MAJOR REQUIREMENTS - 78 HOURS (48 advanced)

1 - Graphic Design Core - 75 hours (48 advanced)
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II
ARTS 1311 Design I
ARTS 1312 Design II
ARTS 1316 Drawing I
ARTS 2363 Typography
ARTS 2313 Design Communications I
ARTS 2314 Design Communications II
ARTS 2316 Painting I
ARTS 2333 Printmaking I
ARTS 3330 Image and Illustration
ARTS 3331 Visual Communications
ARTS 3333 Design and Production
ARTS 3334 Photography as an Art Form
ARTS 3335 Internship/Co-op for Graphic Design Majors
ARTS 3337 Type Design
ARTS 3338 Ideas and Styles
ARTS 3354 History of Graphic Design
ARTS 3396 Contemporary Art
ARTS 4333 Graphic Design I
ARTS 4334 Graphic Design II
Choose one:
ARTS 4336 Multimedia Production and Design ARTS 4388 Special Topics in Studio Art
ARTS 4337 Digital Photography
ARTS 4338 Interactive Design
ARTS 4339 Portfolio for Graphic Design
ARTS 4396 Bachelor of Fine Arts Senior Graphic Design Exhibit (Capstone)
2 - Advanced Art History Elective - $\mathbf{3}$ hours (3 advanced)
Choose from:
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
ARTS 3351 Andean Pre-Hispanic Art and Architecture
ARTS 3352 Art and Architecture of Asia, Africa and Oceania
ARTS 3353 Italian Renaissance Art, 1415-1595

ARTS 3355 History of Spanish Architecture, 711 to 1780 A.D.
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 3357 South American Viceregal Art and Architecture
ARTS 3358 Nineteenth-Century European Art History
ARTS 3359 History of Women in Art
ARTS 4350 Modern Art History
ARTS 4351 American Art
ARTS 4352 Latin American Art and Architecture
ARTS 4353 History of Photography
ARTS 4354 Modern Mexican Art, 1785-1940
ARTS 4355 Modern Mexican Art Since 1940
ARTS 4356 Modern Art of South America and the Caribbean
ARTS 4357 Latin@ Art History
ARTS 4358 Research Methods in Latin American Art and Architectural History ARTS 4359 Seminar on Topics in Art History

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 51 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

A grade of 'C' or better in ARTS 2313, ARTS 3335 and ARTS 4333 before admission to the second courses in these sequences, ARTS 2314, ARTS 3336 and ARTS 4334.

## Graduation requirements

1. Native GPA of at least 2.0 and a grade of 'C' or better in ARTS 4396.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

BACHELOR OF ARTS (BA) WITH A MAJOR IN

ART
(FOCUS IN LATIN AMERICAN HISTORY)

This Bachelor of Arts degree in Art will provide students with hemispheric knowledge and independent critical judgment of the key Pre-Columbian, Viceregal and modern stylistic, historic and cultural stylistic developments in Latin American and Latin@ Art and Architectural History. It will prepare them for careers in museums, museum studies, curatorial work, monument management and protection, art or architectural criticism, appraisal, restoration and preservation, gallery management, teaching and fashion and post-graduate studies in art and architectural history.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate advanced knowledge of the major Latin American artists, schools of art, stylistic trends, and artistic and architectural movements.
2. Students will demonstrate advanced understanding of the socio-historical, ethnic and gender contexts behind the creation of Latin American artistic and architectural masterpieces.
3. Students will demonstrate advanced English language skills by giving a convincing and authoritative spoken academic seminar presentation on a topic in Latin American art and architecture of at least $\mathbf{2 0}$ minutes in length.
4. Students will demonstrate independent critical judgment with a scholarly written paper of at least ten pages of written double-spaced text in length that convincingly interprets bodies of works of Latin American art and/or architecture by using methodical professional stylistic and contextual analysis. This paper must also prove advanced, articulate English language writing and persuasive skills.
5. Students will contribute new personal insights and discoveries to the critical discourse on Latin American art and architecture.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Creative Arts - 3 hours
Choose one:

B - MAJOR REQUIREMENTS - 60 HOURS (45 advanced)
1 - Art Core - 21 hours (12 advanced)
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II
ARTS 1311 Design I
ARTS 1316 Drawing I
ARTS 3396 Contemporary Art
ARTS 4337 Digital Photography
ARTS 4358 Research Methods in Latin American Art and Architectural History ARTS 4359 Seminar on Topics in Art History
2 - Media Area Electives - 6 hours
Choose from:
ARTS 1312 Design II
ARTS 1317 Drawing II
ARTS 2313 Design Communications I
ARTS 2314 Design Communications II
ARTS 2316 Painting I
ARTS 2317 Painting II
ARTS 2326 Sculpture I
ARTS 2327 Sculpture II
ARTS 2333 Printmaking I

ARTS 2334 Printmaking II
ARTS 2341 Beginning Jewelry/Metalworking
ARTS 2346 Ceramics I
ARTS 2347 Ceramics II
ARTS 2348 Digital Media
ARTS 2356 Photography I
ARTS 2357 Photography II
ARTS 2361 Computer Imaging I
ARTS 2362 Computer Imaging II
3 - Advanced Latin American Art and Architectural History Electives - $\mathbf{2 7}$ hours (27 advanced)

Choose from:
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
ARTS 3351 Andean Pre-Hispanic Art and Architecture
ARTS 3352 Art and Architecture of Asia, Africa, and Oceania
ARTS 3355 History of Spanish Architecture, 711 to 1780 A.D.
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 3357 South American Viceregal Art and Architecture
ARTS 4353 History of Photography
ARTS 4354 Modern Mexican Art, 1785-1940
ARTS 4355 Modern Mexican Art Since 1940
ARTS 4356 Modern Art of South America and the Caribbean
ARTS 4357 Latin@ Art History
ARTS 4359 Seminar on Topics in Art History*

* May be repeated once for a total of 6 hours if the two topics are substantively different.
4 - Advanced Art or Free Electives - 6 hours ( 6 advanced)
C - MINOR - 18 HOURS ( 6 advanced)
TOTAL CREDIT HOURS FOR GRADUATION - $\mathbf{1 2 0}$ HOURS
TOTAL ADVANCED HOURS - 51 HOURS
ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:


## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF FINE ARTS (BFA) <br> WITH A MAJOR IN <br> ART <br> (FOCUS IN STUDIO ART) 

A Bachelor of Fine Arts with Studio Art Concentration will provide students with an opportunity to express themselves using a variety of creative disciplines and methods within the visual arts and prepare them for such fields as Museum Studies, Gallery Management, Teaching, Studio Artist, Art Therapy, Fashion, Marketing, and Graduate Studies in Architecture.

## STUDENT LEARNING OUTCOMES:

1. Knowledge of appropriate historical and contemporary artists and issues.
2. Visual communication skills of the materials, equipment, and processes relevant to their major.
3. Critical and creative/generative thinking skills.
4. Verbal and written communication skills.
5. Ability to generate a cohesive body of art products and an overall capability to succeed.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

B - MAJOR REQUIREMENTS - Required
Creative Arts - 3 hours
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II
B - MAJOR REQUIREMENTS - 78 HOURS (48 advanced)
1 - Art Core - 24 hours (9 advanced)
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II
ARTS 1311 Design I
ARTS 1312 Design II
ARTS 1316 Drawing I
ARTS 1317 Drawing II
ARTS 3311 Intermediate Drawing
ARTS 4340 Portfolio for Studio Art
ARTS 4397 Bachelor of Fine Arts Exhibit Studio Art (Capstone)
2 - Studio Art Electives - 15 hours
Choose from:
ARTS 2316 Painting I
ARTS 2326 Sculpture I
ARTS 2333 Printmaking I
ARTS 2341 Beginning Jewelry/Metalworking
ARTS 2346 Ceramics I

ARTS 2348 Digital Media
3 - Advanced Art History Electives - 9 hours (9 advanced)
Choose from:
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
ARTS 3351 Andean Pre-Hispanic Art and Architecture ARTS 3352 Art and Architecture of Asia, Africa and Oceania ARTS 3353 Italian Renaissance Art, 1415-1595
ARTS 3354 History of Graphic Design
ARTS 3355 History of Spanish Architecture, 711 to 1780 A.D.
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 3357 South American Viceregal Art and Architecture
ARTS 3358 Nineteenth-Century European Art History
ARTS 3359 History of Women in Art
ARTS 4350 Modern Art History
ARTS 4351 American Art
ARTS 4352 Latin American Art and Architecture
ARTS 4353 History of Photography
ARTS 4354 Modern Mexican Art, 1785-1940
ARTS 4355 Modern Mexican Art Since 1940
ARTS 4356 Modern Art of South America and the Caribbean ARTS 4357 Latin@ Art History
ARTS 4358 Research Methods in Latin American Art and Architectural History ARTS 4359 Seminar on Topics in Art History
4 - Advanced Studio Art Electives - $\mathbf{2 7}$ hours (27 advanced) Choose from:

ARTS 3303 Intermediate Jewelry/Metalworking
ARTS 3311 Intermediate Drawing
ARTS 3321 Intermediate Painting
ARTS 3330 Image and Illustration
ARTS 3332 Digital Image
ARTS 3334 Photography as an Art Form
ARTS 3339 Professional Photographic Documentation
ARTS 3340 Foundry Studies in Sculpture
ARTS 3341 Intermediate Sculpture
ARTS 3342 Introduction to Installation and Performance Art Concepts
ARTS 3361 Intermediate Printmaking
ARTS 3371 Intermediate Ceramics
ARTS 4303 Advanced Jewelry/Metalworking
ARTS 4311 Advanced Drawing
ARTS 4321 Advanced Painting
ARTS 4331 Advanced Computer Imaging
ARTS 4337 Digital Photography
ARTS 4341 Advanced Sculpture
ARTS 4361 Advanced Printmaking
ARTS 4371 Advanced Ceramics
ARTS 4388 Special Topics in Studio Art
ARTS 4391 Individual Problems/Internship/Co-op
ARTS 4392 Individual Problems

ARTS 4393 2-D Experimental Art
ARTS 4394 3-D Experimental Art
5 - Advanced Art or Free Elective - 3 hours (3 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

TOTAL ADVANCED HOURS - 48 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

A grade of ' $C$ ' or better will be the prerequisite grade for continuing studio art courses in the sequence of the particular artistic medium in question.

## Graduation requirements

1. Native GPA of at least 2.0 and a grade of 'C' or better in ARTS 4397.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

BACHELOR OF ARTS (BA)
WITH A MAJOR IN
ART
(FOCUS IN VISUAL ART)

A Bachelor of Arts in Art will provide students with an opportunity to express themselves using a variety of creative disciplines and methods within the visual arts and prepare them for such fields as Museum Studies, Gallery Management, Teaching, Studio Artist, Graphic Design, Product Design, Art Therapy, Graduate Studies in Architecture, Fashion and Marketing.

## STUDENT LEARNING OUTCOMES:

1. Students will be able to discriminate and discuss the art of differing aesthetic movements, styles, periods and concerns.
2. The students' work will exhibit both a high "quality of production" and "creativity."
3. The students' work will exhibit a high level of craftsmanship and creative activity.
4. Students will show the ability to conduct advanced problem solving with regard to each stage of their production process.
5. Students will demonstrate the appropriate mastery of their medium of choice.
6. Students will show the ability to critically discuss and defend their field of study and their personal work.
7. The students' work shall demonstrate beyond doubt the development of a personal aesthetic and line of inquiry.
8. Students shall demonstrate a serious work ethic as well as the ability to incorporate constructive critical feedback.
9. For the capstone course ARTS 4395 BA Senior Exhibit, the concepts and intentions behind the students' work will be convincingly manifest in the final product, piece or installation, including a grammatically and semantically articulate thesis in English that is not general but instead specific to the historical relationship to their historic development and steps taken to arrive at the exhibited works.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Creative Arts - $\mathbf{3}$ hours
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II
B - MAJOR REQUIREMENTS - 78 HOURS (48 advanced)
1 - Core Courses - $\mathbf{1 8}$ hours (3 advanced)
Choose one:
ARTS 1303 Art History I
ARTS 1304 Art History II
ARTS 1311 Design I
ARTS 1317 Drawing II
ARTS 1312 Design II
ARTS 1316 Drawing I
ARTS 4395 Bachelor of Arts Senior Exhibit (Capstone)
2 - Studio Art Electives I-9 hours
Choose from:
ARTS 2316 Painting I
ARTS 2326 Sculpture I
ARTS 2341 Beginning Jewelry/Metalworking
ARTS 2333 Printmaking I
ARTS 2346 Ceramics I
ARTS 2356 Photography I
ARTS 2361 Computer Imaging I
3 - Studio Art Electives II-6 hours
Choose from:
ARTS 2347 Ceramics II
ARTS 2317 Painting II
ARTS 2348 Digital Media
ARTS 2327 Sculpture II
ARTS 2357 Photography II
ARTS 2334 Printmaking II
ARTS 2362 Computer Imaging II
4 - Advanced Art History Electives - $\mathbf{1 2}$ hours (12 advanced)
Choose from:
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
ARTS 3351 Andean Pre-Hispanic Art and Architecture
ARTS 3352 Art and Architecture of Asia, Africa, and Oceania ARTS 3353 Italian Renaissance Art, 1415-1595
ARTS 3354 History of Graphic Design
ARTS 3355 History of Spanish Architecture, 711 to 1780 A.D.
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 3357 South American Viceregal Art and Architecture
ARTS 3358 Nineteenth-Century European Art History
ARTS 3359 History of Women in Art
ARTS 4350 Modern Art History
ARTS 4351 American Art
ARTS 4352 Latin American Art and Architecture
ARTS 4353 History of Photography
ARTS 4354 Modern Mexican Art, 1785-1940
ARTS 4355 Modern Mexican Art Since 1940
ARTS 4356 Modern Art of South America and the Caribbean
ARTS 4357 Latin@ Art History
ARTS 4358 Research Methods in Latin American Art and Architectural History
ARTS 4359 Seminar on Topics in Art History\#
\# Course may be repeated once for a total of six credit hours if the two topics are substantively different.
5 - Advanced Studio Electives - 33 hours (33 advanced)
Choose from:
ARTS 3303 Intermediate Jewelry/Metalworking^
ARTS 3311 Intermediate Drawing^
ARTS 3321 Intermediate Painting^
ARTS 3341 Intermediate Sculpture^
ARTS 3342 Introduction to Installation and Performance Art Concepts
ARTS 3361 Intermediate Printmaking^
ARTS 3371 Intermediate Ceramics^
ARTS 4303 Advanced Jewelry/Metalworking*
ARTS 4311 Advanced Drawing*
ARTS 4321 Advanced Painting*
ARTS 4331 Advanced Computer Imaging*
ARTS 4341 Advanced Sculpture*
ARTS 4361 Advanced Printmaking*
ARTS 4371 Advanced Ceramics*
ARTS 4391 Individual Problems/Internship/Co-op*
ARTS 4392 Individual Problems
ARTS 4393 2-D Experimental Art
ARTS 4394 3-D Experimental Art
$\wedge$ May be repeated twice for a total of 9 hours.

* May be repeated three times for a total of 12 hours.
\# May be repeated once for a total of 6 hours if the two topics are substantively different.


## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

A grade of ' $C$ ' or better will be the prerequisite grade for continuing studio art courses in the sequence of the particular artistic medium in question.

## Graduation requirements

1. Native GPA of at least 2.0 and a grade of 'C' or better in ARTS 4395.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF ARTS (BA) <br> WITH A MAJOR IN <br> ART <br> (EC - 12 TEACHER CERTIFICATION) 

A Bachelor of Arts in Art EC-12 allows students the opportunity to become a certified art teacher, and provides the necessary training in studio technique, curriculum and classroom strategies to go on to a career in arts education. Upon the completion of the degree students will be able to to teach Art in any public school setting EC-12.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate competencies in TExES standards for EC-12 Certification in Art.
2. As measured in the EC-12 capstone course ARTS 4301, the student will achieve no less than $80 \%$ on all of the SLOs for the BFA degree with Studio Art Concentration, which are the following:
3. Students will be able to discriminate and discuss the art of differing aesthetic movements, styles, periods and concerns.
4. The students' work will exhibit both a high "quality of production" and "creativity."
5. The students' work will exhibit a high level of craftsmanship and creative activity.
6. Students will show the ability to conduct advanced problem solving with regard to each stage of their production process.
7. Students will demonstrate the appropriate mastery of their medium of choice.
8. Students will show the ability to critically discuss and defend their field of study and their personal work.
9. The students' work shall demonstrate beyond doubt the development of a personal aesthetic and line of inquiry.
10. Students shall demonstrate a serious work ethic as well as the ability to incorporate constructive critical feedback.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.
Required
Creative Arts - $\mathbf{3}$ hoursChoose one:
ARTS 1303 Art History IARTS 1304 Art History II
B - MAJOR REQUIREMENTS - 54 HOURS (27 advanced)1 - Core Courses - 21 hours (9 advanced)Choose one:
ARTS 1303 Art History IARTS 1304 Art History II
ARTS 1311 Design I
ARTS 1312 Design IIARTS 1316 Drawing IARTS 3381 Art Education: Theory and BackgroundARTS 3382 Art Education: Issues and PracticeARTS 4301 Senior Experience in Art (Capstone)
2 - Studio Art Electives I-9 hours
Choose from:
ARTS 2316 Painting I
ARTS 2326 Sculpture I
ARTS 2341 Beginning Jewelry/Metalworking
ARTS 2333 Printmaking I
ARTS 2346 Ceramics I
ARTS 2356 Photography I
ARTS 2361 Computer Imaging I
3 - Studio Art Electives II-6 hoursChoose from:
ARTS 1317 Drawing II
ARTS 2347 Ceramics II
ARTS 2317 Painting II
ARTS 2348 Digital Media
ARTS 2327 Sculpture II
ARTS 2357 Photography II
ARTS 2334 Printmaking II
ARTS 2362 Computer Imaging II
4 - Advanced Art History Electives - 3 hours (3 advanced)Choose from:
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
ARTS 3351 Andean Pre-Hispanic Art and Architecture
ARTS 3352 Art and Architecture of Asia, Africa and Oceania
ARTS 3353 Italian Renaissance Art, 1415-1595
ARTS 3354 History of Graphic Design
ARTS 3355 History of Spanish Architecture 711 to 1780 A.D.
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 3357 South American Viceregal Art and Architecture
ARTS 3358 Nineteenth-Century European Art History

> ARTS 3359 History of Women in Art ARTS 4350 Modern Art History
> ARTS 4351 American Art
> ARTS 4352 Latin American Art and Architecture
> ARTS 4353 History of Photography
> ARTS 4354 Modern Mexican Art, 1785-1940
> ARTS 4355 Modern Mexican Art Since 1940
> ARTS 4356 Modern Art of South America and the Caribbean
> ARTS 4357 Latin@ Art History
> ARTS 4358 Research Methods in Latin American Art and Architectural History
> ARTS 4359 Seminar on Topics in Art History \#
> 5 - Advanced Studio Art Electives - 15 hours (15 advanced) Choose from:
> ARTS 3303 Intermediate Jewelry/Metalworking ^
> ARTS 3311 Intermediate Drawing ^
> ARTS 3321 Intermediate Painting ^
> ARTS 3334 Photography as an Art Form*
> ARTS 3341 Intermediate Sculpture ^
> ARTS 3361 Intermediate Printmaking ^
> ARTS 3371 Intermediate Ceramics ^
> ARTS 4303 Advanced Jewelry/Metalworking*
> ARTS 4311 Advanced Drawing *
> ARTS 4321 Advanced Painting *
> ARTS 4331 Advanced Computer Imaging *
> ARTS 4341 Advanced Sculpture *
> ARTS 4361 Advanced Printmaking *
> ARTS 4371 Advanced Ceramics *
> ARTS 4391 Individual Problems/Internship/Co-op *
> ARTS 4392 Individual Problems
> ARTS 4393 2-D Experimental Art
> ARTS 4394 3-D Experimental Art
> ${ }^{\wedge}$ May be repeated twice for a total of 9 hours.
> * May be repeated three times for a total of 12 credit hours.
> \# May be repeated once for a total of 6 hours if the two topics are substantively different.

## C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)

Area of Certification: Art (EC-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories and Student Learning
EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management and Assessment to Promote Student Learning ARTS 3383 Art Education: Classroom Strategies
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

## TOTAL CREDIT HOURS FOR GRADUATION - 123 HOURS

 TOTAL ADVANCED HOURS - 51 HOURS
## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

A grade of ' $C$ ' or better will be the prerequisite grade for continuing studio art courses in the sequence of the particular artistic medium in question. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students. Students unable to be admitted to EDUC 4611 will be required to substitute for 3 advanced hours, as recommended by advisor.

## Graduation requirements

1. Native GPA of at least 2.0 and a grade of 'C' or better in ARTS 4301.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## A - MINOR REQUIREMENTS - 18 HOURS (12 advanced)

1-Art History Core-6 hours
ARTS 1303 Art History I
ARTS 1304 Art History II
2 - Advanced Art Electives - 12 hours (12 advanced)
Choose 12 hours of advanced Art History courses, which can include:
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture ARTS 3351 Andean Pre-Hispanic Art and Architecture ARTS 3352 Art and Architecture of Asia, Africa and Oceania ARTS 3353 Italian Renaissance Art, 1415-1595
ARTS 3354 History of Graphic Design
ARTS 3355 History of Spanish Architecture, 711 to 1780 A.D.
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 3357 South American Viceregal Art and Architecture
ARTS 3358 Nineteenth-Century European Art History
ARTS 3359 History of Women in Art
ARTS 4350 Modern Art History
ARTS 4351 American Art
ARTS 4352 Latin American Art and Architecture
ARTS 4353 History of Photography
ARTS 4354 Modern Mexican Art, 1785-1940
ARTS 4355 Modern Mexican Art Since 1940

ARTS 4356 Modern Art of South America and the Caribbean ARTS 4357 Latin@ Art History
ARTS 4358 Research Methods in Latin American Art and Architectural History

MINOR IN
ART

## A - MINOR REQUIREMENTS - 18 HOURS ( 6 advanced)

1-Art Core - 6 hours
ARTS 1311 Design I
ARTS 1316 Drawing I
2-Art Electives-6 hours
Choose from:
ARTS 1312 Design II
ARTS 1317 Drawing II
ARTS 2316 Painting I
ARTS 2317 Painting II
ARTS 2326 Sculpture I
ARTS 2327 Sculpture II
ARTS 2333 Printmaking I
ARTS 2334 Printmaking II
ARTS 2341 Beginning Jewelry/Metalworking
ARTS 2348 Digital Media
ARTS 2346 Ceramics I
ARTS 2347 Ceramics II
ARTS 2356 Photography I
ARTS 2357 Photography II
ARTS 2361 Computer Imaging I
ARTS 2362 Computer Imaging II
3 - Advanced Art Electives - 6 hours ( 6 advanced)
Choose from:
ARTS 3303 Intermediate Jewelry/Metalworking^
ARTS 3311 Intermediate Drawing^
ARTS 3321 Intermediate Painting^
ARTS 3330 Image and Illustration
ARTS 3332 Digital Image
ARTS 3334 Photography as an Art Form*
ARTS 3339 Professional Photographic Documentation
ARTS 3340 Foundry Studies in Sculpture^
ARTS 3341 Intermediate Sculpture^
ARTS 3342 Introduction to Installation and Performance Art Concepts
ARTS 3361 Intermediate Printmaking^
ARTS 3371 Intermediate Ceramics^
ARTS 4303 Advanced Jewelry/Metalworking*
ARTS 4311 Advanced Drawing*

ARTS 4321 Advanced Painting*
ARTS 4331 Advanced Computer Imaging*
ARTS 4337 Digital Photography*
ARTS 4341 Advanced Sculpture*
ARTS 4361 Advanced Printmaking*
ARTS 4371 Advanced Ceramics*
ARTS 4388 Special Topics in Studio Art\#
ARTS 4391 Individual Problems/Internship/Co-op*
ARTS 4392 Individual Problems
ARTS 4393 2-D Experimental Art
ARTS 4394 3-D Experimental Art
$\wedge$ May be repeated twice for a total of 9 hours.

* May be repeated three times for a total of 12 hours.
\# May be repeated once for a total of 6 hours if the topics are substantively different.


## MINOR IN GRAPHIC DESIGN

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)

1-Graphic Design Core - 12 hours
ARTS 1311 Design I
ARTS 2313 Design Communications I
ARTS 2314 Design Communications II
ARTS 2363 Typography
2 - Advanced Graphic Design Electives - 6 hours (6 advanced) Choose from:

ARTS 3331 Visual Communications
ARTS 3333 Design and Production
ARTS 3337 Design Type
ARTS 4333 Graphic Design I
ARTS 4334 Graphic Design II
ARTS 4336 Multimedia Production and Design
ARTS 4338 Interactive Design

## Dance Program

Mr. Francisco Munoz III<br>Academic Program Director, Dance Program Location: HPE 2.115 (UTRGV Edinburg Campus)<br>Phone: 956-665-2230<br>Fax: 956-665-8728<br>Email: francisco.munoz@utrgv.edu

## BACHELOR OF ARTS (BA)

## WITH A MAJOR IN

DANCE

The Dance Program holds entry auditions by appointment and/or through assessment during initial technique classes, which will determine whether there has been adequate progression to continue as a Dance major.

## STUDENT LEARNING OUTCOMES:

1. Has developed competence in a number of dance techniques and developed proficiency in at least one to the performance level.
2. Is able to analyze works of dance perceptively and evaluate them critically. Is able to place works of dance in historical and stylistic context and the cultural milieu in which they were created.
3. Has developed visual, aural, and kinesthetic perceptions.
4. Has developed competency in the choreographic process, production, and presentation of producing works of dance.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture BIOL 2402 Anatomy and Physiology II three-hour lecture

## Creative Arts - 3 hours

Must not be DANC 2323 Dance Appreciation.
Integrative and Experiential Learning - $\mathbf{2}$ hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - MAJOR REQUIREMENTS - 72 HOURS (56 advanced)
1 - Dance Core - 42 hours ( 32 advanced)
DANC 1351 Introduction to Dance
DANC 1202 Dance Improvisation
DANC 2303 Music for Dancers
Choose one:
DANC 2112 Dance Performance: Beginning/Intermediate
DANC 3112 Dance Performance: Intermediate/Advanced
Choose one:
DANC 2112 Dance Performance: Beginning/Intermediate
DANC 3112 Dance Performance: Intermediate/Advanced
DANC 3112 Dance Performance: Intermediate/Advanced
DANC 3112 Dance Performance: Intermediate/Advanced
DANC 3112 Dance Performance: Intermediate/Advanced
DANC 3112 Dance Performance: Intermediate/Advanced

DANC 3301 Choreography I
DANC 3302 Choreography II
DANC 3308 Dance History
DANC 3311 Dance Production
DANC 3312 Dance Philosophy and Criticism
DANC 3313 World Dance
DANC 3320 Dance Science
DANC 3121 Dance Science Lab
DANC 4302 Senior Project (Capstone)
DANC 4309 Dance Theory
2 - Dance Technique - $\mathbf{3 0}$ hours (24 advanced)
Students must complete 30 total technique hours, of which 24 hours must be advanced. Students must choose two techniques and complete a minimum of 12 hours in each (one technique must be either Modern or Ballet). Additionally, students must complete a minimum of 6 hours, at least 2 hours each from the remaining two techniques. Technique areas are listed below:
a - Modern Dance Technique
DANC 2246 Modern Dance I
DANC 2345 Modern Dance I
DANC 3246 Modern Dance II
DANC 3345 Modern Dance II
DANC 4246 Modern Dance III
DANC 4345 Modern Dance III
b - Ballet Techniques
DANC 2242 Ballet I
DANC 2244 Ballet Technique: Pointe I
DANC 2341 Ballet I
DANC 3242 Ballet II
DANC 3244 Ballet Technique: Pointe II
DANC 3341 Ballet II
DANC 4242 Ballet III
DANC 4341 Ballet III
c - Folklorico Techniques
DANC 2250 Folklorico I
DANC 2349 Folklorico I
DANC 3250 Folklorico II
DANC 3349 Folklorico II
DANC 4250 Folklorico III
DANC 4349 Folklorico III
d - Flamenco Techniques
DANC 2254 Flamenco I
DANC 2353 Flamenco I
DANC 3254 Flamenco II
DANC 3353 Flamenco II
DANC 4254 Flamenco III
DANC 4353 Flamenco III

## C - RESTRICTED ELECTIVES - 6 HOURS (6 advanced)

Choose at least 6 advanced hours from courses in the Liberal Arts and/or Fine Arts, excluding DANC hours.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - $\mathbf{6 2}$ HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

## Admission requirements

Official entry into Dance Program is through an interview process at the end of the required course, Music for Dancers (DANC 2303), and a 2.50 core curriculum GPA.
Progression requirements
For all technique Courses, a minimum of one year required at each level and/or faculty approval to advance. Must have a grade of ' $C$ ' or better in all DANC courses.

## Graduation requirements

1. To graduate, a minimum of 120 hours plus GPA's 2.5 or greater in Major, Minor \& General Education; a ranking of Satisfactory or higher in Professional Portfolio.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF ARTS (BA) <br> WITH A MAJOR IN <br> DANCE <br> (7-12 TEACHER CERTIFICATION)

The Dance Program holds entry auditions by appointment and/or through assessment during initial technique classes, which will determine whether there has been adequate progression to continue as a Dance major.

## STUDENT LEARNING OUTCOMES:

1. Has developed competence in a number of dance techniques and developed proficiency in at least one to the performance level.
2. Is able to analyze works of dance perceptively and evaluate them critically. Is able to place works of dance in historical and stylistic context and the cultural milieu in which they were created.
3. Has developed visual, aural, and kinesthetic perceptions.
4. Has developed competency in the choreographic process, production, and presentation of producing works of dance.
5. Uses effective, developmentally appropriate instructional strategies and communication techniques to prepare dance trained individuals.
6. Is a reflective practitioner who evaluates the effects of his/her actions on others (e.g. students, parents/caregivers, other professionals in the learning environment) and participates in opportunities to grow professionally.
7. Demonstrates use of formal and informal assessment to promote students' physical, cognitive, social, and emotional development in dance education contexts.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture
BIOL 2402 Anatomy and Physiology II three-hour lecture
Creative Arts - 3 hours
Must not be DANC 2323 Dance Appreciation.
Integrative and Experiential Learning - $\mathbf{2}$ hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - MAJOR REQUIREMENTS - 51 HOURS ( 37 advanced)
1 - Dance Core - $\mathbf{3 5}$ hours ( 25 advanced)
DANC 1351 Introduction to Dance
DANC 1202 Dance Improvisation
DANC 2303 Music for Dancers
Choose one:
DANC 2112 Dance Performance: Beginning/Intermediate
DANC 3112 Dance Performance: Intermediate/Advanced
Choose one:
DANC 2112 Dance Performance: Beginning/Intermediate
DANC 3112 Dance Performance: Intermediate/Advanced
DANC 3301 Choreography I
DANC 3302 Choreography II
DANC 3308 Dance History
DANC 3311 Dance Production
DANC 3312 Dance Philosophy and Criticism
DANC 3313 World Dance
DANC 3320 Dance Science
DANC 3121 Dance Science Lab
DANC 4302 Senior Project (Capstone)
2 - Dance Technique - $\mathbf{1 6}$ hours ( $\mathbf{1 2}$ advanced)
Students must complete 16 total technique hours, of which 12 hours must be advanced. Students must choose two techniques and complete a minimum of 6 hours in each (one technique must be Modern or Ballet). Additionally, students must complete a minimum of 4 hours, at least 2 hours each from the remaining two techniques. Technique areas are listed below:
a - Modern Dance Technique
DANC 2246 Modern Dance I
DANC 2345 Modern Dance I DANC 3246 Modern Dance II DANC 3345 Modern Dance II DANC 4246 Modern Dance III DANC 4345 Modern Dance III
b - Ballet Techniques
DANC 2242 Ballet I DANC 2244 Ballet Technique: Pointe I
DANC 2341 Ballet I DANC 3242 Ballet II DANC 3244 Ballet Technique: Pointe II DANC 3341 Ballet II DANC 4242 Ballet III DANC 4341 Ballet III
c - Folklorico Techniques
DANC 2250 Folklorico I
DANC 2349 Folklorico I
DANC 3250 Folklorico II DANC 3349 Folklorico II DANC 4250 Folklorico III DANC 4349 Folklorico III
d - Flamenco Techniques
DANC 2254 Flamenco I
DANC 2353 Flamenco I DANC 3254 Flamenco II DANC 3353 Flamenco II DANC 4254 Flamenco III DANC 4353 Flamenco III

## C - TEACHER CERTIFICATION - 27 HOURS (27 advanced)

Area of Certification: Dance (7-12)
DANC 4309 Dance Theory
DANC 4313 Dance in the Public Schools
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools EDUC 3302 Human Development, Learning Theories, and Student Learning EDUC 3303 Teaching in Today's Diverse Classrooms EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
EDUC 4611 Student Teaching Secondary or All-Level
READ 4305 Content Area Literacy

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 64 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

Official entry into Dance Program is through an interview process at the end of the required course, Music for Dancers (DANC 2303), and a 2.50 core curriculum GPA.

## Progression requirements

For all technique Courses, a minimum of one year required at each level and/or faculty approval to advance. Must have a grade of 'C' or better in all DANC courses. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses. Students unable to be admitted to EDUC 4611 will be required to substitute for 6 advanced hours, as recommended by advisor.

## Graduation requirements

1. To graduate, a minimum of 120 hours plus GPA's 2.5 or greater in Major, Minor, and General Education; a ranking of Satisfactory or higher in Professional Portfolio.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## A - MINOR REQUIREMENTS - 22 HOURS MINIMUM (10 advanced minimum)

1 - Dance Core - 12 hours minimum (6 advanced minimum)
DANC 1202 Dance Improvisation
Choose one:
DANC 2112 Beg./Intermediate Dance Performance
DANC 3112 Intermediate/Advanced Dance Performance
DANC 3308 Dance History DANC 3311 Dance Production Choose one:

DANC 2303 Music for Dancers
DANC 3312 Dance Philosophy and Criticism
DANC 3313 World Dance
DANC 3320 Dance Science and DANC 3121 Dance Science Lab
$\mathbf{2}$ - Dance Technique - $\mathbf{1 0}$ hours (4 advanced)
Complete 4 hours from two different techniques, of which one area must be ballet or modern. Two hours must be completed from one of the remaining technique areas: ballet, folklorico, flamenco, or modern dance. A minimum of one year is required at each level and/or faculty approval to advance. Choose from the following courses:

DANC 2341 Ballet I
DANC 2242 Ballet I
DANC 2244 Ballet Technique: Pointe I

DANC 2345 Modern Dance I
DANC 2246 Modern Dance I
DANC 2349 Folklorico I
DANC 2250 Folklorico I
DANC 2353 Flamenco I
DANC 2254 Flamenco I
DANC 3130 Ballet Technique: Variations
DANC 3341 Ballet II
DANC 3242 Ballet II
DANC 3244 Ballet Technique: Pointe II
DANC 3345 Modern Dance II
DANC 3246 Modern Dance II
DANC 3349 Folklorico II
DANC 3250 Folklorico II
DANC 3353 Flamenco II
DANC 3254 Flamenco II
DANC 4341 Ballet III
DANC 4242 Ballet III
DANC 4345 Modern Dance III
DANC 4246 Modern Dance III
DANC 4349 Folklorico III
DANC 4250 Folklorico III
DANC 4353 Flamenco III
DANC 4254 Flamenco III

## School of Music

Dr. Kurt Martinez<br>Director, School of Music<br>Location: FABA 106 (UTRGV Edinburg Campus)<br>Phone: 956-665-2992<br>Fax: 956-665-3472<br>Email: kurt.martinez@utrgv.edu<br>\section*{BACHELOR OF MUSIC (BM)}<br>WITH A MAJOR IN<br>PERFORMANCE

This degree is designed to train students for careers in the professional world of music performance or who wish to pursue a graduate degree in music.

## STUDENT LEARNING OUTCOMES:

1. Students will have competence in musical solo and ensemble performance covering a variety of stylistic eras and cultural influences.
2. Students will have an understanding of the historical and cultural context of stylistic epochs.
3. Students will have the ability to apply theoretical analysis to music to enhance stylistic and structural understanding.
4. Student will understand and be able to apply best practice concepts and application in music instruction and pedagogy for young ages through adulthood.
5. Students will demonstrate conceptual and practical capacity for practices relating to sustainability in performing arts and performing arts education.
6. Students will demonstrate effective use of current technologies as relate to music performance, history, culture, and analysis.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Language, Philosophy, and Culture - 3 hours MUSI 1309 World Music Cultures
Creative Arts - 3 hours
MUSI 1308 Music History and Literature I

B - MAJOR REQUIREMENTS - 78 HOURS (42 advanced minimum)
1 - Music Core - $\mathbf{2 4}$ hours (12 advanced)
MUSI 1211 Music Theory I
MUSI 1116 Sight Singing and Ear Training I
MUSI 1212 Music Theory II
MUSI 1117 Sight Singing and Ear Training II
MUSI 2211 Music Theory III
MUSI 2116 Sight Singing and Ear Training III
MUSI 2212 Music Theory IV
MUSI 2117 Sight Singing and Ear Training IV
MUSI 3211 Musical Form and Analysis
MUSI 3301 Music History and Literature II
MUSI 3302 Music History and Literature III
MUSI 3299 Junior Recital
MUSI 4299 Senior Recital / Capstone
2 - Concentrations - 54 hours ( 30 advanced minimum) a - Guitar - 54 hours (31 advanced)
i-Guitar Core - 22 hours (15 advanced)
MUSI 1114 Piano for Music Majors I
MUSI 1115 Piano for Music Majors II
MUSI 1183 Vocal Methods
MUSI 2114 Piano for Music Majors III
MUSI 2310 Technology in Music
MUSI 3102 Instrumental Conducting I
MUSI 3106 Guitar Literature
MUSI 3120 Supervised Applied Teaching I
MUSI 3121 Supervised Applied Teaching II
MUSI 3122 Supervised Applied Teaching III

MUSI 3123 Supervised Applied Teaching IV
MUSI 3210 The Art of Teaching and Pedagogy
MUSI 4310 Music Advocacy, Outreach, and Business
MUSI 4102 Instrumental Conducting II
MUSI 4301 Chamber and Symphonic Music Literature
ii - Applied Guitar - $\mathbf{1 6}$ hours (8 advanced)
MUAP 1207 Applied Guitar I
MUAP 1257 Applied Guitar II
MUAP 2207 Applied Guitar III
MUAP 2257 Applied Guitar IV
MUAP 3207 Applied Guitar V
MUAP 3257 Applied Guitar VI
MUAP 4207 Applied Guitar VII
MUAP 4257 Applied Guitar VIII
iii - Music Ensembles - $\mathbf{1 6}$ hours ( $\mathbf{8}$ advanced)
Complete 8 hours of Major Ensembles, of which 4 hours must be advanced, from (repeat as needed):

MUEN 1124 Guitar Ensemble
MUEN 3124 Guitar Ensemble
Complete 8 hours of Secondary Ensembles, of which 4 hours must be advanced, from (repeat as needed):

MUEN 1134 Chamber Music for Guitar
MUEN 3134 Chamber Music for Guitar
b - Piano - 54 hours (32 advanced)
i - Piano Core - $\mathbf{2 3}$ hours (17 advanced)
MUSI 1183 Vocal Methods
MUSI 2118 Keyboard Skills I
MUSI 2119 Keyboard Skills II
MUSI 2310 Technology in Music
MUSI 3101 Choral Conducting I
MUSI 3111 Piano Pedagogy I
MUSI 3112 Piano Pedagogy II
MUSI 3120 Supervised Applied Teaching I
MUSI 3206 Piano Literature I
MUSI 3207 Piano Literature II
MUSI 3210 The Art of Teaching and Pedagogy
MUSI 4101 Choral Conducting II
MUSI 4301 Chamber and Symphonic Music Literature
MUSI 4310 Music Advocacy, Outreach, and Business
ii - Applied Piano - 16 hours (8 advanced)
MUAP 1211 Applied Piano I
MUAP 1261 Applied Piano II
MUAP 2211 Applied Piano III
MUAP 2261 Applied Piano IV
MUAP 3211 Applied Piano V
MUAP 3261 Applied Piano VI
MUAP 4211 Applied Piano VII
MUAP 4261 Applied Piano VIII

> iii - Music Ensembles - 15 hours (7 advanced) Complete 8 hours of Major Ensembles, of which 4 hours must be advanced, from (repeat as needed):
> MUEN 1125 Piano Accompanying (4 hours total)
> MUEN 3125 Piano Accompanying (4 hours total)
> Complete 7 hours of Secondary Ensembles, of which 3 hours must be advanced, from (repeat as needed):
> MUEN 1135 Chamber Music for Piano
> MUEN 1140 Chamber Music
> MUEN 1141 Master Chorale
> MUEN 1142 University Choir
> MUEN 1143 Opera Workshop
> MUEN 3135 Chamber Music for Piano
> MUEN 3140 Chamber Music
> MUEN 3141 Master Chorale
> MUEN 3142 University Choir
> MUEN 3143 Opera Workshop
> c - String - 54 hours ( 30 advanced)
> i - String Core - $\mathbf{2 3}$ hours (16 advanced)
> MUSI 1114 Piano for Music Majors I
> MUSI 1115 Piano for Music Majors II
> MUSI 1183 Vocal Methods
> MUSI 2114 Piano for Music Majors III
> MUSI 2310 Technology in Music
> MUSI 3102 Instrumental Conducting I
> MUSI 3120 Supervised Applied Teaching I
> MUSI 3121 Supervised Applied Teaching II
> MUSI 3122 Supervised Applied Teaching III
> MUSI 3123 Supervised Applied Teaching IV
> MUSI 3204 Instrumental Literature
> MUSI 3210 The Art of Teaching and Pedagogy
> MUSI 4102 Instrumental Conducting II
> MUSI 4301 Chamber and Symphonic Music Literature
> MUSI 4310 Music Advocacy, Outreach, and Business
> ii - Applied String - 16 hours (7 advanced)
> Choose 16 hours of any MUAP courses, of which 7 hours must be advanced.
> iii - Music Ensembles - $\mathbf{1 5}$ hours ( $\mathbf{7}$ advanced)
> Complete 8 hours of Major Ensembles, of which 4 hours must be advanced, from (repeat as needed):
> MUEN 1123 Symphony Orchestra
> MUEN 1124 Guitar Ensemble
> MUEN 3123 Symphony Orchestra
> MUEN 3124 Guitar Ensemble
> Complete 7 hours of Secondary Ensembles, of which 3 hours must be advanced, from (repeat as needed):
> MUEN 1133 Chamber Music for Strings
> MUEN 1134 Chamber Music for Guitar
> MUEN 1140 Chamber Music
MUEN 3133 Chamber Music for Strings MUEN 3134 Chamber Music for Guitar MUEN 3140 Chamber Music
d - Voice - 54 hours (31 advanced)
i - Voice Core - $\mathbf{2 4}$ hours (15 advanced)
MUSI 1114 Piano for Music Majors I
MUSI 1115 Piano for Music Majors II
MUSI 1160 Diction I MUSI 1161 Diction II MUSI 1163 Movement and Vocal Improvisation
MUSI 2114 Piano for Music Majors III MUSI 2310 Technology in Music MUSI 3101 Choral Conducting I MUSI 3103 Vocal Pedagogy II MUSI 3115 Keyboard Skills for Vocalists MUSI 3208 Song Literature MUSI 3209 Vocal Pedagogy I MUSI 3210 The Art of Teaching and Pedagogy MUSI 3225 Vocal and Performance Techniques MUSI 4101 Choral Conducting II MUSI 4310 Music Advocacy, Outreach, and Business
ii - Applied Voice - $\mathbf{1 6}$ hours ( 9 advanced) Choose 16 hours of any MUAP courses, of which 9 hours must be advanced.
iii - Music Ensembles - $\mathbf{1 4}$ hours (7 advanced)
Complete 8 hours of Major Ensembles, of which 4 hours must be advanced, from (repeat as needed): MUEN 1141 Master Chorale MUEN 1142 University Choir MUEN 3141 Master Chorale MUEN 3142 University Choir Complete 6 hours of Secondary Ensembles, of which 3 hours must be advanced, from (repeat as needed): MUEN 1140 Chamber Music MUEN 1143 Opera Workshop MUEN 3140 Chamber Music MUEN 3143 Opera Workshop
e - Winds/Brass/Percussion - 54 hours ( 30 advanced)
i - Winds/Brass/Percussion Core - 23 hours (16 advanced)
MUSI 1114 Piano for Music Majors I
MUSI 1115 Piano for Music Majors II MUSI 1183 Vocal Methods MUSI 2114 Piano for Music Majors III MUSI 2310 Technology in Music MUSI 3102 Instrumental Conducting I MUSI 3120 Supervised Applied Teaching I MUSI 3121 Supervised Applied Teaching II MUSI 3122 Supervised Applied Teaching III MUSI 3123 Supervised Applied Teaching IV

> MUSI 3204 Instrumental Literature MUSI 3210 The Art of Teaching and Pedagogy MUSI 4102 Instrumental Conducting II MUSI 4301 Chamber and Symphonic Music Literature MUSI 4310 Music Advocacy, Outreach, and Business
> ii - Applied Winds/Brass/Percussion - 16 hours (7 advanced) Choose 16 hours of any MUAP courses, of which 7 hours must be advanced. iii - Music Ensembles - 15 hours (7 advanced)
> Complete 8 hours of Major Ensembles, of which 4 hours must be advanced, from (repeat as needed):
> MUEN 3121 Wind Ensemble
> MUEN 3122 University Concert Band or Marching Band
> MUEN 1121 Wind Ensemble
> MUEN 1122 University Concert Band or Marching Band Complete 7 hours of Secondary Ensembles, of which 3 hours must be advanced, from (repeat as needed):
> MUEN 1131 Chamber Music for Winds
> MUEN 1132 Jazz Combo
> MUEN 1136 Chamber Music for Percussion
> MUEN 1137 Music and Dance Collaboration Ensemble
> MUEN 1140 Chamber Music
> MUEN 3131 Chamber Music for Winds
> MUEN 3132 Jazz Combo
> MUEN 3136 Chamber Music for Percussion
> MUEN 3137 Music and Dance Collaboration Ensemble
> MUEN 3140 Chamber Music

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS <br> TOTAL ADVANCED HOURS (MINIMUM) - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

Students must pass an audition prior to beginning music program.

## Graduation requirements

1. A grade of ' $C$ ' or better is required in all music courses.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF MUSIC (BM) <br> WITH A MAJOR IN <br> MUSIC <br> (EC - 12 TEACHER CERTIFICATION) 

This degree is designed to train students for careers in the professional world of music performance or who wish to pursue a graduate degree in music.

## STUDENT LEARNING OUTCOMES:

1. Students will have competence in musical solo and ensemble performance covering a variety of stylistic eras and cultural influences.
2. Students will have an understanding of the historical and cultural context of stylistic epochs.
3. Students will have the ability to apply theoretical analysis to music to enhance stylistic and structural understanding.
4. Student will understand and be able to apply best practice concepts and application in music instruction and pedagogy for young ages through adulthood.
5. Students will demonstrate conceptual and practical capacity for practices relating to sustainability in performing arts and performing arts education.
6. Students will demonstrate effective use of current technologies as relate to music performance, history, culture, and analysis.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Language, Philosophy, and Culture - $\mathbf{3}$ hours
MUSI 1309 World Music Cultures
Creative Arts - 3 hours
MUSI 1308 Music History and Literature I
B - MAJOR REQUIREMENTS - 60 HOURS (24 advanced minimum)
1 - Music Core - 20 hours (8 advanced)
MUSI 1211 Music Theory I
MUSI 1116 Sight Singing and Ear Training I
MUSI 1212 Music Theory II
MUSI 1117 Sight Singing and Ear Training II
MUSI 2211 Music Theory III
MUSI 2116 Sight Singing and Ear Training III
MUSI 2212 Music Theory IV
MUSI 2117 Sight Singing and Ear Training IV
MUSI 3211 Musical Form and Analysis
MUSI 3301 Music History and Literature II
MUSI 3302 Music History and Literature III
2 - Concentrations - 40 hours (16 advanced minimum)
Choose one concentration:
a - Guitar - 40 hours (16 advanced)
i-Guitar Core - 16 hours (6 advanced)
MUSI 1114 Piano for Music Majors I
MUSI 1115 Piano for Music Majors II
MUSI 1166 Woodwind Methods I MUSI 1167 Woodwind Methods II
Choose one:
MUSI 1178 High Brass Methods MUSI 1179 Low Brass Methods
MUSI 1183 Vocal Methods
MUSI 1188 Percussion Methods
MUSI 1192 Guitar Methods
Choose one:
MUSI 1195 High String Methods MUSI 1196 Low String Methods
MUSI 2114 Piano for Music Majors III MUSI 3102 Instrumental Conducting I MUSI 3106 Guitar Literature MUSI 4102 Instrumental Conducting II MUSI 4310 Music Advocacy, Outreach, and Business
ii - Applied Guitar - 14 hours (6 advanced)
MUAP 1207 Applied Guitar I MUAP 1257 Applied Guitar II MUAP 2207 Applied Guitar III MUAP 2257 Applied Guitar IV MUAP 3207 Applied Guitar V MUAP 3257 Applied Guitar VI MUAP 4207 Applied Guitar VII
iii - Music Ensembles - $\mathbf{1 0}$ hours (4 advanced)
Complete 7 hours of Major Ensembles, of which 3 hours must be advanced, from (repeat as needed):

MUEN 1124 Guitar Ensemble MUEN 3124 Guitar Ensemble Complete 3 hours of Secondary Ensembles, of which 1 hours must be advanced, from (repeat as needed): MUEN 1134 Chamber Music for Guitar MUEN 3134 Chamber Music for Guitar
b - Piano - 40 hours (20 advanced)
i - Instrument Core - 15 hours (9 advanced)
MUSI 1160 Diction I MUSI 1161 Diction II MUSI 1183 Vocal Methods MUSI 1197 Instrumental Methods MUSI 2118 Keyboard Skills I MUSI 2119 Keyboard Skills II MUSI 3101 Choral Conducting I MUSI 3104 Choral Literature MUSI 3111 Piano Pedagogy I
MUSI 3112 Piano Pedagogy II
MUSI 3206 Piano Literature I
MUSI 3207 Piano Literature II
MUSI 4101 Choral Conducting II
ii - Applied Instrument - 14 hours (6 advanced)
MUAP 1211 Applied Piano I
MUAP 1261 Applied Piano II
MUAP 2211 Applied Piano III
MUAP 2261 Applied Piano VI
MUAP 3211 Applied Piano V
MUAP 3261 Applied Piano VI
MUAP 4211 Applied Piano VII
iii - Music Ensembles - 11 hours (5 advanced)
Complete 7 hours of Major Ensembles, of which 3 hours must be advanced, from (repeat as needed):
MUEN 1125 Piano Accompanying
MUEN 3125 Piano Accompanying
Complete 4 hours of Secondary Ensembles, of which 2 hours must be advanced, from (repeat as needed):
MUEN 1135 Chamber Music for Piano
MUEN 1140 Chamber Music
MUEN 1141 Master Chorale
MUEN 1142 University Choir
MUEN 1143 Opera Workshop
MUEN 3135 Chamber Music for Piano
MUEN 3140 Chamber Music
MUEN 3141 Master Chorale
MUEN 3142 University Choir
MUEN 3143 Opera Workshop
c - String - 40 hours (16 advanced)
i- Instrument Core - 15 hours (5 advanced)
MUSI 1114 Piano for Music Majors I
MUSI 1115 Piano for Music Majors II
MUSI 2114 Piano for Music Majors III
Choose 6 hours from the following:
MUSI 1166 Woodwind Methods I
MUSI 1167 Woodwind Methods II
MUSI 1178 High Brass Methods
MUSI 1179 Low Brass Methods
MUSI 1188 Percussion Methods
MUSI 1192 Guitar Methods
MUSI 1195 High String Methods
MUSI 1196 Low String Methods
MUSI 1183 Vocal Methods
MUSI 3102 Instrumental Conducting I
MUSI 3107 Orchestral Literature
MUSI 3213 Orchestral Techniques
MUSI 4102 Instrumental Conducting II
ii - Applied Instrument Electives - $\mathbf{1 4}$ hours (6 advanced)
Choose 14 hours of MUAP courses, of which 6 hours must be advanced.
iii - Music Ensembles - $\mathbf{1 1}$ hours (5 advanced)
Complete 7 hours of Major Ensembles, of which 3 hours must be advanced, from (repeat as needed):

MUEN 1123 Symphony Orchestra
MUEN 3123 Symphony Orchestra
Complete 4 hours of Secondary Ensembles, of which 2 hours must be advanced, from (repeat as needed):

MUEN 1128 Mariachi Ensemble
MUEN 1133 Chamber Music for Strings
MUEN 1140 Chamber Music
MUEN 3128 Mariachi Ensemble
MUEN 3133 Chamber Music for Strings
MUEN 3140 Chamber Music
d - Voice - 40 hours (16 advanced)
i - Instrument Core - 16 hours (9 advanced)
MUSI 1114 Piano for Music Majors I
MUSI 1115 Piano for Music Majors II
MUSI 1160 Diction I
MUSI 1161 Diction II
MUSI 1163 Movement and Vocal Improvisation
MUSI 1197 Instrumental Methods
MUSI 2114 Piano for Music Majors III
MUSI 3101 Choral Conducting I
MUSI 3104 Choral Literature
MUSI 3103 Vocal Pedagogy II
MUSI 3115 Keyboard Skills for Vocalists
MUSI 3208 Song Literature
MUSI 3209 Vocal Pedagogy I
MUSI 4101 Choral Conducting II
ii - Applied Instrument Electives- 14 hours (3 advanced)
Choose 14 hours of MUAP courses, of which 3 hours must be advanced.
iii - Music Ensembles - $\mathbf{1 0}$ hours (4 advanced)
Complete 7 hours of Major Ensembles, of which 3 hours must be advanced, from (repeat as needed):

MUEN 1141 Master Chorale
MUEN 1142 University Choir
MUEN 3141 Master Chorale
MUEN 3142 University Choir
Complete 3 hours of Secondary Ensembles, of which 1 hours must be advanced, from (repeat as needed):

MUEN 1140 Chamber Music
MUEN 1143 Opera Workshop
MUEN 3140 Chamber Music
MUEN 3143 Opera Workshop

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e - Winds/Brass/Percussion - 40 hours (16 advanced)
i - Instrument Core - 15 hours (5 advanced)
    MUSI }1114\mathrm{ Piano for Music Majors I
    MUSI }1115\mathrm{ Piano for Music Majors II
    MUSI 1183 Vocal Methods
    MUSI }2114\mathrm{ Piano for Music Majors III
    Choose 6 hours from the following:
        MUSI 1166 Woodwind Methods I
        MUSI 1167 Woodwind Methods II
        MUSI 1178 High Brass Methods
        MUSI 1179 Low Brass Methods
        MUSI 1188 Percussion Methods
        MUSI 1192 Guitar Methods
        MUSI 1195 High String Methods
        MUSI 1196 Low String Methods
        MUSI 3102 Instrumental Conducting I
        MUSI 3105 Concert Band Literature
        MUSI 3212 Marching Band Techniques
        MUSI 4102 Instrumental Conducting II
    ii - Applied Instrument Electives - 14 hours ( advanced)
    Choose 14 hours of MUAP courses, of which 6 hours must be advanced.
        iii - Music Ensembles - 11 hours (5 advanced)
    Complete 7 hours of Major Ensembles, of which 3 hours must be advanced,
    from (repeat as needed):
    MUEN 1121 Wind Ensemble
    MUEN 1122 University Concert Band or Marching Band
    MUEN 3121 Wind Ensemble
    MUEN 3122 University Concert Band or Marching Band
    Complete 4 hours of Secondary Ensembles, of which 2 hours must be
    advanced, from (repeat as needed):
        MUEN }1131\mathrm{ Chamber Music for Winds
        MUEN 1132 Jazz Combo
        MUEN 1136 Chamber Music for Percussion
        MUEN 1137 Music and Dance Collaboration Ensemble
        MUEN 1140 Chamber Music
        MUEN 3131 Chamber Music for Winds
        MUEN 3132 Jazz Combo
        MUEN }3136\mathrm{ Chamber Music for Percussion
        MUEN 3137 Music and Dance Collaboration Ensemble
        MUEN 3140 Chamber Music
        C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)
        Area of Certification: Music (EC-12)
        MUSI 2301 Elementary Music Techniques
        MUSI 3311 The Music Teaching Profession and Student Learning in Contemporary Schools
        MUSI 4312 Implementing and Assessing Effective Secondary Music Content Pedagogy
        EDUC 3302 Human Development, Learning Theories, and Student Learning
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EDUC 3303 Teaching in Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management and Assessment to Promote Student Learning READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-level

## TOTAL CREDIT HOURS FOR GRADUATION - 129 HOURS TOTAL ADVANCED HOURS (MINIMUM) - 48 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

Students must pass an audition prior to beginning music program. For teacher certification, students must apply for admission and be accepted to the College of Education and P -16 Integration prior to enrolling in teacher certification courses, except for MUSI 2301 which is open to all students.

## Graduation requirements

1. A grade of ' $C$ ' or better is required in all music courses.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## A - MINOR REQUIREMENTS - 19 HOURS (6 advanced)

Students must pass an audition prior to beginning music program. A grade of ' $C$ ' or better is required for all music courses.

MINOR IN MUSIC

1-Music Core - 7 hours
MUSI 1211 Music Theory I
MUSI 1116 Sight Singing and Ear Training I
MUSI 1212 Music Theory II
MUSI 1117 Sight Singing and Ear Training II
MUSI 1114 Piano for Music Majors I
2 - Applied Major Instrument - $\mathbf{4}$ hours (2 advanced)
MUAP 12xx Applied Major Instrument
MUAP 32xx Applied Major Instrument
3 - Music Ensembles - 2 hours (1 advanced)
Choose one:
MUEN 1121 Wind Ensemble
MUEN 1122 University Concert Band or Marching Band
MUEN 1123 Symphony Orchestra
MUEN 1124 Guitar Ensemble
MUEN 1141 Master Chorale

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\begin{aligned}
& \text { MUEN } 1142 \text { University Choir } \\
& \text { Choose one: } \\
& \text { MUEN } 3121 \text { Wind Ensemble } \\
& \text { MUEN } 3122 \text { University Concert Band or Marching Band } \\
& \text { MUEN } 3123 \text { Symphony Orchestra } \\
& \text { MUEN } 3124 \text { Guitar Ensemble } \\
& \text { MUEN } 3141 \text { Master Chorale } \\
& \text { MUEN } 3142 \text { University Choir } \\
& \mathbf{4} \text { - Restricted Music Electives - } 3 \text { hours } \\
& \text { Choose from: } \\
& \text { MUSI 1306 Music Appreciation } \\
& \text { MUSI } 1307 \text { Mexican Folk Music } \\
& \text { MUSI 1308 Music History and Literature I } \\
& \text { MUSI 1309 World Music Cultures } \\
& \text { MUSI 1310 History of Rock } \\
& 5 \text { - Advanced Music Elective - } \mathbf{3} \text { hours (3 advanced) } \\
& \text { Choose } 3 \text { hours from any advanced Music course. } \\
& \text { CERTIFICATE IN } \\
& \text { PERFORMANCE WITH MARIACHI CONCENTRATION }
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The department of music and dance awards the certificate in mariachi performance to students who choose to complete a structured study of mariachi music that includes instrumental/vocal techniques, and historical, stylistic, and pedagogical issues in mariachi music. The certificate will produce highly competent mariachi performers and educators. As mariachi ensembles continue to proliferate in secondary and higher education, the certificate will add value to the degrees of students seeking this concentration. The certificate also fulfills UTRGV's values as a bi-cultural, bilingual, and biliterate institution, and the mission of the department of music and dance to promote greater appreciation of the cultural heritage of the region. The certificate in mariachi performance is not a substitute for teacher certification.

## STUDENT LEARNING OUTCOMES:

1. Students will have competence in musical performance of a variety of genres and styles in the mariachi repertoire.
2. Students will have an understanding of the historical and cultural contexts of mariachi music
3. Students will have the technical skills to arrange pieces for mariachi ensembles
4. Students will have skills to direct and promote mariachi ensembles
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A - REQUIREMENTS - 15 HOURS (9 advanced)
MUEN 1128 Mariachi Ensemble
MUEN 3128 Mariachi Ensemble
MUSI 1307 Mexican Folk Music
MUSI }2128\mathrm{ Techniques of Guitarrón, Vihuela, Guitar
MUSI }2228\mathrm{ Special Topics: Style and Interpretation of Violin, Trumpet, Voice
MUSI 2310 Technology in Music
MUAP x2xx Applied Major Instrument
MUAP x2xx Applied Major Instrument
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# Department of Theatre 

Mr. Thomas Grabowski<br>Interim Chair, Department of Theatre<br>Location: ARHU 160B (UTRGV Edinburg Campus)<br>Phone: 956-665-3580<br>Email: thomas.grabowski@utrgv.edu

BACHELOR OF ARTS (BA)
WITH A MAJOR IN THEATER
(FOCUS IN THEATER/TELEVISION/FILM)

The Bachelor of Arts in Theater/Television/Film prepares a student to work in the arts and entertainment industries, in either live theater or recorded media such as film, television, commercials, and music videos. Depending upon their concentration within the program, students may be prepared for performance or direction in multiple media; theatrical design and technical production jobs; and/or film and television production. The BA in Theater/TV/Film also prepares students for entry into graduate school or secondary education. Other employment opportunities in related fields, such as advertising and development, exist due to the liberal arts emphasis of this degree. Students also gain social skills, including teamwork and project leadership that are valuable to employers in any field.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate knowledge of the history structure, and research tools of theatre, television, and film.
2. Demonstrate the capability to communicate effectively as a professional in oral and written situations.
3. Demonstrate the capability to work collaboratively with others in all areas of their discipline.
4. Demonstrate knowledge of acting and directing.

## Design track

1. Demonstrate the ability to communicate effectively in the visual mode.
2. Demonstrate basic general knowledge of the principles of design - scene, costume, and lighting.
3. Demonstrate specific knowledge of the elements necessary to successfully execute a scene, costume, or lighting design.
Performance Track
4. Demonstrate knowledge of theories and practices of major contemporary acting techniques in theatre, television and film; and the elements necessary to successfully analyze and interpret scripts.
5. Demonstrate an ability to play a range of roles in theatre, television, and film.

Television/Film Track

1. Demonstrate the ability to write a script professionally.
2. Demonstrate an ability to direct a television/film script professionally.
3. Demonstrate an ability to edit a television/film script professionally.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Integrative and Experiential Learning - 3 hours
Choose one:
COMM 1311 Introduction to Communication
COMM 1315 Public Speaking
Recommended
Creative Arts - 3 hours
Choose one:
THTF 1310 Theatre Appreciation
THTF 2366 Cinema Appreciation

B - MAJOR REQUIREMENTS - 57 HOURS (39 advanced minimum)
1 - Theatre Core - $\mathbf{3 0}$ hours (21 advanced)
THTF 1351 Acting I
THTF 1336 Television Production
THTF 2361 Video and Film Editing I
THTF 4120 Practicum Theatre Television Film
THTF 4120 Practicum Theatre Television Film
THTF 4120 Practicum Theatre Television Film
THTF 4311 Directing I
THTF 4312 Directing II
THTF 4316 History of Theatre I
THTF 4317 History of Theatre II
Choose one:
THTF 4615 Summer Theatre Workshop
THTF 4601 Professional Internship
2 - Concentrations - 27 hours (18 advanced minimum)
a - Design Technical Concentration - 27 hours (18 advanced)
THTF 1330 Stagecraft
THTF 1331 Lighting and Sound Technology
THTF 1342 Costume Technology

THTF 3330 Drawing and Rendering
THTF 3331 Scene Design
THTF 3332 Lighting for the Stage, Film, and Television
THTF 3333 Costume Design
Choose one:
THTF 3311 Contemporary Drama
THTF 3312 World Drama
Choose one:
THTF 4303 Special Topics
THTF 4321 Children's Theatre Workshop
b - Performance Concentration - 27 hours (21 advanced)
THTF 1341 Makeup
THTF 1352 Acting II
THTF 3311 Contemporary Drama
THTF 3312 World Drama
THTF 3351 Acting III
THTF 3354 Voice and Diction
THTF 4351 Theory and Styles of Acting
Choose one:
THTF 3352 Acting IV
THTF 4352 Problems in Acting
Choose one:
THTF 4303 Special Topics
THTF 4321 Children's Theatre Workshop
c - Television/Film Concentration - 27 hours (24 advanced)
THTF 1331 Lighting and Sound Technology
THTF 3315 History and Significance of Motion Picture
THTF 3332 Lighting for the Stage, Film, and Television
THTF 3354 Voice and Diction
THTF 3361 Location Film and Video Production
THTF 4315 Scriptwriting for the Stage and Screen
THTF 4361 Video and Film Editing II
THTF 4362 Advanced Television/Film Production
Choose one:
THTF 3331 Scene Design
THTF 3333 Costume Design

## C - FREE ELECTIVES - 21 HOURS (6 advanced minimum)

The number of advanced electives will vary to reach the 51 advanced minimum.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS <br> TOTAL ADVANCED HOURS - 51 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

All courses in the major require a grade of ' $C$ ' or better.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

BACHELOR OF ARTS (BA)

## WITH A MAJOR IN

 THEATER(EC - 12 TEACHER CERTIFICATION AND FOCUS IN THEATRE/TELEVISION/FILM)

The Bachelor of Arts in Theater/Television/Film prepares a student to work in the arts and entertainment industries, in either live theater or recorded media such as film, television, commercials, and music videos. Depending upon their concentration within the program, students may be prepared for performance or direction in multiple media; theatrical design and technical production jobs; and/or film and television production. The BA in Theater/TV/Film also prepares students for entry into graduate school or secondary education. Other employment opportunities in related fields, such as advertising and development, exist due to the liberal arts emphasis of this degree. Students also gain social skills, including teamwork and project leadership that are valuable to employers in any field.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate knowledge of the history structure and research tools of theatre and film.
2. Demonstrate the capability to communicate effectively as a professional in oral and written situations.
3. Demonstrate the capability to work collaboratively with others in other areas of their discipline.
4. Demonstrate knowledge of acting and directing.
5. Demonstrate basic knowledge of design and construction techniques in scenery, costuming, and lighting.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Integrative and Experiential Learning - 3 hours
Choose one:
COMM 1311 Introduction to Communication COMM 1315 Public Speaking

## Recommended

Creative Arts - $\mathbf{3}$ hours
Choose one:
THTF 2366 Cinema Appreciation THTF 1310 Theatre Appreciation

## B - MAJOR REQUIREMENTS - 42 HOURS ( 27 advanced)

1 - Theatre/Television/Film Core - $\mathbf{2 1}$ hours (12 advanced)
THTF 1351 Acting I
THTF 1336 Television Production
THTF 2361 Video and Film Editing I
THTF 4311 Directing I
THTF 4312 Directing II
THTF 4316 History of Theatre I
THTF 4317 History of Theatre II
2 - Design Technical Electives - 21 hours (15 advanced)
THTF 1330 Stagecraft
THTF 1342 Costume Technology
THTF 3321 Creative Drama
Choose one:
THTF 3311 Contemporary Drama
THTF 3312 World Drama

C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)
Area of Certification: Theatre (EC-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories, and Student Learning
EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

D - FREE ELECTIVES - 9 HOURS

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 51 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

All courses in the major require a grade of ' $C$ ' or better. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students. Students unable to be admitted to student teaching program will be required to substitute EDUC 4611 for 6 advanced hours, as recommended by advisor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN

 THEATRE
## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)

The Theatre/Television/Film Minor will require a student to take a total of 18 hours in THTF, of which 9 must be advanced. All classes in the theatre minor must be completed with a grade of ' $C$ ' or higher.

[^8]
## Course Inventory for College of Fine Arts (COFA) <br> Art

## ARTS 1301 Art Appreciation

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within formal, cultural, and historical contexts.

ARTS 1303 Art History I, Prehistoric to the 14th-Century
A comprehensive examination of the major artistic and architectural achievements of western civilization from Paleolithic through Gothic.

ARTS 1304 Art History II, 14th-Century to the Present A comprehensive examination of the major artistic and architectural achievements of western civilization from the Renaissance to the present.

ARTS 1311 Design I
An introduction to the fundamental terminology, concepts, theory, and application of twodimensional design.

ARTS 1312 Design II
Investigation into the phenomena extant in the three-dimensional arts. A variety of materials handling and creative methods for the purposes of creative methods for the purposes of creating three-dimensional forms will be considered.

## ARTS 1316 Drawing I

Emphasis on descriptive, expressive, and conceptual approaches. Learning to see and interpret a variety of subjects while using diverse materials and techniques. Engagement in critical analysis and understanding drawing as a discipline.

## ARTS 1317 Drawing II

Drawing II is a continuation of ARTS 1316 Drawing I with an emphasis on forms of expression that represent the human figure.

## ARTS 2313 Design Communications I

Communication of ideas through processes and techniques of graphic design and illustration. This course merges learning in digital applications with design practices. Taking conceptually based ideas from the sketch process to screen media, students will gain understanding of the computer graphics packages currently in use. They will experience the typical workflow of a design environment, where graphic programs are used in unison, each making their contribution to resolve the complete design.
ARTS 2314 Design Communications II
A continuation of communication of ideas through processes and techniques of graphic design and illustration.

ARTS 2316 Painting I
Exploration of ideas using painting media and techniques.
ARTS 2317 Painting II
A continuation of ARTS 2316 Painting I with an emphasis on special problems determined by the student in cooperation with the instructor.

ARTS 2326 Sculpture I
Introductory course in sculptural concepts through basic sculptural media.
ARTS 2327 Sculpture II
A continuation of ARTS 2326 Sculpture I but with a greater emphasis on aiding the student in solving individual problems using sculptural media and techniques.

ARTS 2333 Printmaking I
Introduction to printmaking as a means of personal expression and aesthetic communication. Relief, mono-, silkscreen, and other printmaking processes.

ARTS 2334 Printmaking II
A continuation of ARTS 2333 Printmaking I. Exploration of a variety of printmaking processes.
ARTS 2341 Beginning Jewelry/Metalworking
Instruction is given in the use of hand tools, metals handling, and creative use of shop equipment. Emphasis on creative artistic expression focusing on jewelry as a portable art form. Other materials are considered.

ARTS 2346 Ceramics I
Introduction to ceramic design concentrating on hand building. Some work with the potter's wheel, glazing, and firing.

ARTS 2347 Ceramics II
A continuation of ARTS 2346 Ceramics I with an emphasis on glaze formulation.
ARTS 2348 Digital Media
Introduction to digital imaging processes including video, animation, image making, and time-based media.

ARTS 2356 Photography I
Study of fundamental lighting, posing, camera techniques, composition, processing, and printing with special emphasis on portraits and still life.

ARTS 2357 Photography II
A continuation of ARTS 2356 Photography I with an emphasis on extending the students' knowledge of techniques and guiding them toward developing personal outlooks toward specific applications of the photographic process.

ARTS 2361 Computer Imaging I
Explores the potential of computer hardware and software as media for visual, conceptual, and practical uses in the visual arts.

ARTS 2362 Computer Imaging II
A continuation of ARTS 2361 Computer Imaging I but with greater emphasis on fine art digital manipulation and computer graphics.

## ARTS 2363 Typography

The fundamentals of typography and typographic design are explored in experimental and practical projects. The study of typefaces as communication vehicles. Exploration of visual texture, pattern, hierarchy, rhythm, and the emotional quality of composition plus the development of concept, content, and execution.

ARTS 3303 Intermediate Jewelry/Metalworking
Continuation of jewelry/metalworking processes with an emphasis on advanced techniques.
ARTS 3311 Intermediate Drawing
Advanced concepts in drawing. These may include conceptual issues, spatial relationships, interpretation of source reference materials, experimental surfaces, and/or other non-traditional directions or materials.

ARTS 3321 Intermediate Painting
Studio problems in painting.
ARTS 3330 Image and Illustration
Explores coherent visual statements to illustrate problems generated by multiple media. Emphasis on developing an individual visual language to be utilized in the illustration process. Assignments focus on exploration and understanding of traditional and digital media.

ARTS 3331 Visual Communications
Exploring the translation of verbal into visual language through a variety of media. Basic design concepts including image usage, symbol, and color in visual communication as well as the principles of typographic composition, message structure, and human perception.

ARTS 3332 Digital Image
Processing In the contemporary landscape of photography, students learn approaches to techniques and methods for the production and distribution of digital images. Advanced protocol, constructions, digital concepts, and state-of-the-art approaches to image making.

ARTS 3333 Design and Production
Terminology and process of preparing designs for commercial printing. Preparation of art and design stressing attention to detail and the printing industry's pre-press principles. Basic to complex electronic documents that include a broad spectrum of the printing process.

ARTS 3334 Photography as an Art Form
Advanced photography as a means of personal expression. Emphasis on black and white processes. Students must provide own 35mm camera.

ARTS 3335 Internship/Co-op for Graphic Design Majors
An internship for graphic design majors with a company, workshop, administrative entity, non-profit, or other organization with established advanced design practices or needs.

ARTS 3337 Type Design
Further exploration of type as a creative medium and carrier of communication. Experimental approaches to the use of type and to various media, including movement and interactivity.

ARTS 3338 Ideas and Styles
A theoretical course surveying design from the Pre-Industrial era (1450) to the present. Explores relationship of graphic design to movements in art, architecture, product design, and the collective influence of these movements on Western culture. Technological, conceptual, and social implications conveyed in design from early communication processes to the digital age. Individual designers, groups, and manifestos along with research and practical assignments.

ARTS 3339 Professional Photographic Documentation
The professional use of photography to document laboratory, field and archival investigations in such areas as engineering, science, forensics, anthropology, archaeology, humanities, art, and art history.

ARTS 3340 Foundry Studies in Sculpture
The expansion of visual expression in sculpture through multiple methods of liquid material manipulation. Concentration on mold making and the physical characteristics of diverse molten and liquid materials. Interaction with molten metals and glass in a controlled environment and experimentation with cold cast materials.

ARTS 3341 Intermediate Sculpture
Emphasis on individual development. Consideration of additional media for sculptural expression.
ARTS 3342 Introduction to Installation and Performance Art Concepts
Installation and performance art emerges in various forms: sculpture, performance, installation, and conversation. The materials often used in this genre are discarded objects which can reflect a cycle of life world view derived from animism. Students will reference this philosophy to create environments that immerse the viewer in a sensory, intellectual and emotional experience. The materials and methods used will range from everyday objects to highly personalized forms. Demonstration of art skills particularly useful in installation (sculptural, video, audio, interactive media, graphic presentation), presentations by the instructor and weekly critiques.

ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
An in-depth survey of Mesoamerican art and architecture from the Olmecs to the Maya and the Aztecs, emphasizing masterpieces of high aesthetic quality.

ARTS 3351 Andean Pre-Hispanic Art and Architecture
An in-depth survey of the Pre-Hispanic art and architecture of Peru, Bolivia, Ecuador, and Colombia 4000 B.C.-1533 A.D.

ARTS 3352 Art and Architecture of Asia, Africa and Oceania
A rigorous examination of thousands of years of the finest architecture and art of China, Japan, India, Southeast Asia, Africa, and Oceania.

ARTS 3353 Italian Renaissance Art, 1415-1595
The major artists and the development of Classicism and Neoplatonism.
ARTS 3354 History of Graphic Design
The historical evolution of visual communication in art, graphic design, illustration, and popular culture. Emphasis on the interpretation of images, symbols, typography, and media in the dissemination of news, products, ideas, and ideologies and impact of graphic design in modern visual culture.

ARTS 3355 History of Spanish Architecture, 711-1780AD
A history of the greatest achievements in architecture and its decoration in Spain from the Islamic conquest through the Baroque period. Special emphasis on the profound Hispano-Islamic and Mudejar influences on Spanish Christian architecture that distinguish it from the rest of Europe.

ARTS 3356 Mexican Viceregal Art and Architecture
An in-depth survey of colonial art and architecture of New Spain from Texas and New Mexico in the north to Oaxaca in the south.

ARTS 3357 South American Viceregal Art and Architecture
The finest art and architectural achievements of the central Andean nations of Peru, Bolivia, and Ecuador, with some material on Brazil, Colombia, Venezuela, Paraguay, Argentina, and Chile, from 1530 to 1825.

ARTS 3358 Nineteenth-Century European Art History
European painting, sculpture and architecture as social and political events from the French Revolution to 1900. The development of Neoclassicism, Romanticism, Social Realism, Impressionism, and Post-Impressionism and their international impact.

ARTS 3359 History of Women in Art
Thematic and chronological survey of the greatest achievements by women artists, using gender theories to analyze issues concerning visual representation.

ARTS 3361 Intermediate Printmaking
The lithographic and intaglio printmaking processes. Emphasis on the planographic system of producing multiple images within the frame. Etching and dry point technique, along with the use of different grounds.

ARTS 3371 Intermediate Ceramics
Emphasis on basic wheel-thrown shapes and introduction to glaze calculation.
ARTS 3381 Art Education: Theory and Background
Students will be introduced to key figures and theories within the field and their relationship to significant developments within the art world. This course will provide students with a theoretical basis for art at all levels.

ARTS 3382 Art Education: Issues and Practice
This class is designed to show the students, on a practical level, how to teach in the public school setting. The students will be responsible for implementing their own curriculum, syllabi, and lesson plans by using a wide array of resources.

ARTS 3383 Art Education: Classroom Strategies
Approaches to the art classroom with an overview of the various concepts currently in practice, their ideologies, and important strengths and weaknesses.

ARTS 3396 Contemporary Art
A seminar that covers issues faced and presented globally by contemporary artists. Development of advanced thought and discourse and the language and knowledge to engage in critical discussions. Students will research and present artists and articles found in appropriate art journals and periodicals as well as review exhibitions.

ARTS 4301 Senior Experience in Art
The capstone course for BA in Art Education. It is designed to make connections with the various elements of the arts degree program. Students must complete before student teaching.

ARTS 4303 Advanced Jewelry/Metalworking
Personal development in metals/jewelry.
ARTS 4311 Advanced Drawing
Advanced problems in drawing to be determined by the instructor.
ARTS 4321 Advanced Painting
Advanced study in painting with parameters to be determined by the instructor.
ARTS 4331 Advanced Computer Imaging
Explores advanced techniques in computer usage as an artistic and graphic medium.

## ARTS 4333 Graphic Design I

Systematic approach to design problem solving, with a series of studio assignments and critiques relating directly to two - and three - dimensional graphic design. A variety of problems are explored including "client - designer" relationships, then applied to information strategies, environmental, product, and package design.

ARTS 4334 Graphic Design II
Alternative creative communication problem-solving strategies are investigated within a series of advanced problems and intensive critiques relating to graphic design. Shared emphasis on content driven forms and complex problems that require conceptualization and the development toward a personal methodology.

ARTS 4336 Multimedia Production and Design
Introduction to basic hardware/software tools needed to design and create multimedia productions. Program logic and problem solving techniques within the context of an authoring tool. Extensive work on flow charts, 2-D/3-D animation, motion graphics, and storyboarding to create web and CD-ROM multimedia.

ARTS 4337 Digital Photography
Advanced problems in Digital Photography.
ARTS 4338 Interactive Design
Websites are designed and implemented using current software. Content and information architecture are considered while building web entities that give prominence to viewer experience.

ARTS 4339 Portfolio for Graphic Design
Development of a professional hard copy and online portfolio for the graphic designer. Students will prepare and organize work into a presentable and targeted dossier for use in their career placement.

ARTS 4340 Portfolio for Studio Art
Development of a professional hard copy and online portfolio for the studio artist. Students will prepare and organize work into a presentable and targeted dossier for use in their career placement.

ARTS 4341 Advanced Sculpture
Continuation of student's personal direction in sculpture.
ARTS 4350 Modern Art History
Art History from the 19th century in Europe and the Americas to the present. Development and growth of today's arts and aesthetics.

ARTS 4351 American Art
History of Visual Arts in the United States from the 17th century to the present, including Native American Art.

ARTS 4352 Latin American Art and Architecture
Major monuments of Latin American art and architecture, 16th century to the present. Emphasizes post-Conquest mixtures of European and indigenous styles during the colonial period and major developments since independence.

ARTS 4353 History of Photography
The history of photography as an art form from its inception under Talbot, Niepce, and Daguerre to the present. Special emphasis on Mexico, Latin America, and the Borderlands.

ARTS 4354 Modern Mexican Art, 1785-1940
An in-depth survey of modern Mexican art from the founding of the San Carlos Academy in Mexico City in 1785 through 1940.

ARTS 4355 Modern Mexican Art since 1940
An in-depth survey of the most recent developments in Mexican art since 1940.
ARTS 4356 Modern Art of South America and the Caribbean
An in-depth survey of South American and Caribbean art from the 1816 founding of the Brazilian Academy through the present. Most emphasis will be on the nations of Argentina, Brazil, Colombia, Cuba, Uruguay, and Venezuela.

ARTS 4357 Latin@ Art History
The most notable artistic achievements and movements of the United States' peoples of Mexican, Cuban, Puerto Rican, or other Latin American or U.S. Borderlands descent since 1920.

ARTS 4358 Research Methods in Latin American Art and Architectural History
Art and Architectural History The practice of effective research methods for Latin American art and architectural history.

ARTS 4359 Seminar on Topics in Art History
Variable topics on the different art historical regions, periods or themes to be offered on demand in the seminar format. This is the required capstone course for the BA Concentration in Latin American Art and Architectural History.

ARTS 4361 Advanced Printmaking
More advanced printmaking processes. The student may pursue previously learned processes in greater depth or may pursue more experimental directions.

ARTS 4371 Advanced Ceramics
Students are expected to be involved in a personal direction in the use of clay/glaze.
ARTS 4388 Special Topics in Studio Art
Immersion within an artistic discipline to study a special advanced studio art topic not required in the graduate curriculum.

ARTS 4391 Individual Problems/Internship/Co-op
Advanced problems in an art area of the student's choice and/or internship with an art professional in the field of interest.

ARTS 4392 Individual Problems
Advanced problems in the area of the student's choice.
ARTS 4393 2-D Experimental Art
Exploration of conceptual possibilities in artistic creation through diverse 2-D media and practices.
ARTS 4394 3-D Experimental Art
Exploration of conceptual possibilities in artistic creation through diverse 3-D media and practices.
ARTS 4395 BA Senior Exhibit
This course requires an art exhibition and a written paper. This is the capstone course for the BA Concentration in Visual Art.

## ARTS 4396 BFA Senior Graphic Design Exhibit

Organization and management of promotional materials, portfolio, oral presentation, installation and de-installation of work and opening night preparation related to coordinating a professionally successful art exhibition. This is the capstone course for the BFA Concentration in Graphic Design.

ARTS 4397 BFA Exhibit in Studio Art
Organization and management of promotional materials, portfolio, oral presentation, installation, and de-installation of work and opening night preparation related to coordinating a professionally successful art exhibition. This is the capstone course for the BFA Concentration in Studio Art.

## Dance

DANC 1202 Dance Improvisation
Exploration of dance elements and design through creative problem solving and guided experiences. Must be registered concurrently in any DANC modern dance technique class. Prerequisites: Required course for both Dance majors and minors. Must be registered concurrently in any Modern Dance technique course from: DANC 2246, 2345, 3246, 3345, 4246, 4345.

DANC 1222 Folk and Square Dance
Introduction to folk and square dance technique and styles. Prerequisites: May be repeated for credit.
DANC 1228 Ballroom Dance
Introduction to ballroom dance technique and styles. Prerequisites: May be repeated for credit.
DANC 1230 Yoga
Introduction to yoga practice. Prerequisites: May be repeated for credit.
DANC 1240 Pilates
Introduction of Pilates mat work. Prerequisites: May be repeated for credit.
DANC 1241 Introduction to Ballet Technique I
Introduction to Ballet technique and styles. Prerequisites: May be repeated for credit.
DANC 1242 Introduction to Ballet Technique II
Introduction to Ballet technique and styles. Prerequisites: May be repeated for credit.
DANC 1245 Introduction to Modern Dance Technique I
Introduction to modern technique and styles. Prerequisites: May be repeated for credit.
DANC 1246 Introduction to Modern Dance Technique II
Introduction to modern technique and styles. Prerequisites: May be repeated for credit.
DANC 1249 Introduction to Folklorico I
Introduction to folklorico dance technique and styles. Prerequisites: May be repeated for credit.
DANC 1250 Introduction to Folklorico II
Introduction to folklorico dance technique and styles. Prerequisites: May be repeated for credit.
DANC 1253 Introduction to Flamenco I
Introduction of flamenco dance technique and styles. Prerequisites: May be repeated for credit.
DANC 1254 Introduction to Flamenco II
Introduction of flamenco dance technique and styles. Prerequisites: May be repeated for credit.

DANC 1351 Introduction to Dance
Introduction to dance as a profession; with activities that prepare the student for dance major course work with an emphasis on dance conditioning/somatic practices. Prerequisites: Required course for Dance majors. Not required for Dance minors.

DANC 2112 Dance Performance: Beginning/Intermediate
Introduction to dance performance participation and techniques. Prerequisites: Must be registered concurrently in any dance technique course from: DANC 2246, 2345, 3246, 3345, 4246, 4345, 2242, $2244,2341,3242,3244,3344,4242,4341,2254,2353,3254,3353,4254,4353,2250,2349,3250$, 3349, 4250, 4349, 2220, 3220, 2321, 3321, 2220, 3220 . May be repeated for credit.

DANC 2130 Dance Technique: Special Topics I
Intensive study in dance technique; study with guest artists. Prerequisites: May be repeated for credit.

DANC 2210 Tap Dance I
Introduction to tap dance technique and styles. Prerequisites: May be repeated for credit.
DANC 2220 Jazz Dance I
Introduction to jazz dance technique and styles. Prerequisites: May be repeated for credit.
DANC 2242 Ballet I
Study of fundamentals of ballet technique. Prerequisites: May be repeated for credit.
DANC 2244 Ballet Technique: Pointe I
Instruction in Pointe technique. Prerequisites: May be repeated for credit.
DANC 2246 Modern Dance I
Study of fundamentals of modern technique. Prerequisites: May be repeated for credit.
DANC 2250 Folklorico I
Study of fundamentals of Folklorico dance technique. Prerequisites: May be repeated for credit.
DANC 2254 Flamenco I
Study of fundamentals of Flamenco dance technique. May be repeated for credit. Prerequisites: May be repeated for credit.

DANC 2303 Music for Dancers
Introduction to musical elements as they relate to dance technique, performance, and instruction. Prerequisites: Required course for Dance majors, optional for Dance minors.

DANC 2321 Jazz Dance I
Beginning/Intermediate jazz dance technique and styles. Prerequisites: May be repeated for credit.
DANC 2323 Dance Appreciation
An introduction to theatrical dance, including ballet, modern dance, post-modern, folklorico dance and flamenco dance. How to understand and enjoy dance, an appreciation and understanding of Western dance performance forms. Prerequisites: Fulfills General Education Core requirement for Creative Arts, excluding Dance majors.

DANC 2341 Ballet I
Study of fundamentals of ballet technique. Prerequisites: May be repeated for credit.
DANC 2345 Modern Dance I
Study of fundamentals of modern dance technique. Prerequisites: May be repeated for credit.

Study of fundamentals of Folklorico dance technique. Prerequisites: May be repeated for credit.
DANC 2353 Flamenco I
Study of fundamentals of Flamenco dance technique. May be repeated for credit. Prerequisites: May be repeated for credit.

DANC 3112 Dance Performance: Intermediate/Advanced
Intermediate/advanced dance performance techniques. Prerequisites: Must be registered concurrently in any dance technique course from: DANC 2246, 2345, 3246, 3345, 4246, 4345, 2242, $2244,2341,3242,3244,3344,4242,4341,2254,2353,3254,3353,4254,4353,2250,2349,3250$, 3349, 4250, 4349, 2220, 3220, 2321, 3321, 2220, 3220. May be repeated for credit.

DANC 3121 Dance Science Lab
This course is designed to provide a deeper understanding of the concepts taught in the DANC 3320 Dance Science lecture course through the application of several means of assessment with the integration of conditioning activities geared toward injury prevention. Prerequisites: BIOL 2401 and BIOL 2402; must be registered concurrently in DANC 3320.

DANC 3130 Dance Technique: Special Topics II
Intensive study in advanced dance technique; study with guest artists. Prerequisites: May be repeated for credit.

DANC 3210 Tap Dance II
Continuation of tap dance technique and styles. Prerequisites: Completion of DANC 2210 with the grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3220 Jazz Dance II
Continuation of jazz dance technique and styles. Prerequisites: Completion of DANC 2220 with the grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3242 Ballet II
Continuing study of fundamentals of ballet technique. Prerequisites: Completion of two semesters of either DANC 2242 and/or DANC 2341 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3244 Ballet Technique: Pointe II
Instruction in advanced Pointe technique. Prerequisites: Completion of DANC 2244 with the grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3246 Modern Dance II
Continuing study of fundamentals of modern dance technique. Prerequisites: Completion of two semester of either DANC 2246 and/or DANC 2345 with a grade of ' $B$ ' or better, or permission of instructor. May be repeated for credit.

DANC 3250 Folklorico II
Continuing study of fundamentals of Folklorico dance technique. Prerequisites: Completion of two semesters of either DANC 2250 and/or DANC 2349 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

Continuing study of Flamenco dance. Prerequisites: Completion of two semesters of either DANC 2254 and/or DANC 2353 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3301 Choreography I
Investigation of compositional structures, motif and motif development; space, dynamics and rhythm as choreographic tools in dance making, leading to production of original dance work for formal/informal presentation. Prerequisites: DANC 1202.

DANC 3302 Choreography II
Study of space use, group design and emotional content in dance-making, leading to the production of original dance work for formal/informal presentation. Prerequisites: DANC 3301.

DANC 3308 Dance History
History of dance as an art form viewed in its cultural and societal contexts. Prerequisites: At least junior level status.

DANC 3311 Dance Production
Theory and practice of technical production for dance, including lighting design, costume design and construction, set design, sound and props. Prerequisites: At least junior level status.

DANC 3312 Dance Philosophy and Criticism
Orientation to historical and contemporary dance philosophies; critical analysis of choreography and dance performance. Prerequisites: DANC 3308.

DANC 3313 World Dance
Inquiry into dance forms and cultural contexts in diverse world cultures. Prerequisites: At least junior level status.

DANC 3320 Dance Science
Fundamentals of physiology, kinesiology, biomechanics, physical conditioning and injury prevention as they apply to dance techniques and training. Prerequisites: BIOL 2401 and BIOL 2402; must be registered concurrently in DANC 3121.

DANC 3321 Jazz Dance II
Introduction to tap dance technique and styles. Prerequisites: Completion of either DANC 2220 and/or DANC 2321 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3341 Ballet II
Continuing study of fundamentals of ballet technique. Prerequisites: Completion of two semesters of either DANC 2242 and/or DANC 2341 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3345 Modern Dance II
Continuing study of fundamentals of modern dance technique. Prerequisites: Completion of two semesters of either DANC 2246 and/or DANC 2345 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3349 Folklorico II
Continuing study of fundamentals of Folklorico dance technique. Prerequisites: Completion of two semesters of either DANC 2250 and/or DANC 2349 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 3353 Flamenco II
Continuing study of fundamentals of Flamenco dance technique. Prerequisites: Completion of two semesters of either DANC 2254 and/or DANC 2353 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4242 Ballet III
Continuing study of ballet technique with a strong emphasis on performing skills and styles.
Prerequisites: Completion of two semesters of either DANC 3242 and/or DANC 3341 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4246 Modern Dance III
Continuing study of modern dance technique with a strong emphasis on performing skills and styles. Prerequisites: Completion of two semesters of either DANC 3246 and/or DANC 3345 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4250 Folklorico III
Continuing study of Folkloric dance technique with a strong emphasis on performing skills and styles. Prerequisites: Completion of two semesters of either DANC 3250 and/or DANC 3349 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4254 Flamenco III
Continuing study of Flamenco dance technique with a strong emphasis on performing skills and styles. Prerequisites: Completion of two semesters of either DANC 3254 and/or DANC 3353 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4302 Senior Project
The production of senior choreographic work for formal presentation or a research project. Prerequisites: DANC 3302. Capstone course for Dance majors. Permission of instructor.

DANC 4309 Dance Theory
Technical and aesthetic theories and practices related to the training of dancers. Prerequisites: Grade of 'B' or better in DANC 3242, DANC 3244, DANC 3246, DANC 3341, DANC 3345, DANC 4242, DANC 4246, DANC 4341, or DANC 4345, or permission of instructor.

DANC 4313 Dance in the Public Schools
Field-based experiences in program planning for dance in secondary schools, including unit instruction, lesson planning, class organization and materials sources. Laboratory experiences to be arranged. Prerequisites: DANC 4309, EDUC 3301, and EDUC 3302.

DANC 4341 Ballet III
Continuing study of ballet technique with a strong emphasis on performing skills and styles.
Prerequisites: Completion of two semesters of either DANC 3242 and/or DANC 3341 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4345 Modern Dance III
Continuing study of modern dance technique with a strong emphasis on performing skills and styles. Prerequisites: Completion of two semesters of either DANC 3246 and/or DANC 3345 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

DANC 4349 Folklorico III
Continuing study of Folkloric dance technique with a strong emphasis on performing skills and styles. Prerequisites: Completion of two semesters of either DANC 3250 and/or DANC 3349 with a grade of ' $B$ ' or better, or permission of instructor. May be repeated for credit.

DANC 4353 Flamenco III
Continuing study of Flamenco dance technique with a strong emphasis on performing skills and styles. Prerequisites: Completion of two semesters of either DANC 3254 and/or DANC 3353 with a grade of 'B' or better, or permission of instructor. May be repeated for credit.

## Applied Music

MUAP 1201 Applied Bassoon I
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: Audition and program acceptance required.

MUAP 1202 Applied Cello I
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: Audition and program acceptance required.

MUAP 1203 Applied Clarinet I
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites:
Audition and program acceptance required.
MUAP 1204 Applied Euphonium I
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites:
Audition and program acceptance required.
MUAP 1205 Applied Flute I
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: Audition and program acceptance required.

MUAP 1206 Applied French Horn I
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: Audition and program acceptance required.

MUAP 1207 Applied Guitar I
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: Audition and program acceptance required.

MUAP 1208 Applied Harp I
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: Audition and program acceptance required.

MUAP 1209 Applied Oboe I
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites:
Audition and program acceptance required.
MUAP 1210 Applied Percussion I
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: Audition and program acceptance required.

MUAP 1211 Applied Piano I
Intensive technical, interpretive, and performance skills development on piano. Prerequisites:
Audition and program acceptance required.

MUAP 1212 Applied Saxophone I
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: Audition and program acceptance required.

MUAP 1213 Applied String Bass I
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: Audition and program acceptance required.

MUAP 1214 Applied Trombone I
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: Audition and program acceptance required.

MUAP 1215 Applied Trumpet I
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites:
Audition and program acceptance required.
MUAP 1216 Applied Tuba I
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: Audition and program acceptance required.

MUAP 1217 Applied Viola I
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: Audition and program acceptance required.

MUAP 1218 Applied Violin I
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: Audition and program acceptance required.

MUAP 1219 Applied Voice I
Intensive technical, interpretive, and performance skills development on voice. Prerequisites:
Audition and program acceptance required.
MUAP 1251 Applied Bassoon II
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: MUAP 1201.

MUAP 1252 Applied Cello II
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: MUAP 1202.

MUAP 1253 Applied Clarinet II
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites: MUAP 1203.

MUAP 1254 Applied Euphonium II
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites: MUAP 1204.

MUAP 1255 Applied Flute II
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: MUAP 1205.

MUAP 1256 Applied French Horn II
[0-0-1]
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: MUAP 1206.

MUAP 1257 Applied Guitar II
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: MUAP 1207.

MUAP 1258 Applied Harp II
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: MUAP 1208.

MUAP 1259 Applied Oboe II [0-0-1]
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites: MUAP 1209.

MUAP 1260 Applied Percussion II
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: MUAP 1210.

MUAP 1261 Applied Piano II
Intensive technical, interpretive, and performance skills development on piano. Prerequisites: MUAP 1211.

MUAP 1262 Applied Saxophone II
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: MUAP 1212.

MUAP 1263 Applied String Bass II
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: MUAP 1213.

MUAP 1264 Applied Trombone II
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: MUAP 1214.

MUAP 1265 Applied Trumpet II
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites: MUAP 1215.

MUAP 1266 Applied Tuba II
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: MUAP 1216.

MUAP 1267 Applied Viola II
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: MUAP 1217.

MUAP 1268 Applied Violin II
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: MUAP 1218.

MUAP 1269 Applied Voice II
Intensive technical, interpretive, and performance skills development on voice. Prerequisites: MUAP 1219.

MUAP 2201 Applied Bassoon III
[0-0-1]
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: MUAP 1251.

MUAP 2202 Applied Cello III
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: MUAP 1252.

MUAP 2203 Applied Clarinet III
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites: MUAP 1253.

MUAP 2204 Applied Euphonium III
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites: MUAP 1254.

MUAP 2205 Applied Flute III
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: MUAP 1255.

MUAP 2206 Applied French Horn III
[0-0-1]
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: MUAP 1256.

MUAP 2207 Applied Guitar III
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: MUAP 1257.

MUAP 2208 Applied Harp III
[0-0-1]
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: MUAP 1258.

MUAP 2209 Applied Oboe III
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites: MUAP 1259.

MUAP 2210 Applied Percussion III
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: MUAP 1260.

MUAP 2211 Applied Piano III [0-0-1]
Intensive technical, interpretive, and performance skills development on piano. Prerequisites: MUAP 1261.

MUAP 2212 Applied Saxophone III
[0-0-1]
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: MUAP 1262.

MUAP 2213 Applied String Bass III
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: MUAP 1263.

MUAP 2214 Applied Trombone III
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: MUAP 1264.

MUAP 2215 Applied Trumpet III
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites: MUAP 1265.

MUAP 2216 Applied Tuba III [0-0-1]
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: MUAP 1266.

MUAP 2217 Applied Viola III
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: MUAP 1267.

MUAP 2218 Applied Violin III
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: MUAP 1268.

MUAP 2219 Applied Voice III
Intensive technical, interpretive, and performance skills development on voice. Prerequisites: MUAP 1269.

MUAP 2251 Applied Bassoon IV
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: MUAP 2201.

MUAP 2252 Applied Cello IV
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: MUAP 2202.

MUAP 2253 Applied Clarinet IV
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites: MUAP 2203.

MUAP 2254 Applied Euphonium IV
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites: MUAP 2204.

MUAP 2255 Applied Flute IV
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: MUAP 2205.

MUAP 2256 Applied French Horn IV
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: MUAP 2206.

MUAP 2257 Applied Guitar IV
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: MUAP 2207.

MUAP 2258 Applied Harp IV
[0-0-1]
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: MUAP 2208.

MUAP 2259 Applied Oboe IV
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites: MUAP 2209.

MUAP 2260 Applied Percussion IV
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: MUAP 2210.

MUAP 2261 Applied Piano IV
Intensive technical, interpretive, and performance skills development on piano. Prerequisites: MUAP 2211.

MUAP 2262 Applied Saxophone IV
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: MUAP 2212.

MUAP 2263 Applied String Bass IV
[0-0-1]
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: MUAP 2213.

MUAP 2264 Applied Trombone IV
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: MUAP 2214.

MUAP 2265 Applied Trumpet IV
[0-0-1]
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites: MUAP 2215.

MUAP 2266 Applied Tuba IV
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: MUAP 2216.

MUAP 2267 Applied Viola IV
[0-0-1]
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: MUAP 2217.

MUAP 2268 Applied Violin IV
[0-0-1]
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: MUAP 2218.

MUAP 2269 Applied Voice IV
Intensive technical, interpretive, and performance skills development on voice. Prerequisites: MUAP 2219.

MUAP 3201 Applied Bassoon V
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: MUAP 2251.

MUAP 3202 Applied Cello V
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: MUAP 2252.

MUAP 3203 Applied Clarinet V
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites: MUAP 2253.

MUAP 3204 Applied Euphonium V
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites: MUAP 2254.

MUAP 3205 Applied Flute V
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: MUAP 2255.

MUAP 3206 Applied French Horn V
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: MUAP 2256.

MUAP 3207 Applied Guitar V
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: MUAP 2257.

MUAP 3208 Applied Harp V
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: MUAP 2258.

MUAP 3209 Applied Oboe V
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites: MUAP 2259.

MUAP 3210 Applied Percussion V
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: MUAP 2260.

MUAP 3211 Applied Piano V
Intensive technical, interpretive, and performance skills development on piano. Prerequisites: MUAP 2261.

MUAP 3212 Applied Saxophone V
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: MUAP 2262.

MUAP 3213 Applied String Bass V
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: MUAP 2263.

MUAP 3214 Applied Trombone V
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: MUAP 2264.

MUAP 3215 Applied Trumpet V
[0-0-1]
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites: MUAP 2265.

MUAP 3216 Applied Tuba V
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: MUAP 2266.

MUAP 3217 Applied Viola V
[0-0-1]
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: MUAP 2267.

MUAP 3218 Applied Violin V
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: MUAP 2268.

MUAP 3219 Applied Voice V
[0-0-1]
Intensive technical, interpretive, and performance skills development on voice. Prerequisites: MUAP 2269.

MUAP 3251 Applied Bassoon VI
[0-0-1]
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: MUAP 3201.

MUAP 3252 Applied Cello VI
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: MUAP 3202.

MUAP 3253 Applied Clarinet VI
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites: MUAP 3203.

MUAP 3254 Applied Euphonium VI
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites: MUAP 3204.

MUAP 3255 Applied Flute VI
[0-0-1]
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: MUAP 3205.

MUAP 3256 Applied French Horn VI
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: MUAP 3206.

MUAP 3257 Applied Guitar VI
[0-0-1]
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: MUAP 3207.

MUAP 3258 Applied Harp VI
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: MUAP 3208.

MUAP 3259 Applied Oboe VI
[0-0-1]
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites: MUAP 3209.

MUAP 3260 Applied Percussion VI
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: MUAP 3210.

MUAP 3261 Applied Piano VI
Intensive technical, interpretive, and performance skills development on piano. Prerequisites: MUAP 3211.

MUAP 3262 Applied Saxophone VI
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: MUAP 3212.

MUAP 3263 Applied String Bass VI
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: MUAP 3213.

MUAP 3264 Applied Trombone VI
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: MUAP 3214.

MUAP 3265 Applied Trumpet VI
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites: MUAP 3215.

MUAP 3266 Applied Tuba VI
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: MUAP 3216.

MUAP 3267 Applied Viola VI
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: MUAP 3217.

MUAP 3268 Applied Violin VI
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: MUAP 3218.

MUAP 3269 Applied Voice VI
Intensive technical, interpretive, and performance skills development on voice. Prerequisites: MUAP 3219.

MUAP 4201 Applied Bassoon VII
Intensive technical, interpretive, and performance skills development on bassoon. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3251.

MUAP 4202 Applied Cello VII
[0-0-1]
Intensive technical, interpretive, and performance skills development on cello. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3252.

MUAP 4203 Applied Clarinet VII
Intensive technical, interpretive, and performance skills development on clarinet. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3253.

MUAP 4204 Applied Euphonium VII
Intensive technical, interpretive, and performance skills development on euphonium. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3254.

MUAP 4205 Applied Flute VII
Intensive technical, interpretive, and performance skills development on flute. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3255.

MUAP 4206 Applied French Horn VII
[0-0-1]
Intensive technical, interpretive, and performance skills development on french horn. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3256.

MUAP 4207 Applied Guitar VII
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3257.

MUAP 4208 Applied Harp VII
Intensive technical, interpretive, and performance skills development on harp. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3258.

MUAP 4209 Applied Oboe VII
Intensive technical, interpretive, and performance skills development on oboe. Capstone Project.
Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3259.

MUAP 4210 Applied Percussion VII
[0-0-1]
Intensive technical, interpretive, and performance skills development on percussion. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3260.

MUAP 4211 Applied Piano VII
[0-0-1]
Intensive technical, interpretive, and performance skills development on piano. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3261.

MUAP 4212 Applied Saxophone VII
Intensive technical, interpretive, and performance skills development on saxophone. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3262.

MUAP 4213 Applied String Bass VII
Intensive technical, interpretive, and performance skills development on string bass. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3263.

MUAP 4214 Applied Trombone VII
Intensive technical, interpretive, and performance skills development on trombone. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3264.

MUAP 4215 Applied Trumpet VII
Intensive technical, interpretive, and performance skills development on trumpet. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 2265.

MUAP 4216 Applied Tuba VII
Intensive technical, interpretive, and performance skills development on tuba. Capstone Project. Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3266.

MUAP 4217 Applied Viola VII
Intensive technical, interpretive, and performance skills development on viola. Capstone Project.
Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3267.

MUAP 4218 Applied Violin VII
Intensive technical, interpretive, and performance skills development on violin. Capstone Project.
Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3268.

MUAP 4219 Applied Voice VII
Intensive technical, interpretive, and performance skills development on voice. Capstone Project.
Minimum 40 minute recital of representative repertoire for the major instrument/voice with research component. Education Majors. Prerequisites: MUAP 3269.

MUAP 4251 Applied Bassoon VIII
Intensive technical, interpretive, and performance skills development on bassoon. Prerequisites: MUAP 4201.

MUAP 4252 Applied Cello VIII
Intensive technical, interpretive, and performance skills development on cello. Prerequisites: MUAP 4202.

MUAP 4253 Applied Clarinet VIII
Intensive technical, interpretive, and performance skills development on clarinet. Prerequisites: MUAP 4203.

MUAP 4254 Applied Euphonium VIII
Intensive technical, interpretive, and performance skills development on euphonium. Prerequisites: MUAP 4204.

MUAP 4255 Applied Flute VIII
[0-0-1]
Intensive technical, interpretive, and performance skills development on flute. Prerequisites: MUAP 4205.

MUAP 4256 Applied French Horn VIII
Intensive technical, interpretive, and performance skills development on french horn. Prerequisites: MUAP 4206.

MUAP 4257 Applied Guitar VIII
Intensive technical, interpretive, and performance skills development on guitar. Music history and analysis reinforcement. Prerequisites: MUAP 4207.

MUAP 4258 Applied Harp VIII
Intensive technical, interpretive, and performance skills development on harp. Prerequisites: MUAP 4208.

MUAP 4259 Applied Oboe VIII
[0-0-1]
Intensive technical, interpretive, and performance skills development on oboe. Prerequisites: MUAP 4209.

MUAP 4260 Applied Percussion VIII
Intensive technical, interpretive, and performance skills development on percussion. Prerequisites: MUAP 4210.

MUAP 4261 Applied Piano VIII
Intensive technical, interpretive, and performance skills development on piano. Prerequisites: MUAP 4211.

MUAP 4262 Applied Saxophone VIII
[0-0-1]
Intensive technical, interpretive, and performance skills development on saxophone. Prerequisites: MUAP 4212.

MUAP 4263 Applied String Bass VIII
Intensive technical, interpretive, and performance skills development on string bass. Prerequisites: MUAP 4213.

MUAP 4264 Applied Trombone VIII
[0-0-1]
Intensive technical, interpretive, and performance skills development on trombone. Prerequisites: MUAP 4214.

MUAP 4265 Applied Trumpet VIII
Intensive technical, interpretive, and performance skills development on trumpet. Prerequisites: MUAP 4215.

MUAP 4266 Applied Tuba VIII
Intensive technical, interpretive, and performance skills development on tuba. Prerequisites: MUAP 4216.

MUAP 4267 Applied Viola VIII
Intensive technical, interpretive, and performance skills development on viola. Prerequisites: MUAP 4217.

MUAP 4268 Applied Violin VIII
Intensive technical, interpretive, and performance skills development on violin. Prerequisites: MUAP 4218.

MUAP 4269 Applied Voice VIII
Intensive technical, interpretive, and performance skills development on voice. Prerequisites: MUAP 4219.

MUAP 4291 Applied Composition
Applying theory and aural skills components to create and compose musical scores. Student must have completed all theory and aural skills requirements. Prerequisites: MUSI 2212, MUSI 2117, MUSI 2114, and consent of instructor.

MUAP 4292 Applied Conducting
Continuation of Conducting II (either instrumental or choral), but in a private lesson setting. Prerequisites: MUSI 2212, MUSI 2117, MUSI 2114, and consent of instructor.

## Music Ensembles

MUEN 1121 Wind Ensemble
Wind Ensemble: The Wind Ensemble studies and performs a wide variety of music representing the literature and genres of wind music throughout history. Membership is open to the entire University student population. May be repeated for additional credit. Prerequisites: Audition required.

MUEN 1122 University Concert Band or Marching Band
University Concert Band or Marching Band: Instrumental music ensemble open by audition to all University students who play appropriate instruments. Each course may be repeated any number of times. Prerequisites: Audition required.

MUEN 1123 Symphony Orchestra
Symphony Orchestra: The symphony Orchestra rehearses and performs symphonic literature composed and arranged for the symphonic or chamber orchestra. Membership is open to the entire University student population. Course may be repeated for additional credit. Prerequisites: Audition required.

MUEN 1124 Guitar Ensemble
The study and public presentation of music for guitar in groups. Improvisation and conducting will be covered. Prerequisites: Audition required.

MUEN 1125 Piano Accompanying
This is a course for college students who have an ability to play piano and an interest in collaborating with other musicians. Each course may be repeated any number of times. Permission of instructor is necessary. Prerequisites: Consent of instructor.

MUEN 1126 Jazz Ensemble
An instrumental music organization open to all college students who have an ability to play an appropriate instrument. Membership is determined by audition. This organization rehearses and performs popular, rock, and jazz music for its own musical development and to satisfy requests on and off the campus. Each course may be repeated any number of times. Prerequisites: Audition required.

MUEN 1127 Latin Ensemble
This is an ensemble open to all college students who have an ability to play an appropriate instrument. This ensemble rehearses and performs pop, salsa, merengue, cumbia and other Latin styles of music to satisfy requests on and off the campus. Each course may be repeated any number of times. Permission of instructor is necessary Prerequisites: Audition required.

MUEN 1128 Mariachi Ensemble
This is an ensemble open to all college students who have an ability to play an appropriate instrument. This ensemble rehearses and performs to satisfy requests on and off the campus. Each course may be repeated any number of times. Permission of instructor is necessary. Prerequisites: Audition required.

MUEN 1131 Chamber Music for Winds
A course designated to promote collaboration of three or more instrumental musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1132 Jazz Combo
A course designated to promote collaboration of three or more musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1133 Chamber Music for Strings
A course designated to promote collaboration of three or more string musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1134 Chamber Music for Guitar
A course designated to promote collaboration of three or more instrumental musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1135 Chamber Music for Piano
A course designated to promote collaboration of three or more musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1136 Chamber Music for Percussion
A course designated to promote collaboration of three or more instrumental musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1137 Music and Dance Collaboration Ensemble
A course designated to promote collaboration of dancers and musicians in various settings.
Prerequisites: Consent of instructor.
MUEN 1140 Chamber Music
A course designated to promote collaboration of in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 1141 Master Chorale
Master Chorale is an elite choral ensemble open to music and non-music majors through audition and director approval. The Master Chorale studies and performs outstanding choral literature of all eras and styles. May be repeated for additional credit. Prerequisites: Audition required.

MUEN 1142 University Choir
The University Choir studies and performs a wide variety of choral music, from madrigals and folk songs to modern arrangements and masterworks. Membership is open to the entire University students population. May be repeated for additional credit. Prerequisites: Audition required.

MUEN 1143 Opera Workshop
An ensemble that stages scenes or complete works from opera and Broadway theater. Open by audition to all University students. Each course may be repeated any number of times. Prerequisites: Consent of instructor.

MUEN 3121 Wind Ensemble
The Wind Ensemble studies and performs a wide variety of music representing the literature and genres of wind music throughout history. Membership is open to the entire University student population. May be repeated for additional credit. Prerequisites: Audition required.

MUEN 3122 University Concert Band or Marching Band
Instrumental music ensemble open by audition to all University students who play appropriate instruments. Each course may be repeated any number of times. Prerequisites: Audition required.

MUEN 3123 Symphony Orchestra
The symphony Orchestra rehearses and performs symphonic literature composed and arranged for the symphonic or chamber orchestra. Membership is open to the entire University student population. Course may be repeated for additional credit. Prerequisites: Audition required.

MUEN 3124 Guitar Ensemble
The study and public presentation of music for guitar in groups. Improvisation and conducting will be covered. Prerequisites: Audition required.

MUEN 3125 Piano Accompanying
Piano Accompanying: This is a course for college students who have an ability to play an piano and an interest in collaborating with other musicians. Each course may be repeated any number of times. Permission of instructor is necessary. Prerequisites: Consent of instructor.

MUEN 3126 Jazz Ensemble
An instrumental music organization open to all college students who have an ability to play an appropriate instrument. Membership is determined by audition. This organization rehearses and performs popular, rock, and jazz music for its own musical development and to satisfy requests on and off the campus. Each course may be repeated any number of times. Prerequisites: Audition required.

MUEN 3127 Latin Ensemble
This is an ensemble open to all college students who have an ability to play an appropriate instrument. This ensemble rehearses and performs pop, salsa, merengue, cumbia and other Latin styles of music to satisfy requests on and off the campus. Each course may be repeated any number of times. Permission of instructor is necessary Prerequisites: Audition required.

MUEN 3128 Mariachi Ensemble
This is an ensemble open to all college students who have an ability to play an appropriate instrument. This ensemble rehearses and performs to satisfy requests on and off the campus. Each course may be repeated any number of times. Permission of instructor is necessary. Prerequisites: Audition required.

MUEN 3131 Chamber Music for Winds
A course designated to promote collaboration of three or more instrumental musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3132 Jazz Combo
A course designated to promote collaboration of three or more musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3133 Chamber Music for Strings
A course designated to promote collaboration of three or more string musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3134 Chamber Music for Guitar
A course designated to promote collaboration of three or more instrumental musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3135 Chamber Music for Piano
A course designated to promote collaboration of three or more musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3136 Chamber Music for Percussion
A course designated to promote collaboration of three or more instrumental musicians in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3137 Music and Dance Collaboration Ensemble:
A course designated to promote collaboration of dancers and musicians in various settings.
Prerequisites: Consent of instructor.
MUEN 3140 Chamber Music
A course designated to promote collaboration of in various chamber music settings. Prerequisites: Consent of instructor.

MUEN 3141 Master Chorale
Master Chorale is an elite choral ensemble open to music and non-music majors through audition and director approval. The Master Chorale studies and performs outstanding choral literature of all eras and styles. May be repeated for additional credit. Prerequisites: Audition required.

MUEN 3142 University Choir
The University Choir studies and performs a wide variety of choral music, from madrigals and folk songs to modern arrangements and masterworks. Membership is open to the entire University students population. May be repeated for additional credit. Prerequisites: Audition required.

MUEN 3143 Opera Workshop
An ensemble that stages scenes or complete works from opera and Broadway theater. Open by audition to all University students. Each course may be repeated any number of times. Prerequisites: Consent of instructor.

## Music

MUSI 1114 Piano for Music Majors I
First semester of a three semester sequence designed to develop basic keyboard and musicianship skills including technique, sight reading, harmonization, accompaniment, theory, and piano repertoire Prerequisites: Placement Exam.

MUSI 1115 Piano for Music Majors II
Second semester of a three semester sequence designed to develop basic keyboard and musicianship skills including technique, sight reading, harmonization, accompaniment, theory, and piano repertoire. Prerequisites: Placement Exam or MUSI 1114.

MUSI 1116 Sight Singing and Ear Training I
This course will develop (1) diatonic sight singing skills using moveable Do solfege and Kodaly hand symbols, with accurate pitch, (2) rhythm performance skills, and (3) melodic, rhythmic, and harmonic recognition/dictation/error detection skills. Prerequisites: Placement Exam.

MUSI 1117 Sight Singing and Ear Training II
This course will continue to develop (1) diatonic sight singing skills using moveable Do solfege and Kodaly hand symbols, with accurate pitch, (2) rhythm performance skills, and (3) melodic, rhythmic, and harmonic recognition/dictation/error detection skills. Prerequisites: MUSI 1211 and MUSI 1116

MUSI 1160 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 ( I P A). Prerequisites: Music/Performance Majors only.

MUSI 1161 Diction II
A continuation of MUSI 1160 with an emphasis on the Spanish and French languages. Prerequisites: Music/Performance Majors only and MUSI 1160.

MUSI 1163 Movement and Vocal Improvisation
Movement and Vocal Improvisation: An introduction to the techniques and methods of movement analysis and body usage, and how these relate to music and vocal sound. Topics may include (but are not limited to) Dalcoze, Eurhythmics, Alexander Technique, Feldenkrais Method, and Laban Movement Analysis. Prerequisites: Music/Performance Majors only.

MUSI 1166 Woodwind Methods I
Introduction to the fundamentals of clarinet and saxophone with emphasis on embouchure, breath control, tonguing and intonation problems, literature, maintenance and minor repair, classroom pedagogy and materials. Prerequisites: Music/Performance Majors only.

MUSI 1167 Woodwind Methods II
Introduction to the fundamentals of flute, oboe and bassoon with emphasis on embouchure, breath control, tonguing and intonation problems, literature, maintenance and minor repair, classroom pedagogy and materials. Prerequisites: Music/Performance Majors only.

MUSI 1178 High Brass Methods
Introduction to the fundamentals of trumpet and French horn with emphasis on embouchure, breath control, tonguing and intonation problems, literature, maintenance and minor repair classroom pedagogy and materials. Prerequisites: Music/Performance Majors only.

MUSI 1179 Low Brass Methods
Introduction to the fundamentals of trombone, euphonium and tuba with emphasis on embouchure, breath control, tonguing and intonation problems, literature, maintenance and minor repair classroom pedagogy and materials. Prerequisites: Music/Performance Majors only.

MUSI $\mathbf{1 1 8 3}$ Vocal Methods
Introduction to the fundamentals of singing and choral techniques for instrumentalists with emphasis on healthy vocal production, proper posture and breathing, tone production, expression and confidence. Prerequisites: Music/Performance Majors only.

MUSI $\mathbf{1 1 8 8}$ Percussion Methods
The purpose of this course is to provide future music educators with basic information concerning teaching methods and performance techniques for the percussion family of musical instruments. The course is designed to promote an understanding of technical, pedagogical, historical, and stylistic aspects of percussion in preparation for instructing percussion students in primary and secondary schools. Prerequisites: Music/Performance Majors only.

MUSI 1192 Guitar Methods
Introduction to the fundamentals of guitar with emphasis on tone production, literature, maintenance and minor repair, classroom pedagogy and materials. Prerequisites: Music/Performance Majors only.

MUSI 1195 High String Methods
Introduction to the fundamentals of the violin \& viola with emphasis on tone production, intonation, bowing, maintenance and minor repair, classroom pedagogy and materials. Prerequisites:
Music/Performance Majors only.
MUSI 1196 Low String Methods
Introduction to the fundamentals of the cello and double bass with emphasis on tone production, intonation, bowing, maintenance and minor repair, classroom pedagogy and materials. Prerequisites: Music/Performance Majors only.

MUSI 1197 Instrumental Methods
An overview of techniques necessary to teach and play string, wind, and percussion instruments. Prerequisites: Music/Performance Majors only.

MUSI 1211 Music Theory I
This course will begin with the fundamentals of music (note reading, intervals, chords, scales, key signatures, etc.) and will conclude with four-part writing. Note that you must be concurrently enrolled in Sight Singing and Ear Training I and in Class Piano I unless you have passed the piano proficiency. Prerequisites: Theory Placement Exam.

MUSI 1212 Music Theory II
This course will continue the study of diatonic harmony. Note that you must be concurrently enrolled in Sight Singing and Ear Training II, or another aural skills lab as assigned, and in Class Piano unless you have passed the piano proficiency. Prerequisites: MUSI 1211 and MUSI 1116.

MUSI 1220 Guitar Class for Non-Majors
Guitar instruction for non music majors with no previous experience.
MUSI 1221 Piano for Non-Majors
Piano instruction for non music majors with no previous experience.

MUSI 1222 Voice Class for Non Majors
Voice instruction for non music majors with no previous experience.
MUSI 1301 Fundamentals of Music
An introduction to the elements of music. This course includes the study of music reading and notation, rhythm, time signature and meters, scales, key signatures, intervals, and chords. In addition, a basic level keyboard skills and sight singing is developed.

MUSI 1306 Music Appreciation
An introduction to the formal study of music. Subject matter includes the basic elements of music and the historical style periods in Western art music along with their most important composers. Although classical music will be the course's emphasis, popular styles after 1900 (like jazz and rock), as well as several non-Western musical traditions may also be covered. Listening, reading, and analysis will lead to a greater understanding and appreciation of these styles. No prerequisite. Meets the requirements for the Creative Arts in the General Education Core.

MUSI 1307 Mexican Folk Music
A historical survey of Mexican folk music from its origins in ancient Mexican cultures through modern times. Course content includes audio and video recordings as well as performances of live music. No prerequisite. Meets the requirements for the Creative Arts in the General Education Core.

MUSI 1308 Music History and Literature I
A historical survey of Western musical tradition from the earliest known sources through the 16th century. The overall objective is for the student to gain an understanding of basic developments in Western music from Antiquity, the Middle Ages and the Renaissance. The course will include a study of styles and genres, and will place emphasis on listening, formal structure and musical analysis. The course is also designed to increase the students' critical thinking skills and ability to write effectively about the aesthetics of Western Music. 2nd of 4 courses in Music History, Literature and Culture sequence for majors. Meets the requirements for the Creative Arts in the General Education Core.

MUSI 1309 World Music Cultures
Introduces the study of music by asking fundamental questions about the origins, functions, and universal qualities of music in human society. Students learn how people worldwide use instruments, organize musical sound, and utilize music to enrich their experiences. Universal and unique aspects of music cultures will emerge through selected case studies from Africa, Asia, Europe, and the Americas. Students will examine their personal musical values as part of the course process. 1st of 4 courses in Music History, Literature and Culture sequence for majors. No prerequisite. Meets the requirements for Language, Philosophy \& Culture in the General Education Core.

MUSI 1310 History of Rock
Focuses on styles, key figures, and developments from its roots in the traditional music of AfricanAmericans and rural whites through the 1950's, 60's, and '70s and beyond. Listening, reading, and analysis will lead to a greater understanding and appreciation of these styles. No prerequisite. Meets the requirements for the Creative Arts in the General Education Core.

MUSI 1312 Psychology of Music
This course examines the cognitive, social, and biological basis of our ability to perceive, remember, appreciate and produce music. Examined through selected empirical studies and review papers encompassing the evolutionary, developmental, social/personality, and cognitive neuroscience approaches to understanding musical practice. This course also includes lab assignments involving listening exercises, data collection and analyses. Meets the requirements for Social and Behavioral Sciences in the General Education Core.

MUSI 1313 Teaching Music in the Elementary School
This service learning course emphasizes the importance of the arts in the curriculum. A major goal is to encourage students to critically think about integrating the arts into the curriculum, and about thematic teaching across the curriculum. The course is experiential. Students are active participant in activities that serve as models for future teaching. Students develop creative lessons integrating music, art, dance, and drama, share lessons with peers, and teach lessons to children in a school setting. Students will be introduced to music fundamentals through the recorder. No Prerequisite. Meets the requirements for Creative Arts in the General Education Core.

MUSI 2114 Piano for Music Majors III
This course is the third semester of a three semester sequence designed to develop basic keyboard and musicianship skills including technique, sight reading, harmonization, accompaniment, theory, and piano repertoire. Prerequisites: Piano Placement Exam.

MUSI 2116 Sight Singing and Ear Training III
You will continue to develop 1) sight singing skills using moveable Do solfege and Kodaly hand symbols, with accurate pitch in major and minor keys, 2) rhythm performance skills, using counting syllables, and 3) melodic, rhythmic, and harmonic recognition/dictation/error detection skills. Prerequisites: MUSI 1212 and MUSI 1117.

MUSI 2117 Sight Singing and Ear Training IV
This course will continue to develop 1) sight singing skills with accurate pitch in major and minor keys using moveable Do solfege and Kodaly hand symbols, 2) rhythm performance skills, and 3) melodic, rhythmic, and harmonic recognition/dictation/error detection skills. You will learn to identify modes and other scale types, modulations, and basic altered chords in progressions. Students will prepare for and take the Aural Skills Proficiency. Prerequisites: MUSI 2211 and MUSI 2116.

MUSI 2118 Keyboard Skills I
This course is designed to teach student keyboardists the requisite skills to interpret and perform works in the jazz idiom. Prerequisites: Piano Students Only.

MUSI 2119 Keyboard Skills II
Continuation of Keyboard Skills I. Prerequisites: Piano Students Only.
MUSI 2128 Techniques of Guitarron, Vihuela, and Guitar
Basic Instruction for Guitarron, Vihuela, and Guitar in the Mariachi genre including performance techniques, traditions of mariachi style, and mariachi music literature. Prerequisites: For Mariachi Award Only.

MUSI 2195 Independent Study
Individual readings and/or research on a selected topic under the supervision of a faculty member. Prerequisites: Consent of instructor.

Special Topics in Music - Topic will vary in nature. Open to all college students, may be repeated for credit. Prerequisites: Consent of instructor.

MUSI 2211 Music Theory III
This course will focus on the study of chromatic harmony. Secondary functions, altered chords, simple modulations, contrapuntal genres, and basic formal structures will all be addressed. Note that you must be concurrently enrolled in Sight Singing and Ear Training III, or another aural skills lab as assigned, and in Class Piano unless you have passed the piano proficiency. Prerequisites: MUSI 1212 and MUSI 1117.

MUSI 2212 Music Theory IV
This course will continue the study of chromatic harmony and introduces several post-tonal analytical techniques: Note that you must be concurrently enrolled in Sight Singing and Ear Training IV, or another aural skills lab as assigned, and in Class Piano unless you have passed the piano proficiency. Prerequisites: MUSI 2211 and MUSI 2116.

MUSI 2228 Style and Interpretation of Violin, Trumpet, and Voice
A survey of the traditions, interpretation, performance practices, and styles of the Violin, Trumpet and Voice in the Mariachi genre. Prerequisites: Mariachi Award.

MUSI 2295 Independent Study
Individual readings and/or research on a selected topic under the supervision of a faculty member. Prerequisites: Consent of instructor.

MUSI 2297 Special Topic
Special Topics in Music - Topic will vary in nature. This course is open to all college students and may be repeated for credit. Prerequisites: Consent of instructor.

MUSI 2301 Elementary Music Techniques
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. Prerequisites: Required for Music Education Majors; Substitutes for College of Education.

MUSI 2310 Technology in Music
The course provides experience with the four major types of uses of technology by music teachers and students: Administrative/Communication, Preparing Teaching Materials, Leading Class Activities and Student Uses of Technology to include the fundamentals of orchestration and arranging.

MUSI 2395 Independent Study
Individual readings and/or research on a selected topic under the supervision of a faculty member. Prerequisites: Consent of instructor.

MUSI 2397 Special Topic
Special Topics in Music - Topic will vary in nature. Open to all college students, may be repeated for credit. Prerequisites: Consent of instructor.

MUSI 3101 Choral Conducting I
This course is designed to develop skills fundamental to the art of choral conducting in a laboratory setting. Emphasis will be placed on (1) the application of the physical aspects involved in communication through gesture, (2) the understanding of broad concepts involving the role of teacher on the podium, and (3) development of aural skills that the conductor must acquire before conducting an ensemble. Prerequisites: MUSI 2212 and MUSI 2117. Music majors only.

MUSI 3102 Instrumental Conducting I
This course is designed to develop skills fundamental to the art of instrumental conducting in a laboratory setting. Emphasis will be placed on (1) the application of the physical aspects involved in communication through gesture, (2) the understanding of broad concepts involving the role of teacher on the podium, and (3) development of aural skills that the conductor must acquire before conducting an ensemble. Prerequisites: MUSI 2212 and MUSI 2117. Music majors only.

MUSI 3103 Vocal Pedagogy II
A hands-on study of teaching technique related to singing. Prerequisites: Vocal Pedagogy I, music major only.

MUSI 3104 Choral Literature
The objective of this course is to develop a thorough knowledge of the masterworks of the choral repertoire from historical and stylistic perspectives. The course format will include listening and reading assignments, presentations by class members. Prerequisites: MUSI 2212, MUSI 2117, and MUSI 2114. Music majors only.

MUSI 3105 Concert Band Literature
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. Prerequisites: MUSI 2212, MUSI 2117, and MUSI 2114. Music majors only.

MUSI 3106 Guitar Literature
This course provides an introduction to the following: basic literature for beginning, intermediate, and secondary guitar; small ensemble literature; solo instrumental repertoire; concert programming; counting systems; sight-reading methods and texts; jazz band literature and improvisation materials. Prerequisites: Music/Performance Majors only.

MUSI 3107 Orchestral Literature
This course provides an introduction to the following: basic literature for beginning, intermediate, and secondary orchestras; small ensemble literature; solo instrumental repertoire; concert programming; symphonic literature; sight-reading methods and texts; and improvisation materials. Prerequisites: Music/Performance Majors only.

MUSI 3111 Piano Pedagogy I
This course covers the pedagogical skills, teaching resources, and professional practices needed to teach piano to students who are at the beginning level. Prerequisites: Music/Performance Majors only.

MUSI 3112 Piano Pedagogy II
This course covers the pedagogical skills, teaching resources, and professional practices needed to teach piano to students who are at the intermediate through advanced levels. Prerequisites: MUSI 3111. Music/Performance Majors only.

MUSI 3113 Instrumental Pedagogy
Exploring teaching techniques and methods for a particular instrument. Prerequisites: music major only, permission of the instructor.

MUSI 3114 Instrumental Repertoire
Study and review of repertoire (solos, chamber music, etc) for a particular instrument and instrument area (woodwinds, brass, strings, etc). Prerequisites: music major only, permission of the instructor.

MUSI 3115 Keyboard Skills for Vocalists
Score reading and coaching skills necessary for accompanying choral ensembles and solos and its practical application for teaching and performing. Prerequisites: MUSI 2114. Voice Students Only.

MUSI 3120 Supervised Applied Teaching I
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Sequential practical experience in applied teaching under the supervision of major applied instructor. Prerequisites: Music/Performance Majors only.

MUSI 3121 Supervised Applied Teaching II
Sequential practical experience in applied teaching under the supervision of major applied instructor. Prerequisites: Music/Performance Majors only.

MUSI 3122 Supervised Applied Teaching III
Sequential practical experience in applied teaching under the supervision of major applied instructor. Prerequisites: Music/Performance Majors only.

MUSI 3123 Supervised Applied Teaching IV
Sequential practical experience in applied teaching under the supervision of major applied instructor. Prerequisites: Music/Performance Majors only.

MUSI 3204 Instrumental Literature
Instrumental Literature is designed to provide prospective performers and teachers with resources for locating and evaluating literature of their applied instrument. Emphasis will be placed on identifying appropriate compositions and method books based on educationally sound criteria. Prerequisites: Music/Performance Majors only.

MUSI 3206 Piano Literature I
This course is a survey of the standard piano literature from the Baroque and Classical eras. Additional topics include the instruments, performance practice and study of genres and forms significant to the development of piano literature during these eras. Prerequisites: Music/Performance Majors only.

MUSI 3207 Piano Literature II
This course is a survey of the standard piano literature from the Romantic era to the present. Additional topics include the instruments, performance practice and study of genres and forms significant to the development of piano literature during these eras. Prerequisites:
Music/Performance Majors only.
MUSI 3208 Song Literature
A survey of the major art songs and composers throughout the history of Western Art Music. Prerequisites: Music/Performance Majors only.

MUSI 3209 Vocal Pedagogy I
An in depth study of the anatomy and physiology of the voice as well as an introduction to methods of voice training and production. Prerequisites: Music/Performance Majors only.

MUSI 3210 The Art of Teaching and Pedagogy
Course designed to introduce students to current practices, methods and strategies applicable to applied and group teaching of instrumental and vocal music. This course will include classroom activities and field experiences designed to develop the critical thinking, communication, and presentation skills needed to become effective pedagogues. This course will require classroom observations in a variety of public school settings, mentored teaching internships in local public schools, as well as, self and peer analysis, critique, and evaluation of teaching. Prerequisites: Music/Performance Majors only.

MUSI 3211 Musical Form and Analysis
Harmonic and formal analysis of complete works from the Period of Common Practice, including Sonata Form, Concerto-Sonata, Concerto-Rondo, Sonata-Rondo, Binary, Ternary, Theme and Variations and more. Prerequisites: MUSI 2212 and MUSI 2117.

MUSI 3212 Marching Band Techniques
This course is designed to introduce you to the fundamental principles of effective instruction with respect to the contemporary marching band and application of these skills in learning how to prepare, organize, teach, and rehearse this type of ensemble. Prerequisites: Music/Performance Majors only.

MUSI 3213 Orchestral Techniques
This course is designed to introduce you to the fundamental principles of effective instruction with respect to the string orchestra and application of these skills in learning how to prepare, organize, teach, and rehearse this type of ensemble. In addition, the student will be challenged to examine expectations, aspirations and biases regarding the role of the string orchestra in music education. Through practical assignments, guest lecturers, and multimedia presentations, you will gain a command of the terminology, pedagogy, and structure of a string program. Prerequisites: Music/Performance Majors only.

MUSI 3225 Vocal Performance Techniques
Students will learn elements of stagecraft, including acting techniques, improvisation, movement, elements of set and makeup design, stage direction concepts, and how to incorporate them into vocal performances of a wide range of vocal repertoire. This class should be taken after MUSI 1198: Movement and Vocal Improvisation. Prerequisites: Music/Performance Majors only.

MUSI 3299 Junior Recital
Minimum 30 minute recital of representative repertoire for the major instrument/voice. Performance Majors. Prerequisites: MUSI 2212, MUSI 2117, MUSI 2114, and permission of instructor.

MUSI 3301 Music History and Literature II
A historical survey of Western musical tradition from the 17 th and 18 th centuries. The overall objective is for the student to gain an understanding of basic developments in Western music from the Baroque and Classical Periods. The course will include a study of styles and genres, and will place emphasis on listening, formal structure and musical analysis. The course is also designed to increase the students' critical thinking skills and ability to write effectively about the aesthetics of Western Music. Prerequisites: MUSI 1308.

MUSI 3302 Music History and Literature III
A historical survey of Western musical tradition from the 19th, 20th and 21st centuries. The overall objective is for the student to gain an understanding of basic developments in Western music from the Romantic and Modern Eras. The course will include a study of styles and genres, and will place emphasis on listening, formal structure and musical analysis. The course is also designed to increase the students' critical thinking skills and ability to write effectively about the aesthetics of Western Music. Prerequisites: MUSI 3301.

MUSI 3307 Music, Gender, and Sexuality
This course examines the roles that gender and sexuality play in the production and reception of music in various cultural settings. It investigates gender constructions of musical instruments, styles and genres, paying particular attention to the contribution of women in music.

MUSI 3311 The Music Teaching Profession and Student Learning in Contemporary Schools This course will examine the different aspects involved in teaching music as it relates to the historical, philosophical and social foundations of music education. Additionally, students will draft a philosophy of teaching, participate in advocacy and outreach, begin a digital portfolio, participate in observing off campus teaching, and participate in group presentations. This course will also survey the rules, regulations, and competition of the U.I.L. (University Interscholastic league) and TEKS. Prerequisites: Required of all Music Education Majors; substitute for College of Education Course.

MUSI 4101 Choral Conducting II
This course is designed to develop fundamental skills to the art of choral conducting in a laboratory setting. Emphasis will be placed on (1) the application of the physical aspects involved in communication through gesture, (2) the understanding of broad concepts involving the role of teacher on the podium, and (3) development of aural skills that the conductor must acquire before conducting an ensemble. Prerequisites: MUSI 3101.

MUSI 4102 Instrumental Conducting II
This course is designed to further develop skills fundamental to the art of instrumental conducting in a laboratory setting. Emphasis will be placed on (1) the application of the physical aspects involved in communication through gesture, (2) the understanding of broad concepts involving the role of teacher on the podium, and (3) development of aural skills that the conductor must acquire before conducting an ensemble. Prerequisites: MUSI 3102.

MUSI 4195 Independent Study
Individual readings and/or research on a selected topic under the supervision of a faculty member. Prerequisites: Consent of instructor.

MUSI 4197 Special Topic
Special Topics in Music - Topic will vary in nature. This course is open to all college students and may be repeated for credit. Prerequisites: Consent of instructor.

MUSI 4295 Independent Study
Individual readings and/or research on a selected topic under the supervision of a faculty member. Prerequisites: Consent of instructor.

MUSI 4297 Special Topic
Special Topics in Music - Topic will vary in nature. This course is open to all college students and may be repeated for credit. Prerequisites: Consent of instructor.

MUSI 4299 Senior Recital/Capstone
Minimum 60 minute recital of representative repertoire for the major instrument/voice. Performance Majors. Prerequisites: Consent of instructor. Capstone.

MUSI 4301 Chamber and Symphonic Music Literature
A survey of representative chamber and symphonic music literature of the Classic, Romantic and Modern periods. The course will aim to examine style traits and tendencies of instrumental chamber and symphonic music across all orchestral instruments. Prerequisites: Students taking the course for graduate credit will have additional research and practicum requirements.

MUSI 4310 Music Advocacy, Outreach, and Business
Course designed to equip future music educators and performers with the organizational, business, community engagement, and arts advocacy skills needed to successfully run a musical program, a private studio, an ensemble and individual careers. The course will involve lectures, projects and a practicum component. Prerequisites: Students taking the course for graduate credit will have additional research and practicum requirements.

MUSI 4312 Implementing and Assessing Effective Secondary Music Content Pedagogy This course provides a synthesis of personal music philosophy, its relationship to current literature, design of appropriate curriculum to include lesson planning based on appropriate literature evaluation, appropriate assessments of student learning, identify and describe student learning levels and abilities, demonstrate current techniques for recruitment and retention of students, demonstrate organizational techniques particular to music education. Prerequisites: Required for All Music Education Majors; Substitutes for College of Education.

MUSI 4395 Independent Study
Individual readings and/or research on a selected topic under the supervision of a faculty member. Prerequisites: Consent of instructor.

MUSI 4397 Special Topic
Special Topics in Music - Topic will vary in nature. This course is open to all college students and may be repeated for credit. Prerequisites: Consent of instructor.

Theatre, Television, and Film
THTF 1310 Theatre Appreciation
This class covers the basic elements of live theatre and especially stresses the understanding and appreciation of the nature, function, and history of theatre and its collaborative elements. Guest directors, actors, and designers augment the discussions.

THTF 1330 Stagecraft
This course gives instruction and practice in the methods of construction, painting, rigging, shifting stage scenery, and properties, as well as the application of these techniques.

THTF 1331 Lighting and Sound Technology
This course is an introduction to the equipment and technology for TTF. Particular attention is given to the operational aspects of the production equipment available in the production areas of the department. The course includes an overview of the processes involved in Stage Management and Technical Direction.

THTF 1336 Television Production
This course is an introduction to television studio operations with emphasis on television production. It covers cameras, microphones, lights, setting, and performers.

## THTF 1341 Makeup

This course is a study of makeup for stage, film, and television. It includes the study of makeup design and application for characters in theatre, television, and film. This course covers corrective, character, special effects, and prosthetics basics. Students must provide their own makeup for the course.

THTF 1342 Costume Technology
This course is a study of costume construction and technology, with an emphasis on techniques and equipment commonly used to construct costumes for the theater and television. Pattern modification and development and draping are introduced.

THTF 1351 Acting I
Improvisational acting techniques and the application of these principles to stage, television, and film.
THTF 1352 Acting II
Intensive study of the techniques of building and developing a characterization. Prerequisites: THTF 1351.

THTF 1615 Summer Theatre Workshop
Designed to introduce beginning students to basic techniques of theatre staging through practical situations, this workshop requires students to participate in a series of productions for public viewing. Because of the intensive nature of this course, students are not allowed to take other studies or outside employment during their workshop enrollment period without permission of the instructor.

THTF 1616 Summer Television Workshop
An intensive workshop course in which students are responsible for all aspects of the production of a major dramatic work that will be produced for television and that will embody the principles of dramatic production in television form.

THTF 2120 Practicum Theatre Television Film
Participation in theatre, television or film programs sponsored by the department. One hour of credit requires a minimum of 60 hours of satisfactory participation plus any additional requirements set by the advisor. May be repeated for credit a maximum of four times.

THTF 2313 Readings In Dramatic Literature
Critical review and analysis of selected classic plays from Greek antiquity to the present time, designed to clarify the nature, and major achievements of Western dramatic art. Equivalent Course: ENGL 2313; may be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course.

THTF 2361 Video and Film Editing I
In this course the student will learn the basics of non-linear editing using a variety of software. Prerequisites: Credit/registration in THTF 1336.

THTF 2366 Cinema Appreciation
This course is an introduction to the art of cinema for the non-major. Focus will be on critical viewing of films, identification, and analysis of film form, technique, and content.

THTF 3311 Contemporary Drama
Study of trends and movements in 20th century American, British and European drama with emphasis on works of major playwrights. Equivalent Course: ENGL 3327; can be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course.

THTF 3312 World Drama
Study of trends and movements in dramatic literature from ancient Greece through World War I. Emphasis on the works of major playwrights. Equivalent Course: ENGL 3332; can be counted as English or Communication in satisfying degree requirements. Credit may be received for only one course.

THTF 3315 History and Significance of Motion Picture
Historical survey of motion pictures from 1890s to the present. Students will view, study, and review major motion pictures from various periods, noting important periods, styles, genres and movements in the dramatic film (including foreign films and TV).

THTF 3316 American Film Genre
This course will offer an overview of the fourteen basic American film genres. Students will study their evolution from the silent days to the present and examine how commercial considerations have influence their development in both positive and negative terms. Equivalent Course: ENGL/FILM 3326; may be counted as Communication or Film Studies course in satisfying degree requirements. Credit may be received for only one course.

THTF 3321 Creative Drama
This course focuses on the study of creativity and creative drama especially in their applications in the classroom and other work places where the student might be in a leadership position. It focuses on the development of creativity through specific exercises and original dramatization. It is of special interest to the educator and parent, and of significant value to those who work in the theatre or who rely on creative notions to improve chances for success.

THTF 3330 Drawing and Rendering
This course covers the processes of communicating design ideas through drafting, drawing, and rendering and modeling.

THTF 3331 Scene Design
This course teaches the principles of design as applied to modern stage and television production.
THTF 3332 Lighting for the Stage, Film, and Television
Problems of lighting design and execution as applied to the various media - stage, film, and television.
THTF 3333 Costume Design
This course teaches the principles of designing as applied to costumes for the various media - stage, television, and film.

THTF 3351 Acting III
This course is a study of work with partners in scenes. It gives the students practice in the techniques of working in large and small groups, working for specificity of character, and developing responsive and responsible rehearsal techniques. Prerequisites: THTF 1351.

THTF 3352 Acting IV
This course consists of working with particular acting problems, such as characterization in the musical, individuation in group scenes, commercials, supporting partners, etc. Prerequisites: THTF 1351.

THTF 3354 Voice and Diction
The purpose of this course is to help you understand and duplicate the sounds of standard American speech as expected of announcers, actors, and other professional speakers. The class will help you develop a stress-free, well-modulated vocal quality that has as full a range as possible of pitch, clarity and force. The course also helps you understand the process of vocal production in order to assist you in maintaining a healthy voice, and to be familiar with the different styles of speaking used in the various media live stage performances, film, television, public presentation and radio.

THTF 3361 Location Film and Video Production
Principles of single camera 'film style' location video production. Using video equipment, students will produce short productions based on careful preproduction planning (scripting and storyboarding). Major stress on post-production editing and quality of finished product. Prerequisites: THTF 2361.

THTF 4120 Practicum Theatre Television Film
Participation in theatre, television or film programs sponsored by the department or other programs approved by the instructor. One hour of credit requires a minimum of 60 hours of satisfactory participation, plus any additional requirements set by the instructor. May be repeated for credit a maximum of four times.

THTF 4301 Professional Internship
A planned program of work (10 hours per week), for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report. Advisor approval required to enroll. May be repeated for credit up to two times when the program varies. Prerequisites: Senior standing or instructor consent. Advisor approval required to enroll.

THTF 4303 Special Topics
[0-0-3]
The class is designed to give students an opportunity to study a special advanced topic not required in the undergraduate curriculum. For the advanced undergraduate, this course may be taken more than once if the topic changes.

## THTF 4311 Directing I

This course encompasses the study, observation and practice in selecting scripts and working with problems, methods and techniques of direction and production. Emphasis is on practical application and execution of directing film and theatre scripts. Students will learn how the production process works through preproduction, production and post-production areas. Prerequisites: THTF 1351.

THTF 4312 Directing II
This is the capstone course for the communication Theatre/ TV/ Film majors. Students will produce, direct and prepare a short 10-15 minute film and a 15-20 minute scene from a published play. Emphasis is on practical application of directing techniques acquired during THTF 4311 Directing I. Prerequisites: THTF 4311 and THTF 2361.

THTF 4315 Scriptwriting for the Stage and Screen
Advanced-level course in the arts and crafts of scriptwriting for stage and screen (motion picture and/or television). Course would be repeatable for credit with new work or work with different medium.

THTF 4316 History of Theatre I
This course provides students with a critical introduction to the history of Western theatre, from the ancient Greeks to Elizabethan England. It will be conducted primarily as a lecture/play analysis course, and secondarily as a forum for the discussion of critical issues in historiography as they relate to the theatre. Subjects include a chronological survey of Western Theatre; standard period categories; related areas in performance studies and non-Western theatre; major cultural and historical forces and climates. Multi-media resources will augment the lectures and discussions.

THTF 4317 History of Theatre II
This course is a continuation of History I and its critical introduction to the history of Western theatre. History II begins with the English Restoration and progresses through Victorian theatre, Romanticism, and the rise of Absurdist drama of the 20th century as well as mid-century American classics. It will be conducted primarily as a lecture/play analysis course, and secondarily as a forum for the discussion of critical issues in historiography as they relate to the theatre. Subjects include a chronological survey of Western Theatre; standard period categories; related areas in performance studies and nonWestern theatre; major cultural and historical forces and climates. Multi-media resources will augment the lectures and discussions.

THTF 4321 Children's Theatre Workshop
This course is an intensive workshop in which students are responsible for all aspects of the production of a professional play for children. The play produced will embody the key principles of any excellent theatrical production. The course is practical in its approach it will encompass as much real-life acting company flavor as possible, including the business of a traveling acting company.

THTF 4351 Theory and Styles of Acting
This course covers techniques of period acting and exploration of major theories of acting techniques. Prerequisites: THTF 1351.

THTF 4352 Problems in Acting
This course teaches acting techniques to adapt performance to varying situations such as large and small proscenium, film, and television. It also includes preparation of audition material and problems in developing range of characterization. Prerequisites: THTF 1351.

THTF 4361 Video and Film Editing II
From news stories to feature films, the video film editing step is the last rewrite of the material before it is shown or broadcast. The student will learn professional software and acquire both the arts and crafts of assembling sound and visual into a finished viewable product including sound effects, music, dialogue replacement, and titles as well as exporting in a variety of mediums. Prerequisites: Credit/registration in THTF 2361 or permission of instructor.

THTF 4362 Advanced Television/Film Production
Advanced-level course stressing the application of basic arts and media developed in THTF 1336 and making use of advanced students in directing, technical crafts, performance and scriptwriting. May be repeated for credit with new production. Prerequisites: THTF 1336 and THTF 2361.

THTF 4601 Professional Internship
A planned program of half-time (20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report. Advisor approval required to enroll. Course may be repeated for credit once when the program varies. Prerequisites: Senior standing. Advisor approval required to enroll.

THTF 4615 Summer Theatre Workshop
For the advanced undergraduate, experience in all areas of theatrical presentation. Students assume responsibility for one or more of the following areas: technical theatre production problems in acting and directing, theatre business management. Because of the intensive nature of this course, students are not allowed to take other studies or outside employment during the workshop enrollment period without permission of the instructor.

THTF 4616 Summer Television Workshop
For the advanced undergraduate, an intensive workshop in which students are responsible for the production of a major dramatic work that will be produced for television and that will embody the principles of dramatic production in television form. Journalism students taking the course will produce a documentary concerning the production.

# COLLEGE OF HEALTH AFFAIRS (COHA) 

# Department of Communication Disorders 

Dr. Shawn Saladin<br>Interim Chair, Department of Communications Disorders<br>Location: HSHW 2.234 (UTRGV Edinburg Campus)<br>Phone: 956-665-2291

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## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> COMMUNICATION SCIENCES AND DISORDERS

A Bachelor of Science Degree in Communication Sciences and Disorders (COMD) is a pre-professional degree that prepares students for graduate studies in COMD. Upon completion of the Bachelor degree, students are eligible for licensure to practice in the State of Texas as a Speech-Language Pathologist Assistant.

## STUDENT LEARNING OUTCOMES:

1. The student will demonstrate and apply knowledge of the basic sciences underlying human communication and swallowing processes. Criterion for Success: Direct Means of Assessment (Capstone): $80 \%$ of graduating COMD students will be evaluated as "acceptable" or "exceeds criteria" in the knowledge of the basic sciences underlying human communication and swallowing processes. Indirect Means of Assessment (Exit Survey): 80\% of graduating COMD students will evaluate their knowledge base in the "good" to "excellent" range in the basic sciences underlying human communication and swallowing processes.
2. The student will demonstrate and apply introductory knowledge of types of speech, language and hearing disorders. Criterion for Success: Direct Means of Assessment (Capstone): 80\% of graduating COMD students will be evaluated as "acceptable" or "exceeds criteria" in the introductory knowledge of types of speech, language and hearing disorders. Indirect Means of Assessment (Exit Survey): 80\% of graduating COMD students will evaluate their knowledge base in the "good" to "excellent" range in the introductory knowledge of types of speech, language and hearing disorders.
3. The student will demonstrate and apply knowledge of variation in human communication and its development as a function of diversity, development, and cultural backgrounds. Criterion for Success: Direct Means of Assessment: (Capstone): 80\% of graduating COMD students will be evaluated as "acceptable" or "exceeds criteria" in the knowledge base of variation in human communication and its development as a function of diversity, development, and cultural backgrounds. Indirect Means of Assessment (Exit Survey): 80\% of graduating COMD students will evaluate their knowledge base in the "good" to "excellent" range in the variation of human
communication and its development as a function of diversity, development, and cultural backgrounds.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 1314 College Algebra
Life and Physical Sciences - 6 hours
Choose one pair:
BIOL 1406 General Biology I three-hour lecture (or BIOL 1487 Honors) and BIOL 1407 General Biology II three-hour lecture (or BIOL 1488 Honors) BIOL 2401 Anatomy and Physiology I and BIOL 2402 Anatomy and Physiology II
Social and Behavioral Sciences - $\mathbf{3}$ hours
PSYC 2301 General Psychology
Integrative and Experiential Learning - $\mathbf{2}$ hours
Choose corresponding pair from Life and Physical Sciences: BIOL 1406 General Biology I one-hour lab (or BIOL 1487 Honors) and

BIOL 1407 General Biology II one-hour lab (or BIOL 1488 Honors) BIOL 2401 Anatomy and Physiology I one-hour lab and BIOL 2402

Anatomy and Physiology II one-hour lab

B - MAJOR REQUIREMENTS - 48 HOURS (45 advanced)
COMD 2310 Introduction to Speech-Language
COMD 3310 Normal Language Development
COMD 3315 Anatomy and Physiology of the Speech and Hearing Mechanism
COMD 3320 Phonetics
COMD 3330 Articulation Development
COMD 3340 Audiology I
COMD 3355 Survey of Neurological Disorders
COMD 3360 Neuroanatomy and Physiology for Speech, Language, and Hearing
COMD 4310 Behavior Management for Speech-Language Pathology
COMD 4330 Audiology (Re)Habilitation
COMD 4350 Clinical Applications
COMD 4360 Language Disorders in Children I
COMD 4365 Speech Disorders
COMD 4370 Professional Report Writing in Speech-Language Pathology
COMD 4380 Clinical Problem-Solving
COMD 4390 Principles in Assessment of Speech-Language Pathology

## C - SUPPORT COURSES - 25 HOURS (3 advanced)

COMD 1310 Beginning Sign Language
COMD 1320 Intermediate Sign Language
HRPT 2303 Medical Terminology
MATH 2334 Applied Statistics for Communication Disorders
PHIL 2330 Ethics and Leadership

REHS 3320 Family and Disability
SOCI 1301 Introduction to Sociology
Any 4 hours of Chemistry or Physics (both lecture and lab)

## D - FREE ELECTIVES - 5 HOURS

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 48 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

Students must apply and be formally accepted to the Communication Sciences and Disorders Undergraduate Program. The following must be completed prior to date of COMD Undergraduate program application:

1. Students must take MATH 2334 and complete the course with a 'C' or higher.
2. Students must take three science courses: BIOL 1406 and 1407 (or BIOL 1487 and BIOL 1488) or BIOL 2401 and 2402, and either one Physics course with lab OR one Chemistry course with lab. These courses must be completed with a ' C ' or higher.
3. Students must lack no more than six courses from the following areas: General Education Core, Electives, or Supplemental. The MATH 2334 and the three science courses cannot be included as part of the six courses lacking at the time of the application. MATH 1314 is a prerequisite for MATH 2334.
4. Students must have a minimum GPA of 2.8. Admittance is competitive.

## Progression requirements

Once formally accepted to the COMD Undergraduate program, students must follow the required COMD Major course block sequence.

A 'C' or higher is required in the COMD Major courses. If a student drops a course or receives a ' $D$ ' or ' $F$ ' in any of the COMD Major course(s), the student will not progress in the COMD Major course block sequence until the student re-enrolls in the course(s) the next time the course(s) is offered. A grade of ' $C$ ' or higher is required.

If a ' $D$ ' or ' $F$ ' is earned in a course in the following supplemental courses: COMD 1310, COMD 1320, PHIL 2330, SOCI 1301, HRPT 2303, and REHS 3320, the student will be allowed to proceed in the COMD Major course block sequence, however, must retake the supplemental course in which a ' $D$ ' or ' $F$ ' was earned the next time it is offered. $A$ ' $C$ ' or higher is required.
Graduation requirements

1. Students must earn a 'C' or higher in the COMD Major courses and supplemental courses.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test
approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# Department of Health and Biomedical Sciences 

Dr. Saraswathy Nair<br>Chair, Department of Health and Biomedical Sciences Location: BRHB 1.103 (UTRGV Brownsville Campus)<br>Phone: 956-882-5108<br>Email: saraswathy.nair@utrgv.edu

## BACHELOR OF SCIENCE (BS)

## WITH A MAJOR IN BIOMEDICAL SCIENCE

The degree explores the application of powerful modern bioscience approaches such as molecular cell biology, molecular genetics and genomics, as well as anatomy, physiology, and neuroscience to human health. It is a preparatory degree for tomorrow's health care professionals and leaders and thus prepares students for successful admission to professional schools in medicine, dentistry, veterinary medicine, pharmacy, physical therapy, and physician assistant programs as well as graduate studies in biomedical sciences.

## STUDENT LEARNING OUTCOMES:

1. Students will be able to demonstrate a substantial factual knowledge base and a critical understanding of the major concepts of biological systems and be able to relate them to human anatomy/physiology in health and disease.
2. Students will demonstrate sufficient knowledge and competence in writing and communication for success on standardized exams or employment.
3. Students will perform satisfactorily in standardized graduate examinations.
4. Students will be able to research a topic using standard electronic and non-electronic methods.
5. Students will be able to communicate complex scientific ideas, concepts and theories by oral and written means
6. Students will be able to explain prevailing ethical issues in the biomedical sciences.
7. Students will appreciate the role of research in the biological, biomedical, and clinical sciences.
8. Students will be able to design experiments, collect and analyze data and communicate their findings.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture

## Life and Physical Sciences - 6 hours

## CHEM 1311 General Chemistry I

CHEM 1312 General Chemistry II
Social and Behavioral Sciences - $\mathbf{3}$ hours
PSYC 2301 General Psychology
Integrative and Experiential Learning - $\mathbf{2}$ hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab

## B - MAJOR REQUIREMENTS - 49 HOURS (36 advanced)

 1 - Biomedical Sciences - 22 hours ( 9 advanced)BMED 1101 Introductory Medical Biochemistry
BMED 1102 Introduction to Biomedical Laboratory I
BMED 1103 Introductory Cell Biology
BMED 1104 Introductory Molecular Biology
BMED 1105 Introductory Medical Genetics
BMED 1106 Introductory Medical Microbiology
BMED 1107 Introductory Immunology
BMED 1108 Introductory Medical Neuroscience
BMED 1109 Evolutionary Medicine
BMED 1110 Introductory Medical Physiology
BMED 1111 Introduction to Biomedical II Laboratory
BMED 2101 Gross Anatomy
BMED 2102 Molecules, Cells, and Tissues
BMED 3101 Pathobiology and Host Defense
BMED 3102 Neurochemistry
BMED 3103 Human Behavior
BMED 3104 Integrated Body Systems I: Cardiovascular and Pulmonary BMED 3105 Integrated Body Systems II: Gastrointestinal Systems BMED 3106 Integrated Body System III: Renal, Fluids and Electrolytes BMED 3107 Integrated Body System IV: Endocrine and Reproduction Systems BMED 3108 Integrated Body System V: Dermatology, Hematology, and Musculoskeletal BMED 3109 Medical Syndromes
2 - Advanced Biomedical Sciences - 27 hours (27 advanced)
BMED 3121 Independent Research I
BMED 3122 Independent Research II
BMED 3223 Independent Research III
BMED 3224 Independent Research IV
BMED 4220 Medical Bioinformatics, Genomics, and Systems Biology
BMED 4230 Human Genetics and Medical Genomics
BMED 4240 Medical Microbiology
BMED 4250 Advanced Cell Biology
BMED 4260 Advanced Molecular Biology
BMED 4270 Introduction to Complementary and Alternative Medicine
BMED 4280 Advanced Medical Neuroscience
BMED 4290 Medical Immunology
BMED 4295 Pathophysiology

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C - SUPPORT COURSES - }23\mathrm{ HOURS (3 advanced)
    CHEM 2123 Organic Chemistry I Lab
    CHEM 2125 Organic Chemistry II Lab
    CHEM 2323 Organic Chemistry I
    CHEM 2325 Organic Chemistry II
    MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
    MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
    MATH 3331 Applied Statistics I
    PHYS 1401 General Physics I
    PHYS 1402 General Physics II
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D - RESTRICTED ELECTIVES - 6 HOURS (3 advanced)
1 - Spanish Elective - 3 hours
2 - Advanced Elective - 3 hours (3 advanced)
Choose 3 advanced hours from BMED, PSYC, BIOL, CHEM, MATH, PHYS, HPRS, or CSCI.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

BMED 1101, BMED 1102, BMED 1103, BMED 1104, BMED 1105, BMED 1106, BMED 1107, BMED 1108, BMED 1109, BMED 1110, BMED 1111 with 'C' or better grade and GPA of 2.8 or higher in all these courses. Also CHEM 1311, CHEM 1111, CHEM 1312, CHEM 1112, MATH 2412 (or higher) with ' $C$ ' or better grade in all these courses. Overall GPA of 2.5 and Departmental approval.

## Graduation requirements

1. A grade of 'C' or better in Biomedical Sciences (Section B1) and in MATH 2413 (of MATH 2487 Honors) is required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS)

WITH A MAJOR IN
CLINICAL LABORATORY SCIENCE

This degree will prepare students for certification and employment as Medical Laboratory Scientists. Graduates from this professional program are part of the health care team and play a vital role in the
prevention, diagnosis, and treatment of disease through the performance of laboratory tests in hospital laboratories, physician office labs, and reference labs. It is also serves as an excellent undergraduate option for those students planning on applying to the graduate physician assistant program and medical and dental school. Students who plan to apply to the physician assistant program or medical or dental school should check for additional course requirements.

## STUDENT LEARNING OUTCOMES:

1. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in hematology.
2. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in clinical chemistry.
3. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in immunohematology.
4. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in clinical microbiology.
5. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in urinalysis.
6. Upon completion of the clinical laboratory science program, students will demonstrate entry level knowledge and skills in immunology.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Life and Physical Sciences - 6 hours
CHEM 1311 General Chemistry I CHEM 1312 General Chemistry II
Integrative and Experiential Learning - $\mathbf{3}$ hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab BIOL 1406 General Biology I (or BIOL 1487 Honors) one-hour lab

B - MAJOR REQUIREMENTS - 59 HOURS (59 advanced)
CLSC 3310 Hematology I
CLSC 3420 Clinical Chemistry I
CLSC 3513 Clinical Immunology and Immunohematology
CLSC 3630 Clinical Microbiology I
CLSC 4116 Advanced Immunology
CLSC 4122 Method Development and Research
CLSC 4144 Clinical Practicum V
CLSC 4200 Seminar
CLSC 4303 Medical Laboratory Leadership
CLSC 4314 Advanced Immunohematology
CLSC 4315 Molecular Genetics and Molecular Diagnostics
CLSC 4340 Clinical Practicum I
CLSC 4341 Clinical Practicum II
CLSC 4342 Clinical Practicum III

CLSC 4343 Clinical Practicum IV CLSC 4411 Clinical Hematology II
CLSC 4521 Clinical Chemistry II
CLSC 4631 Clinical Microbiology II

## C - SUPPORT COURSES - 22 HOURS

BIOL 1406 General Biology I (or BIOL 1487 Honors) three-hour lecture
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CLSC 2429 Clinical Microbiology in Health Care
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors or any other statistics course)
TOTAL CREDIT HOURS FOR GRADUATION - 123 HOURS TOTAL ADVANCED HOURS - 59 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

Students should complete all non-clinical laboratory science coursework prior to entering the professional phase of the program. Students who are lacking no more than two non-science prerequisite courses may be considered for admission if they have at least a minimum overall GPA of 3.0 . Preference is given to students who have completed all prerequisite coursework. A minimum GPA of 2.0 and a minimum science GPA of 2.0 is required for admission to the program.

Applicants who plan to utilize coursework more than seven years old in the areas of general chemistry or the biological sciences will be required to demonstrate an up-to-date knowledge in these areas. This may be accomplished by either of the following:

1. Completion of at least one formal course in chemistry and one formal course in the biological sciences within the last five years with a grade of at least C .
2. One year of relevant experience in the field of clinical laboratory science within the last five years.

## Non-degree Seeking Students

A student who does not wish to receive a degree from UTRGV, but who wishes to attend the professional portion of the curriculum for certification purposes must meet one of the following requirements:

1. Hold a baccalaureate degree from an accredited institution and have a minimum of 12 credit hours of chemistry including inorganic and organic or biochemistry and 16 credit hours of biology including microbiology and a college-level math course.
2. Hold a foreign baccalaureate degree from an international institution, meet all admission requirements of UTRGV and have his or her transcript evaluated by agencies acceptable to the National Certification Agencies. This evaluation must show that his or her degree is equivalent to a baccalaureate in the United States with appropriate coursework in biology, chemistry and mathematics.

## Readmission

Students who are dropped from the program for academic reasons are not automatically readmitted. Students must make a formal written request for readmission. Readmission depends on space availability and the student's previous performance in CLSC courses. Students will be notified of their readmission by August 1. The admission committee may require repetition of foundation clinical laboratory science courses or other remedial work in addition to the repetition of courses, which the student previously failed. Students who receive a grade of ' $D$ ' or lower in the same course twice or drop the same CLSC course twice to avoid a failing grade are ineligible for readmission into the CLSC Program.

## Progression requirements

Students are required to maintain a grade of ' $C$ ' or better in all Clinical Laboratory Science courses. Courses with grades lower than ' C ' must be retaken at the next regularly scheduled time that it is offered. Students who earn a grade less than a ' $C$ ' in any CLSC prerequisite course will not be allowed to take any advanced CLSC courses, which require that course as a prerequisite. All on-campus courses must be completed with a ' $C$ ' or better prior to beginning the clinical rotations. If a student fails to earn a ' $C$ ' or better in any two courses, or earns a grade lower than a ' $C$ ' in any required course two times, he/she will not be permitted to continue in the program.

## Graduation requirements

1. Students must complete all professional courses with a grade of ' $C$ ' or better. Must complete all courses in the professional portion of the curriculum within a period of four consecutive years from the date of first enrollment in the program.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test
approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS)

## WITH A MAJOR IN DIETETICS

The Coordinated Program in Dietetics prepares students to successfully complete the national registration examination and be qualified for entry-level positions in administrative, clinical or community dietetics. Graduates will possess additional knowledge and skills that will enable them to work with the specific and unique needs of the local community, which is largely Mexican-American, as well as other areas of the country with large Hispanic populations.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate competence in the knowledge appropriate to the entry level dietitian.
2. Demonstrate the skill competencies expected of an entry level dietitian.
3. Demonstrate competency which will enable them to readily find employment or pursue related professional or graduate education.
4. Demonstrate the ability to use current technologies for information and communication activities.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
Choose one:
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors) MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture BIOL 2402 Anatomy and Physiology II three-hour lecture
Social and Behavioral Sciences - $\mathbf{3}$ hours
PSYC 2301 General Psychology
Integrative and Experiential Learning - 2 hours
BIOL 2401 Anatomy and Physiology I one-hour lab BIOL 2402 Anatomy and Physiology II one-hour lab

B - MAJOR REQUIREMENTS - 58 HOURS (52 advanced)
1 - Dietetics Foundation - 22 hours (16 advanced)
DIET 2351 Introduction to Clinical Nutrition
DIET 2352 Food Preparation
DIET 3252 Quantity Foods Production
DIET 3253 Quantity Foods Practicum
DIET 3353 Advanced Nutrition

DIET 3354 Food Systems Management DIET 3655 Food Systems Management Practicum
2 - Practicum - 11 hours (11 advanced)
DIET 3257 Junior Seminar in Dietetics
DIET 3356 Experimental Foods DIET 3357 Medical Nutrition Therapy I DIET 3358 Medical Nutrition Therapy II
3 - Advanced Dietetics Core - $\mathbf{2 5}$ hours ( $\mathbf{2 5}$ advanced)
Courses are designed to be completed senior year:
DIET 4252 Integrative Seminar in Dietetics
DIET 4257 Research Methods in Dietetics DIET 4258 Communication Skills in Dietetics DIET 4259 Seminar in Dietetics DIET 4359 Community and Life Cycle Nutrition DIET 4455 Community Nutrition Practicum DIET 4752 Clinical Nutrition Practicum Culminating practicum: DIET 4356 General Dietetics Practicum

## C - SUPPORT COURSES - 24 HOURS (3 advanced)

CHEM 1311 General Chemistry I
CHEM 1111 General Chemistry Lab I
CHEM 1312 General Chemistry II
CHEM 1112 General Chemistry Lab II
CHEM 2323 Organic Chemistry I
CLSC 2429 Clinical Microbiology in Healthcare
ECON 1301 Introduction to Economics
HRPT 2303 Medical Terminology
MGMT 3361 Principles of Management

## TOTAL CREDIT HOURS FOR GRADUATION - 124 HOURS

 TOTAL ADVANCED HOURS - 55 HOURSADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Admission requirements Application Process

1. Completed application for admission to the Coordinated Program in Dietetics. Call 956-665-5264 for information.
2. Official transcript showing completion of at least 72 hours with a minimum of 2.7 grade point average to include ENGL 1301, ENGL 1302, and MATH 1342. Science Support Courses: BIOL 2401, BIOL 2402, CLSC 2429, CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 2323 Dietetic Core: HRPT 2303, DIET 2351 and DIET 2352 (NOTE: A minimum GPA of 2.7 with a minimum grade of ' $C$ ' in each course is required in the science support courses and dietetic core courses.).
3. Three letters of recommendation.
4. A letter from the applicant stating reason for interest in the dietetics program.
5. Completion of a minimum of 80 hours of work-related experience, either volunteer or paid, in the area of dietetics or food service prior to entrance into the dietetics program. This must be documented and verified by the applicant's employer.

## Selection Process

Selection by the admissions committee is based upon the following:

1. Completion and submission of the required material by Monday after final exam week of Spring semester.
2. Grade point average overall based on degree plan (X4) and in science courses (X6).
3. Evaluation of selected references and criteria.
4. Admission interview.

## Readmission

Readmission is not automatic. Students desiring re-admission must notify the dietetics program in writing at least one semester (or two summer sessions) in advance. Complete information regarding readmission can be obtained in the current Coordinated Program in Dietetics Student Guidebook available from the department.

## Progression requirements

Students are required to maintain a grade of ' $C$ ' or better ( $75 \%$ or higher) in all Dietetic courses and supervised practices. If a student earns a grade lower than ' C ', he/she must repeat the course at the next regularly scheduled time that it is offered. If a student fails to earn a ' C ' or better in any two or more courses, or earn a grade lower than a ' C ' in any dietetic course twice, he/she will not be permitted to continue in the program.

## Graduation requirements

1. Complete all courses and supervised practices with a grade of ' C ' or better ( $75 \%$ or higher).
2. Complete all five supervised practices totaling at least 1,200 hours.
3. Complete a Junior Comprehensive Exam at the end of junior year and a RD Readiness Exam at the end of senior year before graduation with a minimum of 75 percent of possible points.
4. Receive Verification Statement for the RD exam.
5. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

The BAT Health Services Technology prepares individuals for leadership positions in health services, education, technical, corporate training and consulting and other highly marketable fields.

## STUDENT LEARNING OUTCOMES:

1. The learner will demonstrate written communication skills as measured by assignments that are grammatically correct, with appropriate word choice, format, and citation when appropriate for the topic and the audience.
2. The learner will demonstrate competency in personal and social responsibility in the health care field; measured by completing written reflective essays, after performing appropriate service in the community.
3. The learner will think logically and critically in solving problems; measured by completing assignments in which the learner identifies and summarizes the problem, effectively tabulates/interprets data and formulates conclusions based on the evidence.
4. The learner will plan and complete projects; measured by assignments that demonstrate planning and organizational skills, with accurate content, utilizing different resources and incorporating creative techniques.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Life and Physical Science - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture BIOL 2402 Anatomy and Physiology II three-hour lecture
Social and Behavioral Sciences - $\mathbf{3}$ hours Choose one:

SOCI 1301 Introduction to Sociology
PSYC 2301 General Psychology
Integrative and Experiential Learning - $\mathbf{2}$ hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - AAS DEGREE OR EQUIVALENT ASSOCIATE DEGREE IN A HEALTH FIELD - 36 HOURS
Degree is required to have 36 hours in a health related course work. The hours for the AAS will apply on this bachelor's degree.

Degree Major:
Date:
Institution:

## C - MAJOR REQUIREMENTS - 42 HOURS (42 advanced)

Department approval is required.
1 - Health Services Professional Core - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced)
HPRS 3301 Introduction to the Evolving Healthcare System
HPRS 3302 Medical Law/Ethics for the Health Professional
HPRS 3309 Leading and Managing the Healthcare Team
HPRS 3316 Nutrition Concepts for Allied Health Practitioners HPRS 3320 Patient Education in Health Sciences

HPRS 3324 Teaching in the Health Sciences
HPRS 4301 Introduction to Health Data Utilization
HPRS 4302 Continuous Quality Improvement
HPRS 4312 Applied Pathophysiology HPRS 4334 Issues and Trends in Health Care
$\mathbf{2}$ - Advanced Electives - $\mathbf{1 2}$ hours (12 advanced)
Complete 12 hours of advanced electives; HPRS courses are highly recommended.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS <br> ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

Students are required to have an AAS degree in a health related field or equivalent with 36 hours in related course work.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## Department of Health and Human Performance

Dr. Lin Wang<br>Co-Chair, Department of Health and Human Performance Location: HPE2 108 (UTRGV Edinburg Campus)<br>Phone: 956-665-5036<br>Email: lin.wang@utrgv.edu<br>Dr. Christopher Ledingham<br>Co-Chair, Department of Health and Human Performance<br>Location: SETB 1.550A (UTRGV Brownsville Campus)<br>Phone: 956-882-5756<br>Email: christopher.ledingham@utrgv.edu

## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> EXERCISE SCIENCE

The Department of Health and Human Performance has a focus on preparing Exercise Science majors to function professionally in a changing and diverse society, and to improve the quality of life through the understanding, delivering and promotion of health, physical activity, and wellness.

## STUDENT LEARNING OUTCOMES:

1. Students will be able to demonstrate basic clinical laboratory and field based fitness testing skills.
2. Students will demonstrate competency of knowledge and skill in the Exercise Science field.
3. Students will demonstrate a knowledge base that is sufficient to pass national professional certification exams in the Exercise Science Fields.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Life and Physical Science - 3 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture BIOL 2402 Anatomy and Physiology II three-hour lecture
Social and Behavioral Sciences - $\mathbf{3}$ hours
PSYC 2301 General Psychology
Integrative and Experiential Learning - $\mathbf{2}$ hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - MAJOR REQUIREMENTS - 78 HOURS (42 advanced minimum)
1 - Exercise Science Core - 38 hours ( 35 advanced)
HLTH 3372 Nutrition and Health
KINE 1301 Wellness
KINE 3353 Physiology of Exercise
KINE 3153 Physiology of Exercise Lab
KINE 3360 Exercise Testing and Prescription
KINE 3160 Exercise Testing and Prescription Lab
KINE 3365 Physiology and Techniques of Strength/Power Fitness
KINE 3368 Kinesiology Workshop
KINE 3370 Biomechanics
KINE 4310 Measurement Techniques in Physical Education and Sport
KINE 4351 Adapted Kinesiology
KINE 4355 Pediatric Exercise Physiology
KINE 4360 Clinical Exercise Physiology
KINE 4375 Motor Learning
KINE 4380 Exercise Science Internship (Capstone)

2 - Concentrations - 40 hours ( 7 advanced minimum)
a - Physical Therapy Option I-40 hours (7 advanced minimum)
i - Physical Therapy Core - 33 hours
BIOL 1406 General Biology I (or 1487 Honors)
BIOL 1407 General Biology II (or 1488 Honors)
CHEM 1311 General Chemistry I
CHEM 1111 General Chemistry Lab I
CHEM 1312 General Chemistry II
CHEM 1112 General Chemistry Lab II
PHYS 1401 General Physics I
PHYS 1402 General Physics II
SOCI 1301 Introduction to Sociology
Choose one:
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors) MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors) PSYC 2401 Basic Statistics for Psychologists
Choose one:
HRPT 2303 Medical Terminology
PSYC 3337 Developmental Psychology: Lifespan
ENGL 3342 Technical Communication
c - Free Electives - 40 hours ( 7 advanced)
Choose 40 hours of free electives. Hours can be used to complete a minor and/or second major.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

TOTAL ADVANCED HOURS (MINIMUM) - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Admission requirements
For admission, students must complete of 60 hours of course work and have junior
standing.
Progression requirements
A grade of ' $C$ ' or better must be maintained in all advanced coursework.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS)

## WITH A MAJOR IN HEALTH

The Department of Health and Human Performance has a focus on preparing Health majors to function professionally in a changing and diverse society, and to improve the quality of life through the understanding, delivering and promotion of health, physical activity, and wellness.

## STUDENT LEARNING OUTCOMES:

1. Comprehend concepts related to health promotion and disease prevention.
2. Demonstrate the ability to evaluate valid health information and health-promoting products and services.
3. Advocate for personal, family, and community health.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture
BIOL 2402 Anatomy and Physiology II three-hour lecture
Integrative and Experiential Learning - $\mathbf{2}$ hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - MAJOR REQUIREMENTS - 60 HOURS ( 36 advanced minimum)
1 - Health Core - 33 hours (24 advanced)
KINE 1301 Wellness
KINE 1306 First Aid and First Responder
HLTH 2352 Personal Health
HLTH 3305 Selected Topics in Health Education
HLTH 3325 Latino Health
HLTH 3350 Organization of the Health Program
HLTH 3372 Nutrition and Health

HLTH 3374 Human Disease
HLTH 4305 Community Health Methods
HLTH 4315 Health Program Planning and Evaluation
HLTH 4380 Principles of Public Health (Capstone)
2 - Health Electives - 27 hours (24 advanced) Choose from:

CRIJ 1301 Introduction to the Criminal Justice System
CRIJ 3303 Criminology
HLTH 1352 Community and Environmental Health
HLTH 3370 Concepts for Healthy Lifestyle Promotion
HLTH 3371 Health Problems in Alcohol, Tobacco, and Narcotics
HLTH 3373 Human Sexuality
HLTH 3375 Consumer Health
HLTH 4357 Health Seminar
HLTH 4358 Current Health Readings and Reported Research
KINE 4370 Management in Exercise and Health Promotion
MARK 3300 Principles of Marketing
REHS 2301 Introduction to Rehabilitation
SOCI 1323 Social Problems
SOCI 3324 Sociology of Health

C - MINOR - 18 HOURS (6 advanced)

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 51 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

For admission, students must complete of 60 hours of course work and have junior standing.
Progression requirements
A grade of ' $C$ ' or better must be maintained in all advanced coursework.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours.
Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> HEALTH <br> (EC - 12 TEACHER CERTIFICATION) 

The Department of Health and Human Performance has a focus on preparing Health majors to function professionally in a changing and diverse society, and to improve the quality of life through the understanding, delivering and promotion of health, physical activity, and wellness.

## STUDENT LEARNING OUTCOMES:

1. Teacher candidates will be able to demonstrate attainment of essential knowledge of fundamental concepts of health education content and pedagogy.
2. Teacher candidates will be able to demonstrate the ability to evaluate valid health information and health promoting products and services.
3. Teacher candidates will be able to demonstrate their ability to apply the knowledge and skills associated with health education pedagogy.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture BIOL 2402 Anatomy and Physiology II three-hour lecture
Integrative and Experiential Learning - 2 hours
BIOL 2401 Anatomy and Physiology I one-hour lab BIOL 2402 Anatomy and Physiology II one-hour lab

B - MAJOR REQUIREMENTS - 39 HOURS (27 advanced)
1 - Health Core - $\mathbf{3 0}$ hours (18 advanced)
KINE 1301 Wellness
KINE 1306 First Aid and First Responder
HLTH 2373 Growth, Development, and Fitness
HLTH 2352 Personal Health
HLTH 3300 School Health Methods
HLTH 3350 Organization of the Health Program
HLTH 3372 Nutrition and Health
HLTH 3373 Human Sexuality
HLTH 3374 Human Disease
HLTH 3375 Consumer Health
2 - Advanced Health Electives - 9 hours (9 advanced)
Choose 9 hours of advanced Health courses.

## C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)

Area of Certification: Health (EC-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories, and Student Learning
EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

D - MINOR - 18 HOURS (6 advanced)

TOTAL CREDIT HOURS FOR GRADUATION - 126 HOURS TOTAL ADVANCED HOURS - 57 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

For admission, students must complete of 57 hours of course work, have Junior standing, and be admitted to the Teacher Education program.

## Progression requirements

A grade of 'C' or better must be maintained in all advanced coursework. For teacher certification, students must apply for admission and be accepted to the College of Education and P -16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.

## Graduation requirements

1. A GPA of 2.75 or greater in each section is required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN KINESIOLOGY (EC - 12 TEACHER CERTIFICATION)

The Department of Health and Human Performance has a focus on preparing Kinesiology majors to function professionally in a changing and diverse society, and to improve the quality of life through the understanding, delivering and promotion of health, physical activity, and wellness.

## STUDENT LEARNING OUTCOMES:

1. Teacher candidates will be able to demonstrate attainment of essential knowledge of fundamental concepts of physical education content and pedagogy.
2. Teacher candidates will be able to demonstrate physical proficiency in a variety of motor development skills and physical fitness ability tests.
3. Teacher candidates will be able to demonstrate their ability to apply the knowledge and skills associated with physical education pedagogy.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 1314 College Algebra
Life and Physical Sciences-6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture
BIOL 2402 Anatomy and Physiology II three-hour lecture
Language, Philosophy, and Culture - 3 hours
Choose 3 hours from Anthropology, Communication, English, or Philosophy.
Integrative and Experiential Learning - 2 hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - MAJOR REQUIREMENTS - 39 HOURS (33 advanced)
KINE 1306 First Aid and First Responder
KINE 1351 Introduction to Sports and Exercise Science
KINE 3314 Teaching Movement Arts to Children and Adolescents
KINE 3415 Advanced Sport Skills
KINE 3341 Principles of Conditioning and Fitness
KINE 3353 Physiology of Exercise
KINE 3356 Motor Development
KINE 3370 Biomechanics
KINE 4310 Measurement Techniques in Physical Education and Sport
KINE 4351 Adapted Kinesiology
KINE 4402 Kinesiology Curriculum for Elementary Students
KINE 4409 Kinesiology Curriculum for Secondary Students

C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)
Area of Certification: Physical Education (EC-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories, and Student Learning
EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

D - MINOR - 18 HOURS (6 advanced)
Area of minor must have Teacher Certification available.

## TOTAL CREDIT HOURS FOR GRADUATION - 126 HOURS TOTAL ADVANCED HOURS - 63 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:<br>Admission requirements

For admission, students must complete of 60 hours of course work, have Junior standing, and be admitted to the Teacher Education program.
Progression requirements
A grade of ' $C$ ' or better must be maintained in all advanced coursework. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.

## Graduation requirements

1. A GPA of 2.75 or greater in each section is required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017

The Department of Health and Human Performance has a focus on preparing Kinesiology majors to function professionally in a changing and diverse society, and to improve the quality of life through the understanding, delivering and promotion of health, physical activity, and wellness.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate competency in the application of Kinesiology skills in public and/or private settings.
2. Students will demonstrate written comprehensive competency in Kinesiology Theory courses such as Biomechanics, Exercise Physiology, Motor Learning and Pedagogy.
3. Student must quantify student internship experience in the form of a Student Portfolio that will be presented to the course.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education core requirements.

## Required

Mathematics - 3 hours
MATH 1314 College Algebra
Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture
BIOL 2402 Anatomy and Physiology II three-hour lecture
Language, Philosophy, and Culture - 3 hours
Choose 3 hours from Anthropology, Communication, English, or Philosophy.
Integrative and Experiential Learning - 2 hours
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab
B - MAJOR REQUIREMENTS - 65 HOURS (56 advanced)
1 - Kinesiology Core - 47 hours (38 advanced)
KINE 1301 Wellness
KINE 1351 Introduction to Sports and Exercise Science
KINE 1306 First Aid and First Responder
KINE 3415 Advance Sport Skills
KINE 3314 Teaching Movement Arts to Children and Adolescents
KINE 3341 Principles of Conditioning and Fitness
KINE 3370 Biomechanics
KINE 3353 Physiology of Exercise
KINE 4310 Measurement Techniques in Physical Education and Sport
KINE 4375 Motor Learning
HLTH 3372 Nutrition and Health
KINE 4402 Kinesiology Curriculum for Elementary Students
KINE 4351 Adapted Kinesiology
KINE 4356 Motor Development
KINE 4330 Structure and Organization of Recreational Programs
2 - Concentration - $\mathbf{1 8}$ hours (18 advanced)
Choose one of the following concentrations:
a - Coaching - 18 hours (18 advanced)
Choose one:
KINE 3300 Theory of Football
KINE 3302 Teaching Individual Sports
KINE 3303 Theory of Basketball
KINE 3304 Theory of Baseball
KINE 3305 Theory of Track and Field
KINE 3333 Theory of Soccer
KINE 3330 Coaching of Sports
KINE 3368 Kinesiology Workshop
KINE 3365 Physiology and Techniques of Strength/Power Fitness
KINE 3344 Sports Officiating
KINE 4382 Kinesiology Practicum
b - Athletic Training - 18 hours (18 advanced)
KINE 3352 Care, Treatment, and Prevention of Athletic Injuries
KINE 3365 Physiology and Techniques of Strength/Power Fitness KINE 3354 CPR for the Professional Rescuer KINE 4321 Advanced Athletic Training KINE 4322 Rehabilitation/Therapeutic Modalities in Athletic Training KINE 4382 Kinesiology Practicum
c - Recreational Sports Management - 18 hours (18 advanced)
KINE 3330 Coaching of Sports KINE 3342 Lifestyle Management KINE 3378 Planning and Use of Facilities KINE 3379 Sports Marketing and Technology KINE 4370 Management in Exercise and Health Promotion KINE 4382 Kinesiology Practicum

## C - FREE ELECTIVES - 14 HOURS (6 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 121 HOURS

TOTAL ADVANCED HOURS - 62 HOURS

MINOR IN
HEALTH

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)

1 - Health Core - 9 hours (6 advanced)
HLTH 2352 Personal Health
HLTH 3350 Organization of the Health Program HLTH 4380 Principles of Public Health (Capstone)

2 - Health Electives - 9 hours<br>Choose from:<br>HLTH 1352 Community and Environmental Health<br>KINE 1306 First Aid and First Responder<br>HLTH 2373 Growth, Development, and Fitness<br>HLTH 3370 Concepts for Healthy Lifestyle Promotion<br>HLTH 3371 Health Problems in Alcohol, Tobacco, and Narcotics<br>HLTH 3372 Nutrition and Health<br>HLTH 3374 Human Disease<br>HLTH 3375 Consumer Health<br>HLTH 4357 Health Seminar

## MINOR IN KINESIOLOGY

The Department of Health and Human Performance has a focus on preparing Kinesiology majors to function professionally in a changing and diverse society, and to improve the quality of life through the understanding, delivering and promotion of health, physical activity, and wellness.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate competency in the application of Kinesiology skills in public and/or private settings.
2. Students will demonstrate written comprehensive competency in Kinesiology Theory courses such as Biomechanics, Exercise Physiology, Motor Learning and Pedagogy.
3. Student must quantify student internship experience in the form of a Student Portfolio that will be presented to the course.

A - MINOR REQUIREMENTS - 24 HOURS (9 advanced)
1-Kinesiology Core-9 hours
KINE 1301 Wellness
KINE 1306 First Aid and First Responder
KINE 1351 Introduction to Sports and Exercise Science
2 - Kinesiology Advanced Electives -9 hours (9 advanced)
Choose 9 hours of advanced Kinesiology.
2 - Kinesiology Electives - 6 hours
Choose 4 hours of Kinesiology Activity courses, and complete:
KINE 1200 Swimming

# School of Nursing 

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## BACHELOR OF SCIENCE IN NURSING (BSN)

## WITH A MAJOR IN <br> NURSING

The Bachelor of Science in Nursing (BSN) Program is generic in nature with a pathway for registered nurses. The Program is designed to enable students to integrate knowledge from theory and research, high-level skills, and concepts of leadership into the practice of professional nursing care of individuals, families, groups, and communities. The BSN Program provides a foundation for graduate study.

BSN generic graduates are eligible to apply to the Texas Board of Nursing to take the National Council Licensure Examination. After successfully completing this examination, the graduate is issued a license to practice as a registered nurse in the state of Texas.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate critical thinking in the use of knowledge and theory from the behavioral, physical, and nursing sciences to provide holistic client care in multicultural health settings.
2. Demonstrate the appropriate use of the nursing process in providing holistic culturally competent client care.
3. Collaborate as a member of a multidisciplinary health care team to advocate for safe (mind-bodyspirit), effective, and holistic client care, including the use of information technology, being cognizant of cultural, societal, economic, political, and ethicolegal issues.
4. Use the research process to identify nursing issues and evaluate research findings for applicability to nursing practice.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - $\mathbf{3}$ hours
Choose one:
MATH 1342 Elementary Statistical Methods
MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
Life and Physical Sciences - 6 hours
BIOL 2401 Anatomy and Physiology I three-hour lecture
BIOL 2402 Anatomy and Physiology II three-hour lecture

Social and Behavioral Sciences - $\mathbf{3}$ hours Choose one:

ANTH 2351 Introduction to Cultural Anthropology
SOCI 1301 Introduction to Sociology
Component Area - 6 hours
Choose 3 hours from Humanities, and:
CHEM 1111 General Chemistry I Lab
BIOL 2401 Anatomy and Physiology I one-hour lab
BIOL 2402 Anatomy and Physiology II one-hour lab

## B - MAJOR REQUIREMENTS - 78 HOURS (57 advanced)

1 - Concentrations - 78 hours ( 57 advanced)
Choose one concentration:
a - Generics - 78 hours (57 advanced)
i- Generics Core - 54 hours (54 advanced)
NURS 3302 Pharmacology
NURS 3403 Client Assessment
NURS 3604 Nursing Fundamentals
NURS 3505 Mental Health Nursing
NURS 3306 Research
NURS 3107 Health Promotion
NURS 3608 Adult Health I
NURS 4601 Adult Health II
NURS 4602 Family Health Care
NURS 4303 Issues in Nursing
NURS 4504 Community Health
NURS 4605 Leadership in Nursing
ii - Restricted Electives - 24 hours (3 advanced)
CHEM 1311 General Chemistry I
DIET 2351 Introduction to Clinical Nutrition
Choose one:
CLSC 2429 Clinical Microbiology in Health Care
BIOL 3401 General Microbiology
Choose one:
HRPT 2303 Medical Terminology
SPAN 2317 Spanish for Health Spanish for Healthcare
Professionals I
NURS 2301 Wellness
PSYC 2301 General Psychology
PSYC 3337 Developmental Psychology: Lifespan
Any 2 hour Kinesiology activity course
b - RNs - 78 hours (57 advanced)
i- RN Core - 27 hours (27 advanced)
NURS 3301 Professional Mobility
NURS 3302 Pharmacology
NURS 3403 Client Assessment
NURS 3306 Research

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& \text { NURS } 4303 \text { Issues in Nursing } \\
& \text { NURS } 4504 \text { Community Health } \\
& \text { NURS } 4605 \text { Leadership in Nursing } \\
& \text { ii - RN Advanced Electives - } \mathbf{3 0} \text { hours ( } \mathbf{3 0} \text { advanced) } \\
& \text { May be awarded upon satisfactory completion of RN core: } \\
& \text { NURS } 3604 \text { Nursing Fundamentals } \\
& \text { NURS } 3505 \text { Mental Health Nursing } \\
& \text { NURS } 3107 \text { Health Promotion } \\
& \text { NURS } 3608 \text { Adult Health I } \\
& \text { NURS } 4601 \text { Adult Health II } \\
& \text { NURS } 4602 \text { Family Health Care } \\
& \text { iii - Restricted Electives - } \mathbf{2 1} \text { hours ( } \mathbf{3} \text { advanced) } \\
& \text { CHEM } 1311 \text { General Chemistry I } \\
& \text { DIET } 2351 \text { Introduction to Clinical Nutrition } \\
& \text { Choose one: } \\
& \text { CLSC } 2429 \text { Clinical Microbiology in Health Care } \\
& \text { BIOL } 3401 \text { General Microbiology } \\
& \text { Choose one: } \\
& \text { HRPT } 2303 \text { Medical Terminology } \\
& \text { SPAN } 2317 \text { Spanish for Health Spanish for Healthcare Professionals I }
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## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

 TOTAL ADVANCED HOURS - 57 HOURS
## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Admission requirements

1. Have a minimum 2.5 grade point average (GPA) on a 4.0 scale in all prerequisite courses.
2. Complete all BSN prerequisites with a minimum grade of ' $C$ ' in each course.
3. Pass math quiz [grade of 100].
4. Provide proof of current certification in cardiopulmonary resuscitation (CPR) for health care providers.
5. Provide documentation verifying absence of active (infectious) pulmonary disease.
6. Provide documentation verifying current immunization or immunity status for specified diseases (hepatitis B, measles, mumps, rubella, tetanus/diphtheria or tetanus/diphtheria/pertussis, varicella, flu/influenza, meningitis if <age 22, etc.).
7. Submit evidence of being cleared by the Texas Board of Nursing's criminal background check.
8. RN applicants: Be a registered nurse or have a temporary permit to practice professional nursing in the applicant's state of residence.
9. Submit application to the BSN Program by March 1st.
10. Be admitted by the BSN Student Development Committee. After being rank-ordered according to prerequisite-GPA, students will be admitted on a space-available basis.

## Progression requirements

1. Maintain at least $\$ 1$ million in professional liability insurance.
2. Provide annual documentation verifying absence of active (infectious) pulmonary disease.
3. Provide documentation verifying current immunization or immunity status for specified diseases (hepatitis B, measles, mumps, rubella, tetanus/diphtheria or tetanus/diphtheria/pertussis, varicella, flu/influenza, and, if <22, meningitis, etc.).
4. Provide annual proof of current certification in CPR (health care provider).
5. Maintain a 2.0 GPA on a 4.0 scale.
6. Achieve a minimum grade of ' $C$ ' in each required BSN course.
7. Satisfactorily complete BSN courses in approved sequence.
8. RN students: Provide evidence of current licensure to practice registered nursing in the applicant's state of residence. Students will not be permitted to continue in clinical courses if a temporary permit expires without a license being issued or if a license to practice registered nursing has expired or been suspended, canceled, or revoked.
9. Seek academic advisement each semester regarding program progression.
10. Abide by and adhere to the BSN Student Guide.

## Graduation requirements

1. Achieve a minimum grade of ' $C$ ' in each required course for the BSN degree.
2. Pass the BSN Readiness Exam [generics].
3. Attend designated NCLEX-RN review course [generics].
4. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# School of Rehabilitation Services and Counseling 

Dr. Bruce Reed<br>Director, School of Rehabilitation Services and Counseling<br>Location: HSHW 1276 (UTRGV Edinburg Campus)<br>Phone: 956-665-7036<br>Email: bruce.reed@utrgv.edu<br>Mr. Fidencio Mercado<br>Undergraduate Coordinator, School of Rehabilitation Services and Counseling<br>Location: HSW 1.130<br>Phone: 956-665-3074<br>Email: fidencio.mercado@utrgv.edu

# BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> REHABILITATION SERVICES 

The field of rehabilitation is dedicated to assisting individuals, primarily adults, with disabilities to live full and independent lives. Graduates of the B.S. program are prepared to enter a wide-range of entry-level careers in rehabilitative and human services. Graduates are also prepared academically to continue into graduate studies in rehabilitation counseling and other related majors. The undergraduate degree places special emphasis in hands-on, experiential learning which is integrated into all course work. The educational experience culminates in a 360 hour practicum in an approved community setting.

## STUDENT LEARNING OUTCOMES:

1. Understand disability and related issues.
2. Understand psychological, medical, and social aspects of disability.
3. Knowledge of services and service providers who serve this population.

Addiction Studies Concentration

1. Understand addictions.
2. Knowledge of services and service providers who work with this population.
3. Understand the medical, familial, and psychological aspects of addictions.

Deaf Studies Concentration

1. Understand Deaf culture.
2. Able to communicate in sign language.
3. Understand basics of audiology.
4. Exposure to service learning opportunities within the Deaf community.
5. Knowledge of services and service providers who serve this population.
6. Knowledge of traditional and innovative treatment modalities for hearing loss.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Recommended
Language, Philosophy, and Culture - 3 hours PHIL 1310 Ethics, Happiness, and the Good Life
Social and Behavioral Sciences - $\mathbf{3}$ hours PSYC 2301 General Psychology

B - MAJOR REQUIREMENTS - 60 HOURS (51 advanced)
1 - Rehabilitation Foundation - 39 hours ( 36 hours)
REHS 2301 Introduction to Rehabilitation
REHS 3303 Case Management I
REHS 3311 Disability Policy and Advocacy
REHS 3325 Medical Aspects of Disability I
REHS 3330 Medical Aspects of Disability II
REHS 4301 Assessment in Human Services
REHS 4302 Job Placement

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            REHS 4303 Case Management II
            REHS 4310 Rehabilitation Research
            REHS 4330 Practicum I
            REHS 4360 Assistive Technology in Rehabilitation
            REHS 4602 Practicum II
                2 - Concentrations - }21\mathrm{ hours (15 advanced)
            a - Addictions Studies - }21\mathrm{ hours (15 advanced)
            In the Addictions concentration, students are further trained in addictive behaviors
            with a focus on substance abuse. Curriculum is designed to meet the educational
            requirements for the state of Texas Licensed Chemical Dependency Counselor
            designation; graduates are encouraged to obtain this licensure.
                PSYC 4313 Abnormal Psychology
                REHS 2321 Introduction to Addiction Studies
                REHS 2331 Psychology of Disability
                REHS 3340 Intermediate Aspects of Addiction Studies
                REHS 3350 Prevention of Addictive Behaviors
                REHS 4340 Clinical Issues in Addiction Studies
                REHS 4345 Culture and Family in Addiction Studies
                    b - Deaf Studies - 21 hours (15 advanced)
                COMD 1310 Beginning Sign Language
                COMD 1320 Intermediate Sign Language
                REHS 3315 Hearing Disorders and Assistive Technology
                REHS 3320 Family and Disability
                REHS 3335 Sign Language III
                REHS 4315 Psychological and Social Aspects of Deafness
                REHS 4335 Sign Language IV
c - Rehabilitation Services - 21 hours (15 advanced)
            PSYC 4313 Abnormal Psychology
            REHS 2321 Introduction to Addiction Studies
            REHS 2331 Psychology of Disability
            REHS 3320 Family and Disability
            REHS 4355 Multicultural Issues in Human Services
            Choose one:
            PSYC 3337 Developmental Psychology: Lifespan
            REHS 3345 Lifespan Development and Disability
        Choose one:
            REHS 3340 Intermediate Aspects of Addiction Studies
            REHS 3350 Prevention of Addictive Behaviors
            REHS 4340 Clinical Issues in Addiction Studies
            REHS 4345 Culture and Family in Addiction Studies
            REHS 4350 Special Topics in Rehabilitation
            REHS 4380 Animals in Rehabilitation
            C - FREE ELECTIVES - 18 HOURS
            TOTAL CREDIT HOURS FOR GRADUATION - }120\mathrm{ HOURS
            TOTAL ADVANCED HOURS - 51 HOURS
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# ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements 

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN ADDICTION STUDIES

The field of rehabilitation is dedicated to assisting individuals, primarily adults, with disabilities to live full and independent lives. With this minor degree option, non-Rehabilitative Services majors can complete the addictions track. Students will be trained in addictive behaviors with a focus on substance abuse. The curriculum is designed to meet the educational requirements for the state of Texas Licensed Chemical Dependency Counselor designation with the exception of the supervised field experience required of licensure; graduates are encouraged to obtain this licensure.

## STUDENT LEARNING OUTCOMES:

1. Understand addictions.
2. Knowledge of services and service providers who work with this population.
3. Understand the medical and psychological aspects of addictions.

## A - MINOR REQUIREMENTS - 18 HOURS (15 advanced)

1 - Addiction Studies Core - 18 hours (15 advanced)
REHS 2321 Introduction to Addiction Studies
REHS 3303 Case Management I
REHS 3340 Intermediate Aspects of Addiction Studies
REHS 3350 Prevention of Addictive Behaviors
REHS 4340 Clinical Issues in Addiction Studies
REHS 4345 Culture and Family in Addiction Studies

## MINOR IN <br> REHABILITATION

The field of rehabilitation is dedicated to assisting individuals, primarily adults, with disabilities to live full and independent lives. With this minor degree option, non-Rehabilitative Services majors will be exposed to the field of disabilities and be prepared for entry-level human services careers. Students will be provided a broad overview of the field by completing four required introductory courses as well as two other upper division courses.

## STUDENT LEARNING OUTCOMES:

1. Understand disability and related issues.
2. Understand psychological and social aspects of disability.
3. Knowledge of services and service providers who serve this population.

## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)

REHS 2301 Introduction to Rehabilitation
REHS 2321 Introduction to Addiction Studies
REHS 2331 Psychology of Disability
REHS 3320 Family and Disability
Choose two:
REHS 3325 Medical Aspects of Disability I
REHS 3330 Medical Aspects of Disability II
REHS 3340 Intermediate Aspects of Addiction Studies
REHS 3350 Prevention of Addictive Behaviors
REHS 4310 Rehabilitation Research
REHS 4340 Clinical Issues in Addiction Studies
REHS 4345 Culture and Family in Addiction Studies
REHS 4350 Special Topics in Rehabilitation REHS 4355 Multicultural Issues in Human Services REHS 4360 Assistive Technology in Rehabilitation REHS 4380 Animals in Rehabilitation

# Department of Social Work 

Dr. Sudershan Pasupuleti<br>Chair, Department of Social Work<br>Location: SWOT 1222 (UTRGV Edinburg Campus) Phone: 956-665-3575<br>Fax: 956-665-3516<br>Email: sudershan.pasupuleti@utrgv.edu<br>\section*{BACHELOR OF SOCIAL WORK (BSW)}<br>WITH A MAJOR IN SOCIAL WORK

The Department of Social Work at The University of Texas - Rio Grande Valley offers a Bachelor of Social Work (BSW) degree program which is accredited by the Council on Social Work Education (CSWE). The BSW is a professional degree built on a liberal arts foundation with supporting social and behavioral sciences coursework. Graduates of our program will qualify to take the Texas licensing examination to become a Licensed Baccalaureate Social Work (LBSW).

## STUDENT LEARNING OUTCOMES:

1. Identify as a professional social worker and conduct oneself accordingly.
2. Apply social work ethical principles to guide professional practice.
3. Apply critical thinking to inform and communicate professional judgments.
4. Engage diversity and difference in practice.
5. Advance human rights and social and economic justice.
6. Engage in research informed practice and practice-informed research.
7. Apply knowledge of human behavior and the social environment.
8. Engage in policy practice to advance social and economic well-being and to deliver effective social work services.
9. Respond to contexts that shape practice.
10. Engage, assess, intervene, and evaluate with individuals, families, group, organizations, and communities.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - $\mathbf{3}$ hours
Choose MATH 1314, MATH 1324, or higher level mathematics.
Language, Philosophy, and Culture - $\mathbf{3}$ hours
Choose from: PHIL 1305 Introduction to Latin American Philosophy PHIL 1310 Ethics, Happiness, and the Good Life PHIL 1312 Introduction to Social and Political Philosophy (Social Work section recommended) PHIL 2351 Religious Diversity in the Global Community
Social and Behavioral Sciences - $\mathbf{3}$ hours
Choose from:
SOCI 1301 Introduction to Sociology PSYC 2301 General Psychology

B - MAJOR REQUIREMENTS - 39 HOURS (30 advanced)
SOCW 2361 Introduction to the Social Work Profession
SOCW 2362 The Social Welfare Institution
SOCW 2375 Statistical Methods
SOCW 3314 Social Welfare Policy and Programs
SOCW 3321 Human Behavior and the Social Environment I
SOCW 3322 Human Behavior and the Social Environment II
SOCW 3323 Social Work Practice I
SOCW 4301 Social Work Practice II
SOCW 4302 Social Work Practice III
SOCW 4311 Research for the Social Services
SOCW 4353 Integrative Field Seminar
Choose one:
SOCW 4354 Field Education I and SOCW 4355 Field Education II SOCW 4619 Field Education Block

C - SUPPORT COURSES and ELECTIVES - 39 HOURS (24 advanced)

1 - Advanced Support Courses - 12 hours (12 advanced)
SOCI 4352 Social Stratification
Choose one:
PSYC 4313 Abnormal Psychology
SOCI 4314 Sociology of Deviance
Choose one:
PSYC 3337 Developmental Psychology: Lifespan
PSYC 3332 Developmental Psychology: Infancy through Adolescence
PSYC 3333 Psychology of Adulthood: Maturity and Old Age
Choose one:
SOCl 4313 Race and Ethnic Relations
SOCI 4323 The Mexican American Experience
2 - Advanced Restricted Electives - $\mathbf{1 2}$ hours (12 advanced)
Choose from any advanced CRIJ, REHS, SOCW, PSY, SOCI, POLS, or ANTH courses.
3 - Spanish Language Electives-6 hours
Choose one pair:
SPAN 1311 Spanish for Non-Native Speakers I and SPAN 1312 Spanish for Non-Native Speakers II
SPAN 1387 Beginning Spanish I for Honors Students and SPAN 1388 Beginning Spanish II for Honors Students
SPAN 2313 Spanish for Native/Heritage Speakers I and SPAN 2315 Spanish for Native/Heritage Speakers II
4 - Social Science and Behavioral Science Elective - $\mathbf{3}$ hours
Choose course not completed in the General Education Core:
SOCI 1301 Introduction to Sociology
PSYC 2301 General Psychology
5 - Free Electives - 6 hours

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 54 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Admission requirements
Requirements include: (1) 2.7 cumulative GPA, (2) At least 30 hours of University General Education Core Curriculum requirements, with a 2.0 GPA, (3) SOCW 2361 Introduction to the Social Work Profession, with a grade of ' $C$ ' or higher, (4) 6 hours of freshmen English, with a grade of ' $C$ ' or higher, and (5) 3 hours of college algebra or higher-level mathematics, with a grade of ' $C$ ' or better.
The application process includes the following:

1. Application for Admission into BSW Degree Program.
2. A 300-500 word essay on your interest in becoming a professional social worker.
3. Copy of unofficial UTRGV transcript.

## Progression requirements

A minimum grade of ' C ' is required for SOCW 3323 (Practice I) as a prerequisite for enrollment in SOCW 4301 (Practice II) and SOCW 4302 (Practice III). A minimum grade of ' $C$ ' is required in both SOCW 4301 and SOCW 4302 in order to progress to SOCW 4353
(Integrative Field Seminar) and SOCW 4619 (Field Education Block) or SOCW 4354 and SOCW 4355 (Field Education I and Field Education II).

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## Course Inventory for College of Health Affairs (COHA) Biomedical Studies

BMED 1101 Introductory Medical Biochemistry
This course introduces the fundamentals of modern molecular biology and biochemistry as applied to medicine. Topics discussed include the scientific method, introductory chemistry, molecular biology, nutrition and medical advances as they relate to body functions. Prerequisites: Departmental Interview.

BMED 1102 Introduction to Biomedical I Lab
This course is an introduction to the techniques and procedures used in the biomedical laboratory. Students will perform independent experiments to address a specific question.

BMED 1103 Introductory Cell Biology
This introductory level course introduces freshmen to the concept of cell structures, processes and functions of microbes and multicellular organisms as relevant to the understanding human cellular biology and human disease. Prerequisites: BMED 1101.

BMED 1104 Introductory Molecular Biology
This introductory level course introduces the concept of the structure and function of macromolecules (DNA, RNA, Proteins). Biomedical research techniques utilizing these macromolecules and the relevance of such research in understanding human disease will be discussed. Prerequisites: BMED 1103 with a grade of 'C' or better.
BMED 1105 Introductory Medical Genetics
This introductory level course introduces freshmen to the concept of genetic basis of heredity, simple and complex traits, sexual reproduction and recombination and variations that underlie diseases in human populations. Prerequisites: BMED 1104 with a grade of ' C ' or better.

BMED 1106 Introductory Medical Microbiology
This course is an introduction to the field of medical microbiology and will examine microbial morphology, factors controlling growth and reproduction, metabolism, genetics of human pathogens including bacteria, protest, fungi, and viruses. The molecular basis of host defense and pathogenesis will be emphasized. Prerequisites: BMED 1102, BMED 1105, CHEM 1311, and CHEM 1111 with a grade of 'C' or better.

BMED 1107 Introductory Immunology
This course is an introduction to the field of immunology and will illustrate the importance of an understanding of immunology in clinical problems. The molecular mechanism of innate and adaptive immunity will be emphasized. Prerequisites: BMED 1102, BMED 1105, CHEM 1311, and CHEM 1111 with a grade of 'C' or better.

BMED 1108 Introductory Medical Neuroscience
The course introduces core concepts inneuroanatomy, neurochemistry, neuropharmacology, and neurophysiology in a hierarchical order from molecules to networks of neurons. The course also serves as a foundation to develop knowledge and critical thinking in neuroscience that will be emphasized in advanced neuroscience courses. Prerequisites: BMED 1102, BMED 1105, CHEM 1311, and CHEM 1111 with a grade of ' C ' or better.

BMED 1109 Evolutionary Medicine
This course introduces evolutionary concepts and discusses the application of evolutionary thinking to the study of human health and disease. Prerequisites: BMED 1102, BMED 1105, CHEM 1311, and CHEM 1111.

BMED 1110 Introductory Medical Physiology
This biomedicine course provides an introduction to the major concepts of physiology as applied to the human organism and diseases. The content will be integrated within the concept of homeostasis of body systems that is essential for clinical medicine. Prerequisites: BMED 1105, CHEM 1311, and CHEM 1111 all with a grade of ' C ' or better.

BMED 1111 Introduction to Biomedical II Lab
This course continues the laboratory investigation of Biomedical Laboratory Students will be exposed to experimental design in medical microbiology, medical neurobiology, medical immunology, and bioinformatics. Prerequisites: BMED 1105 with a grade of ' C ' or better.

BMED 2101 Gross Anatomy
The students in this course will have the opportunity to study the detailed structure of the human body. Relationships of surface and internal structures from body systems are emphasized.
Prerequisites: CHEM 1312, MATH 2412, BMED 1110, and BMED 1111 all with a grade of 'C' or better. In addition, a GPA of 2.8 in all BMED course work and a GPA of 2.5 in all coursework.

BMED 2102 Molecules, Cells, and Tissues
This course emphasizes the macromolecules and cells and their influence on biological functions in the human body. The course also, provides students with a current and comprehensive review of the molecular structure and function at the cellular and tissue levels and discusses medical application of such knowledge. Prerequisites: CHEM 1312, MATH 2412, BMED 1110, BMED 1111 all with a grade of ' C ' or better. In addition, a GPA of 2.8 in all BMED course work and a GPA of 2.5 in all coursework.

BMED 2103 Legal Medicine and Ethics
This course is intended to give the student an overview of the multidisciplinary topics in legal medicine and ethics. The students acquired an understanding of the similarities and differences in which medicine and law frame questions, address problems, and approach moral issues affecting the practice of medicine today. Prerequisites: CHEM 1312, MATH 2412, BMED 1110, and BMED 1111 all with a grade of 'C' or better. In addition, a GPA of 2.8 in all BMED course work and a GPA of 2.5 in all coursework.

BMED 3101 Pathobiology and Host Defense
This course is an introduction to the disease process in all organ systems and presents the basic clinical aspects of diseases and its correlation with the morphologic features of the diseases. Prerequisites: BMED 2101 and BMED 2102, both with a grade of ' C ' or better.

BMED 3102 Neurochemistry
The course examines fundamental neuroscientific principles in neurotransmitters and receptors with a useful blend of data from vertebrate and humans, and provides integrated modern knowledge in a hierarchical manner from molecules to networks of higher nervous system functions. Prerequisites: BMED 2101 and BMED 2102, both with a grade of 'C' or better.

BMED 3103 Human Behavior
The course examines the neuronal basis of human behavior with a useful combination of data from vertebrate animals and humans. Biological foundations of human behavior, evolution and development of human behavior, as well as genetic and environmental regulation of human behavior will be discussed in health and disease. Prerequisites: BMED 2101 and BMED 2102, both with a grade of ' C ' or better.

BMED 3104 Integrated Body Systems I: Cardiovascular and Pulmonary
This course is an in depth examination of the cardiovascular and respiratory systems. The embryology, anatomy, histology, physiology, clinical aspects, pathophysiology and pharmacology of cardiovascular and respiratory systems will be presented. Prerequisites: BMED 2101 and BMED 2102, both with a grade of ' C ' or better.

BMED 3105 Integrated Body Systems II: Gastrointestinal Systems
This course is an in depth examination of the digestive system and nutrition. Topics include embryology, anatomy, histology, physiology, clinical aspects, pathophysiology, and pharmacology of digestive system, and the importance of nutrition in the life cycle. Prerequisites: BMED 2101 and BMED 2102, both with a grade of 'C' or better.

BMED 3106 Integrated Body Systems III: Renal, Fluid and Electrolytes
[1-0]
This course is an examination of the embryology, anatomy, histology, physiology, clinical aspects, pathophysiology and pharmacology of the urinary system. The course also includes the study of fluids and electrolyte balance. Prerequisites: BMED 2101 and BMED 2102, both with a grade of 'C' or better.

BMED 3107 Integrated Body Systems IV: Endocrine and Reproductive Systems
This course is an in depth examination of the embryology, anatomy, histology, physiology and pathology of the endocrine and reproductive systems. A special emphasis will be given to the process of gestation. Prerequisites: BMED 2101 and BMED 2102, both with a grade of ' $C$ ' or better.

BMED 3108 Integrated Body Systems V: Dermatology, Hematology and Musculoskeletal
This course is an in depth examination of the integumentary system, musculoskeletal system, and the blood. Topics include anatomy, histology, physiology, clinical aspects, as well as an introduction to the pathophysiology of the integumentary system, blood, and the musculoskeletal system. Prerequisites: BMED 2101 and BMED 2102, both with a grade of 'C' or better.

BMED 3109 Medical Syndromes
The students in this course will learn the importance of clinical judgment, interactions and involvement of the different organ systems in the development of diseases by integration and application of information acquired in previous courses. Topics will include ethics, death and dying, pain management, treatment principles and situational awareness. Prerequisites: BMED 2101 and BMED 2102, both with a grade of 'C' or better.

BMED 3121 Independent Research I
This course is an introduction to the process of science and its literature. The hands on laboratory portion focuses on critical thought for designing and conducting effective research using student designed projects. The student will present a project design to the program faculty.

BMED 3122 Independent Research II
This course is an introduction to advanced research techniques in an area of study chosen by the student. Methods will be taught through experimental approaches, culminating in the reporting of the findings in a scientific format and defended before program faculty. Prerequisites: BMED 3121.

BMED 3223 Independent Research III
This course provides an opportunity to pursue a research topic under the direction of a biology faculty member, resulting in a final presentation to the program faculty. Prerequisites: BMED 3122.

BMED 3224 Independent Research IV
This course is a study program of research arranged between an advanced student and an instructor. This course provides an opportunity to perform advanced research under the direction of a biology faculty member, resulting in a final presentation to the program faculty. Prerequisites: BMED 3223.

BMED 4220 Medical Bioinformatics, Genomics, and Systems Biology
This course is an introduction to genomics and systems biology using bioinformatics methods. Medical case studies are used to illustrate data collection and analysis techniques. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108 , and BMED 3109 all with a grade of ' $C$ ' or better.

BMED 4230 Human Genetics and Medical Genomics
This course will examine human genetics and medical genomics, covering the human genomics, heritability, variations and associations with diseases, gene-environment interactions, population genetics, cancer genetics, epigenetics, and the ethical, legal and social implications of studying human genetics. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of ' $C$ ' or better.

BMED 4240 Medical Microbiology
This advanced course that examines the biological properties of pathogens that contribute to human disease and examines the etiology, epidemiology, host defenses, identification, diagnosis, prevention, and control for selected major human pathogens. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

BMED 4250 Advanced Cell Biology
This advanced level course introduces students to the concept of protein targeting and its implication in human diseases. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

BMED 4260 Advanced Molecular Biology
This biomedical course focuses on the molecular processes involved in synthesis, maintenance and functions of macromolecules in health and disease. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

BMED 4270 Introduction to Complementary and Alternative Medicine
This course examines the principles, practices, use and outcomes of complementary therapies and alternative healing. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

BMED 4280 Advanced Medical Neuroscience
This course examines real clinical problems and utilizes one of the most contemporary teaching approaches in introductory medical neuroscience education through problem solving approaches. Students will be exposed to the most important elements of medical neuroscience in the field of disorders of the nervous system in humans. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

## BMED 4290 Medical Immunology

This advanced course in the medical immunology will relate scientific findings in immunology with clinical problems. It will illustrate essential points about mechanisms of immunity in a clinical context. The course will also cover the design of proper diagnostic approaches and their interpretation based on modern knowledge of immunology. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

BMED 4295 Pathophysiology
This course provides an introduction to the basic concepts of pathophysiology. Students will study human diseases, the mechanisms that govern them and the resulting human response. The major emphasis of this course will be on the physiological factors that underlie disease states. Prerequisites: BMED 3101, BMED 3102, BMED 3103, BMED 3104, BMED 3105, BMED 3106, BMED 3107, BMED 3108, and BMED 3109 all with a grade of 'C' or better.

BMED 4310 Medical Biochemistry
This course addresses the basic biochemical principles and terminology; metabolism and function of biomolecules of importance in medical biology and human pathophysiology.

## Clinical Laboratory Science

CLSC 2429 Clinical Microbiology in Health Care
This course will focus on the immunology, diagnosis, treatment and prevention of infectious diseases. The major categories of microbial pathogens such as viruses, bacteria, fungi and parasites will be discussed in relationship to human disease processes. Utilization and interpretation of laboratory findings in the health care setting will be emphasized. Students will have the opportunity to acquire skills in the use of universal precautions and infection control techniques. Recommended for preprofessional students interested in the health professions. Prerequisites: 8 hours from: [BIOL 1406 and BIOL 1407] or [BIOL 2401 and BIOL 2402] or [BIOL 1487 and BIOL 1488].

CLSC 3310 Hematology I
This course provides an overview of the formation, function, and identifying characteristics of the cellular elements of blood. Lecture and laboratory emphasize the enumeration, morphology, and staining characteristics of normal and abnormal blood cells in healthy and diseased states. Coagulation physiology and methods of detecting defects will also be introduced. Prerequisites: Admission into the Clinical Laboratory Science Program or special approval.

CLSC 3420 Clinical Chemistry I
Studies in clinical chemistry and urinalysis with concentration on the physiology of normal and abnormal metabolism as they relate to those techniques commonly performed in the general chemistry laboratory. Basic clinical chemistry and urinalysis instrumentation and methodology along with a discussion of diagnostic applications and clinical correlation of laboratory results will be emphasized. Appropriate pre-analytical, analytical, and post analytical principles will be discussed along with quality assurance principles appropriate to the clinical chemistry laboratory. Prerequisites: Admission into the Clinical Laboratory Science Program or special approval.

CLSC 3513 Clinical Immunology and Immunohematology
This course covers the basic aspects of the immune response, human genetics, and its relationship to the diagnosis and treatment of disease. Lecture and laboratory also cover clinical applications in the detection and diagnosis of disease processes by common serological tests as well as introductory immunohematology applications and concepts. Prerequisites: Admission into the Clinical Laboratory Science Program or special approval.

CLSC 3630 Clinical Microbiology I
This course provides an overview of human pathogens commonly encountered in the clinical laboratory including parasites and bacteria. Diagnostic techniques used in the hospital laboratory as well as correlation with disease processes are covered. Appropriate pre-analytical, analytical, and post-analytical processes are discussed. An emphasis is placed on staining, cultural, and differential biochemical characteristics, as well as methods of isolation. Prerequisites: Admission into the Clinical Laboratory Science Program or special approval.

CLSC 4116 Advanced Immunology
This course covers advanced concepts in clinical immunology with an emphasis on specialized testing. Topics include hypersensitivity, autoimmune disorders, tumor immunology, immunodeficiency disorders and transplantation. Prerequisites: CLSC 3513.

CLSC 4122 Method Development and Research
Students will be introduced to the principles, regulatory requirements, and statistical procedures used in developing and implementing new methods in the clinical laboratory. The principles of research will also be introduced to enable students to review and evaluate the medical literature as well as participate in the development of research projects related to clinical laboratory medicine. Prerequisites: Admission to the Clinical Laboratory Sciences Program.

CLSC 4144 Clinical Practicum V
Clinical capstone course involving the application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Science Program and successful completion of: CLSC 3310, CLSC 3420, CLSC 3513, CLSC 3630, CLSC 4314, CLSC 4411, CLSC 4521, CLSC 4631.

CLSC 4200 Seminar
This course is designed to prepare the student for the professional role of the medical laboratory scientist. Topics include professionalism and professional ethics, employment search skills, licensure and certification issues, laboratory utilization, critical pathways, principles of interpersonal and interdisciplinary communication, and practice. Also included in this course are review activities for the national certification exam as well as a comprehensive exam encompassing the major areas of the clinical laboratory science field. Prerequisites: Admission into the Clinical Laboratory Science Program and completion of CLSC 4340 and CLSC 4341.

CLSC 4303 Medical Laboratory Leadership
This course provides an introduction to the leadership roles and responsibilities of the clinical laboratory scientist in management, supervision, and education as well as regulatory and legal aspects of laboratory medicine. Prerequisites: Admission into the Clinical Laboratory Science Program or special approval.

CLSC 4314 Advanced Immunohematology
Lecture and laboratory stress the detection, identification, and characterization of rarer and atypical antigens and antibodies, compatibility testing, blood component therapy, hemolytic disease of the fetus and newborn, and problem-solving techniques. Appropriate pre-analytical, analytical and post analytical principles will be discussed along with quality assurance principles appropriate to the immunohematology laboratory. Prerequisites: Admission into the Clinical Laboratory Sciences Program and CLSC 3513.

CLSC 4315 Molecular Genetics and Molecular Diagnostics
This course introduces the student to concepts in molecular genetics and diagnostic testing as applied to the practice of laboratory medicine. Topics include a review of the fundamentals of nucleic acid biochemistry, the human genome and the inheritance of common human diseases, genetic mutations, chromosomal abnormalities as well as molecular diagnostic techniques used in the clinical laboratory. Appropriate pre-analytical, analytical, and post analytical principles will be discussed along with quality assurance principles appropriate to the molecular diagnostics laboratory. Prerequisites: Admission to the Clinical Laboratory Sciences Program or permission of the instructor.

CLSC 4340 Clinical Practicum I
[0-0-13]
Clinical capstone course involving the application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Science Program and successful completion of: CLSC 3310, CLSC 3420, CLSC 3513, CLSC 3630, CLSC 4314, CLSC 4411, CLSC 4521, CLSC 4631.

CLSC 4341 Clinical Practicum II
[0-0-13]
Clinical capstone course involving the application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Science Program and successful completion of: CLSC 3310, CLSC 3420, CLSC 3513, CLSC 3630, CLSC 4314, CLSC 4411, CLSC 4521, CLSC 4631.

CLSC 4342 Clinical Practicum III
Clinical capstone course involving the application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Science Program and successful completion of: CLSC 3310, CLSC 3420, CLSC 3513, CLSC 3630, CLSC 4314, CLSC 4411, CLSC 4521, CLSC 4631.

CLSC 4343 Clinical Practicum IV
[0-0-13]
Clinical capstone course involving the application of theory and techniques in affiliated institutions. Prerequisites: Admission into the Clinical Laboratory Science Program and successful completion of: CLSC 3310, CLSC 3420, CLSC 3513, CLSC 3630, CLSC 4314, CLSC 4411, CLSC 4521, CLSC 4631.

CLSC 4411 Clinical Hematology II
This course is a continuation of Hematology I with an emphasis on abnormal morphology and related disease states. Coagulation abnormalities and associated clinical correlation will also be covered as well as the more specialized techniques in hematology and coagulation. Appropriate specimen collection and pre- and post-analytical principles will be covered. Case studies will be used to develop problem solving skills. Prerequisites: CLSC 3310 or permission of the instructor.

CLSC 4521 Clinical Chemistry II
Continuation of Clinical Chemistry I with an emphasis on more advanced concepts and procedures including acid base balance, endocrine testing, toxicology, therapeutic drug monitoring as well as the associated normal and abnormal physiology and the appropriate clinical correlation of results. Alternate specimen types such as body fluids and fecal samples will also be addressed. Advanced quality assurance and pre- and post-analytical concepts principles will also be discussed.
Prerequisites: CLSC 3420 or permission of the instructor.

CLSC 4631 Clinical Microbiology II
This course is a continuation of Clinical Microbiology I with an emphasis on fastidious bacteria, mycobacteria, fungi, viruses, and rickettsia. Disease processes, therapy and prevention as they relate to microbiology will also be emphasized. Advanced concepts in pre-analytical, analytical and postanalytical processes are discussed. Prerequisites: CLSC 3630 or permission of the instructor.

## Communication Disorders

COMD 1310 Beginning Sign Language
This course raises awareness of basic knowledge about American Sign Language and deaf people. Emphasis in the course is upon acquisition of both comprehension and production skills and knowledge of the deaf community interaction. The students will begin with visual readiness activities and then progress through group targeted lexical items taught within meaningful contexts that stress use of questions, commands and conversational rules such as attention-getting and turn-taking and basic finger-spelling skills also will be stressed. ASHA Standards III C,D.

COMD 1320 Intermediate Sign Language
This course is a continuation of Beginning Sign Language (COMD 1310) and emphasizes expansion and refinement of the fundamental comprehension and production skills covered in Beginning Sign Language, with the acquisition of additional functional grammatical structure and targeted lexical items. Spontaneous, interactive use of American Sign Language is stressed through discussion of the deaf community and other activities being held by the deaf community. The students will continue to study information related to everyday life experiences of deaf Americans and deaf people everywhere in the world. ASHA Standards III C ,D. Prerequisites: COMD 1310 or departmental approval.

COMD 2310 Introduction to Speech-Language
This course acquaints the prospective major with the profession of speech- language pathology, which will include requirements for entering the profession and professional issues. The course will also introduce students to five basic types of communication disorders and their etiologies. ASHA Standards III B,C,D, IV, G a, b.

COMD 3310 Normal Language Development
A study of the theories of language development and language sampling. A description of language, sensory, and motor development is presented. ASHA Standards III B, C, D. Prerequisites: Formal acceptance to COMD Program. 'C' or better in COMD 2310, COMD 3320, COMD 3315, and COMD 3330.

COMD 3315 Anatomy and Physiology of the Speech and Hearing Mechanism
A detailed study of the anatomical and physiological structure and function of the speech and hearing mechanism. ASHA Standards III B, C, D. Prerequisites: Formal acceptance to COMD Program.

COMD 3320 Phonetics
This is an in depth course on the International Phonetic Alphabet and application of this symbol system to analyze various languages. This course will acquaint students with the phonetics symbols that are used to transcribe various dialects of General American English and acquaint them with transcription techniques utilized in the assessment of individuals diagnosed with communication disorders. ASHA Standards III B, C, D and IV G a. Prerequisites: Formal acceptance to COMD Program.

COMD 3330 Articulation Development
The course is a study of the theories of normal articulation and phonological development with emphasis on the practical applications of theory. ASHA Standards III B, C, D, IV G a, b, c. Prerequisites: Formal acceptance to COMD Program.

COMD 3340 Audiology I
Basic orientation to audiology including physics of sound, anatomy, and physiology of the hearing mechanism, pathology of hearing, and evaluation of hearing, which includes emphasis on pure tone and impedance audiometry. ASHA Standards III B, C, D, IV G a, b, c. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3315, and COMD 3330.

COMD 3355 Survey of Neurological Disorders
The course provides an introduction to acquired speech, language, cognition, and swallowing disorders resulting from brain injury. Basic neurophysiology is reviewed followed by discussion of etiology, diagnosis, treatment, and prognosis, of these disorders. ASHA Standards IV, B, D, D, E, G. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3315; and COMD 3330.

COMD 3360 Neuroanatomy and Physiology for Speech, Language, and Hearing
The course is a study of the structure and function of neuroanatomical parts that contribute to production and perception and processing of speech and language. ASHA Standard III, B, C. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3315, and COMD 3330.

COMD 4310 Behavior Management for Speech-Language Pathology
The course is a practical study of behavior management as it relates to and underlies speech and language intervention procedures. ASHA Standards III, C, D. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3355, and COMD 3360.

COMD 4330 Audiology (Re)Habilitation
The course presents methods and techniques utilized in the aural (re)habilitation of individuals who are hard of hearing and deaf. ASHA Standards III, C, D. Prerequisites: C' or better in COMD 2310, COMD 3310, COMD 3320, COMD 3315, COMD 3330, COMD 3340, COMD 3355, and COMD 3360.

COMD 4350 Clinical Applications
This course is designed to provide exposure to speech-language pathology in various settings, analysis of client assessment and treatment profiles, and journal research. This course may include observations, volunteer work in schools, or health care settings, or assisting in the therapy process. ASHA Standards III D, IV G a,b,c. Prerequisites: C' or better in COMD 2310, COMD 3310, COMD 3320, COMD 3315, COMD 3330, COMD 3340, COMD 3355, COMD 3360, COMD 4310, COMD 4330, COMD 4360, and COMD 4365.

COMD 4360 Language Disorders in Children I
The course is a study of the characteristics of language development in children at risk. A sampling of three to five special populations will be presented. Students will be introduced to basic techniques for the clinical management of children with language disorders. ASHA Standards III, C, D, IV, G b, c. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3355, and COMD 3360.

COMD 4365 Speech Disorders
The course is an introduction to functional disorders of speech, which may include those that impact articulation, fluency, and voice. ASHA Standards III, C, D, IV, G b, c. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3355, and COMD 3360.

COMD 4370 Professional Report Writing in Speech-Language Pathology
A study of basic writing skills, scientific writing, and professional writing, particularly for assessment reports, treatment plans, progress, reports, and professional correspondence in Speech-Language Pathology and other health professions. ASHA Standards III D, IV G a, b, c. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3355, COMD 3360, COMD 4330, COMD 4360, COMD 4365, and COMD 4310.

COMD 4380 Clinical Problem-Solving
The course is an orientation to the basic principles fundamental to clinical practice Speech-Language Pathology. ASHA Standards III C, D, IV, G a, b, c. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3355, COMD 3360, COMD 4330, COMD 4360, COMD 4365, and COMD 4310.

COMD 4390 Principles in Assessment of Speech-Language Pathology
The course is a study of diagnostic techniques and specific testing instruments utilized in the evaluation of articulation and language disorders. ASHA Standards III C, D, IV G a, b, c. Prerequisites: C' or better in COMD 2310, COMD 3320, COMD 3310, COMD 3315, COMD 3330, COMD 3340, COMD 3355, COMD 3360, COMD 4330, COMD 4360, COMD 4365, and COMD 4310.

## Dietetics

DIET 2351 Introduction to Clinical Nutrition
Basic principles of human nutrition with emphasis on the nutrients and factors that affect their utilization in the human body; nutritional requirements of the body at all age levels; modern concept of an adequate diet; cultural influences on food selection; principles of diet modification and its importance in the treatment of disease.

DIET 2352 Food Preparation
Application of scientific principles in food selection and preparation (conventional and microwave cooking). Consideration is given to the composition and properties of food, nutritional value, desirability standards, simple menu service, and food economics. Prerequisites: Clinical Nutrition Practicum.

DIET 3252 Quantity of Foods Production
Fall Principles and methods of buying, preparing, and serving foods for various types of quantity food facilities are considered. Standardization of recipes and cost controls. Use and care of institutional equipment. Safety and sanitation. Prerequisites: DIET 3253, DIET 3353, and DIET 3356.

DIET 3253 Quantity Foods Practicum
Students will be assigned to a practicum site in order to develop skills related to the principles and methods of buying, preparing and serving foods for various types of quantity food facilities. Standardization of recipes and cost controls are considered. Use and care of institutional equipment. Safety and sanitation. 9 hours of practicum per week. Concurrent enrollment in DIET 3252, DIET 3353, and DIET 3356. Prerequisites: DIET 2352 and admission to the Coordinated Program in Dietetics. Concurrent enrollment in DIET 3252, DIET 3353, and DIET 3356.

DIET 3257 Junior Seminar in Dietetics
Review and discussion of all topics related to Food Service and Clinical Nutrition. Extensive exam preparation for the Junior Comprehensive Exam will be emphasized. Prerequisites: DIET 3357, DIET 3356, and admission to the Coordinated Program in Dietetics.

DIET 3353 Advanced Nutrition
Study of advanced nutrition and human metabolism; cells and their nourishment; digestive system; energy transformations; macronutrients (carbohydrates, lipids, and proteins) and their metabolism; regulatory nutrients (vitamins and minerals) and their metabolism; body fluids and electrolyte balance; body composition and energy expenditure. Prerequisites: CHEM 2323, DIET 2351, BIOL 2401, BIOL 2402, and admission to the Coordinated Program in Dietetics.

DIET 3354 Food Systems Management
Organization and management of a food service system and basic operational subsystems (procurement, inventory, production, distribution, sanitation, and fiscal control). Prerequisites: DIET 3252, DIET 3353, and DIET 3356.

DIET 3356 Experimental Foods
Investigation of chemical, physical, and nutritional properties of foods and additives during food preparation. Study of food modifications necessary for diet therapy; consideration of cultural preferences. Prerequisites: DIET 2352, CHEM 2323, and admission to the Coordinated Program in Dietetics.

DIET 3357 Medical Nutrition Therapy I
Introduction to the concepts of providing nutritional care to individuals and medical nutrition therapy. Topics include nutritional assessment procedures (anthropometrics, biochemical, clinical and dietary) nutrition care plan, basic principles of interviewing and counseling, diabetic and renal calculations, total parenteral nutrition (TPN) and tube feeding methods, and use of computer software for dietary analysis of intakes. Prerequisites: DIET 3353 and admission to the Coordinated Program in Dietetics.

DIET 3358 Medical Nutrition Therapy II
Pathophysiological effect of disease on humans and rationale for medical nutrition therapy and nutrition care process. Development of ability to translate dietary prescription into meal plans that will satisfy nutritional, emotional, and cultural needs of people. Prerequisites: DIET 3357 and admission to the Coordinated Program in Dietetics.

DIET 3655 Food Systems Management Practicum
Selected problems and clinical experiences directly correlated to DIET 3354: Food Systems Management. Supervised practice in organization and management of food service system and basic operational subsystems (procurement, inventory, production, distribution, sanitation, and fiscal control). Eighteen hours clinical experience per week. Prerequisites: DIET 3252, DIET 3253, DIET 3353, and DIET 3356; concurrent enrollment in DIET 3354.

DIET 4252 Integrative Seminar in Dietetics
Integration of theory and practice on the basis of practicum experience. Two lecture/discussion hours a week for one semester. Prerequisites: DIET 3357, DIET 3358, and admission to the Coordinated Program in Dietetics.

DIET 4257 Research Methods in Dietetics
The study of principles of research and research design. Introduction, interpretation, and evaluation of dietetics-related professional literature. Study of planning techniques and instructional strategies for professional presentations. Students are provided preliminary directions in the development of a research proposal. Prerequisites: DIET 4359, DIET 4752, and admission to the Coordinated Program in Dietetics.

DIET 4258 Communication Skills in Dietetics
The study of the major components of communication, interviewing, counseling, behavior modification, group process, delivery of oral presentations and workshops, learning, and motivation. Prerequisites: DIET 4359, DIET 4752, and admission to the Coordinated Program in Dietetics.

DIET 4259 Seminar in Dietetics
Review and discussion of all topics related to National Registration Examination for dietitians including Food Service, Clinical, and Community Nutrition. Extensive exam preparation for the National Registration Examination will be emphasized. Prerequisites: DIET 4359, DIET 4752, and admission to the Coordinated Program in Dietetics.

DIET 4356 General Dietetics Practicum
Integration of nutritional care and dietetic service into various systems of health care, food systems management or clinical nutrition. Under close supervision, students will assume the role of the generalist dietitian. Students will be assigned to a practicum experience for 12 hours per week. Prerequisites: DIET 4359, DIET 4752, and admission to the Coordinated Program in Dietetics.

DIET 4359 Community and Life Cycle Nutrition

## Health Informatics

HIUT 4300 Introduction to Health Informatics
This introductory graduate-level course covers the discipline of informatics in health care delivery and is designed to be multidisciplinary in nature. The course will focus on the clinical aspects of information technology and provides a broad overview to the nature of information technology, focusing on hardware, software and conceptual models of information. Students will explore different data types and data models specific to their discipline and those that can be shared across disciplines. The focus will be on comparing and contrasting the data types and data models of the different disciplines. Students will be oriented to the various health informatics professional organizations, learn about the entire health information ecosystem and the interrelationships between the component parts of a system, as well as the importance of health information systems within the larger health care delivery system. This course equates to UTH-BMI: HIT-5300 Introduction to Health Informatics.

HIUT 4301 Standards and Standards Development
Unlike much of the world, American health care standards are frequently developed by private organizations rather than the government. The Standards Development Organizations (SDOs) create an alphabet soup of organizations that are often not well known to people within health care, let alone those just entering the field. This course will explore the history of a variety of SDOs, examining their membership and focus domain. Students will examine the role of the major SDOs and their impact on the structure and function of health care delivery in the United States. The relationship between U.S. and international standards organizations will be reviewed. This course equates to UTH-BMI:HIT-5327 Standards and Standards Development.

HIUT 4302 Assessment and Evaluation
Students in this course will learn how to identify and assess different aspects of healthcare systems and healthcare workflow as well as how to evaluate a health information system. Students will learn the skills needed to assess and help improve workflow and the quality of healthcare delivery, with a special emphasis on optimization after implementation. Students will also be introduced to different methods of evaluation and how they would apply to health information systems, as well as the use of health information systems. This course equates to UTH-BMI:HIT-5329 Assessment and Evaluation.

HIUT 4303 The US Healthcare System
This course will present a survey of the modern American health care system. The course will focus on the major pieces of legislation that serve as the foundation of the current U.S. health care structures. Topics in the course will include Medicare, Medicaid, and HIPAA, their impacts on financing, health care access and professional roles. The course will integrate current legislative actions, public concerns, implications, and discussions surrounding health care reform. This course equates to UTH-BMI:HIT-5301 The US Healthcare System.

HIUT 4304 Safety and Security in Applied Informatics
This course will address security issues as they impact health information systems. Physical security of the hardware and software including redundancy, back up and restricted access will be discussed. Security and appropriateness of access will be addressed in terms of both hardware and software solutions. Data integrity, audit ability and system integrity will be considered along with the unique problems, such as the hacking of implantable devices, wired, wireless, and cellular networks, as well as the challenges of personally owned devices. Solutions to these concerns will be discussed in terms of industry standards, those that already exist, and those that are still evolving. Compliance with the HIPAA Security Rule, including the requirement for an annual risk analysis, will be covered. Students will write and evaluate policies, analyze security regulations, and conduct a mock risk analysis. This course equates to UTH-BMI:HIT-5306 Safety for Health Information Systems.

Health
HLTH 1352 Community and Environmental Health
Basic community health waste disposal, safe water, food and drug control, and the improvement of community health.

HLTH 2352 Personal Health
The course will cover factors and the health issues that influence lifestyle and wellness throughout the lifespan. Emphasis will be placed on the application of knowledge and skills for personal and skills for personal and professional practice.

HLTH 2373 Growth, Development, and Fitness
A study of the growth process and systemic development of the human organism. The concept of physical fitness is analyzed and related to organismic function and wellbeing.

HLTH 3300 School Health Methods
This course focuses in the etiology of the physical, mental, social, and emotional health of young people. Emphasis will be placed on the theory and practice in health education and an overview of the coordinated school health program. Prerequisites: Junior standing.

HLTH 3305 Selected Topics in Health Education
Selected topics in the field are examined with the intent of promoting the study and research of are as not offered in the curriculum. May be repeated one time as long as the topic is different.
Prerequisites: Junior standing.
HLTH 3325 Latino Health
This course covers topics related to the health issues of the Latino population. Emphasis will be placed on application of knowledge and skills to personal and professional practice related to the demographic, socioeconomic, and behavioral-risk profiles of Latino populations. Prerequisites: Junior standing.

HLTH 3350 Organization of the Health Program
The organization and management of the health program in school, community and clinical settings with special emphasis on program phases, responsibilities, evaluation and functional relationships with local, state, and federal agencies. Prerequisites: Junior standing. Health Majors only.

HLTH 3370 Concepts for Healthy Lifestyle Promotion
This course explores the scientific study of concepts that promote healthy behavior. The course framework investigates factors of health promotion including elements of individual, group, and organizational behavior that affect health choices, current research findings, and methods about personal behavior. Prerequisites: Junior standing. Health Majors only.

HLTH 3371 Health Problems in Alcohol, Tobacco, and Narcotics
This course examines the psychological, physiological and social effects of substance use, abuse and dependency. Special emphasis is placed on prevention with in-depth study of the contribution of intervention models. Prerequisites: Junior standing.

HLTH 3372 Nutrition and Health
Analysis of food constituents relating to human nutritive needs and sources throughout the life span will be studied. Its emphasis will be on prevention of nutrition-related health problems through study of health-promoting dietary and lifestyle practices, contributing risk factors, and mechanism of development. Prerequisites: Junior standing.

HLTH 3373 Human Sexuality
Adjustment of the individual to life in the social group with emphasis upon problems occurring in mental and emotional health, aging, family living, and human sexuality. Prerequisites: Junior standing.

HLTH 3374 Human Disease
This course covers the relationship between the human body and communicable and noncommunicable diseases. The historical aspects of diseases, etiology, prevention and control, prevalence, and symptoms are examined. Prerequisites: Junior standing.

HLTH 3375 Consumer Health
Selection, evaluation and understanding of health information, medical services, health products, and advertising and sociocultural factors in consumer health protection. Prerequisites: Junior standing.

HLTH 4305 Community Health Methods
This course will examine multiple aspects of community health such as political, social, economic, and cultural values in the community health education settings. Emphasis will be placed on the tenets of program planning, implementation, and evaluation. Prerequisites: Junior or senior standing.

HLTH 4315 Health Program Planning and Evaluation
This course covers the essentials of health education/promotion program design, planning, and evaluation. Students will learn the process of health education programming including assessment, design, planning, implementation, and evaluation. This course will also include an introduction to health behavior theory. Prerequisites: Junior or senior standing.

HLTH 4357 Health Seminar
For teachers, nurses, principals, superintendents and community leaders to gain perspective and insight into essential cooperative efforts of home, school, and community to meet the growing health needs of our society. Prerequisites: Senior standing.

HLTH 4358 Current Health Readings and Reported Research
Research and analysis of the latest concepts and findings relating to the school health program. This will be conducted through review of the literature, written reports, and independent study in a health-substantive area. Prerequisites: Senior standing.

HLTH 4380 Principles of Public Health
Examination of the role and practice of official or voluntary health agencies. Content includes study of health needs, assessment, models for health promotion, program evaluation, basic issues, and management/funding methods achieved. University classroom and field-based experiences. Prerequisites: Senior standing.

Health Programs
HPRS 3301 Introduction to the Evolving Healthcare System
Introduces the student to the organizational structure of the U.S. Health Care system. Provides historical perspective to the system evolution from institutional-based to population based are to cost-aware values. Describes the financing mechanisms, primary providers and secondary providers, and consumers of healthcare. Discusses how technology affects the politics of the system. Discusses the health care system along the Texas-Mexico borders and how cultural influences impacts health care delivery.

HPRS 3302 Medical Law/Ethics for the Health Professional
Describes the laws and ethical standards that apply to allied health practitioners. Uses case presentations and develops methods for solving legal and or ethical and cultural dilemmas. Discuss pertinent legal cases involving allied health practitioners.

HPRS 3309 Leading and Managing the Healthcare Team
Discusses the concepts of leadership within the context of allied health. Prepares the learner to use problem solving methods to effectively supervise and lead subordinates in a health care setting. Focuses on the economics of managed care, how continuous quality improvement relates to costeffective care. Develops skills and values necessary for effective teamwork.

HPRS 3313 Physical and Mental Health Throughout the Lifespan
This course provides concepts of growth, development, and mental health through human stages of life, focusing on biological/genetic and environmental influences on the cognitive, physical, and socioemotional/psychological developmental areas. Course concepts are demonstrated by applying principles and theories to an interaction/ observation project and discussion of current lifespan issues.

HPRS 3316 Nutrition Concepts for Allied Health Practitioners This course is designed to emphasize the importance of nutrition in maintaining health and wellness. The effectiveness of the therapeutic diet as related to specific diseases will be explored. In addition to school-based training, this course provides clinical-based learning experiences.

HPRS 3320 Patient Education in Health Sciences
This course will cover adult learning theories and concepts to develop appropriate teaching materials and materials and grams for patients and their families that enhance client knowledge and skills for health promotion and recovery. Prerequisites: Instructor's approval.

HPRS 3324 Teaching in the Health Sciences
This course will provide an introduction to the principles of teaching to include planning, implementation, assessment and evaluation in health career education. The student will develop an appreciation of the value of vocational/technical education.

HPRS 4300 Pharmacology for Health Professional
This course is designed to provide concepts central to the study of pharmacology, the interaction between chemical substances and living tissues as these relate to the allied health professionals' clinical settings. The human systems with common pathophysiological diseases will be presented for review and use of common medication regimens. Each student will be able to apply pharmacological principles and processes toward required discussion topics. A group discussion and presentation on an identified case study will help the student demonstrate their grasp of the concepts inherent in pharmacological treatments within the clinical arena. Discussions are based on current research findings, chapter questions, web-site research and case studies.

HPRS 4301 Introduction to Health Data Utilization
Surveys the use of computers in the health care industry. The learner will understand the principles of data base management with examples from medical records. Use of computer spreadsheets, graphics programs in managing and presenting data will be taught.

HPRS 4302 Continuous Quality Improvement
Provides basic principles of CQI and its application in health care environments. Provides knowledge, skills, and tools necessary to implement, facilitate, and coordinate CQI activities. This requires experience in a healthcare setting and moderate computer skills including creating spreadsheets, charts and graphs.

HPRS 4309 Methods in Evidenced-Based Healthcare
In this course, students conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem solving. The student actively formulates a problem related to health science, designs the research and procedures to be used, and plans a final product that will involve a formal presentation to representatives of the scientific community. The course may be conducted in the classroom settings or as independent seminar.

HPRS 4312 Applied Pathophysiology
This course allows students to conduct laboratory investigations and fieldwork, use scientific methods during investigations, and make informed decisions using critical thinking and problem-solving. Students in Pathophysiology study disease processes, and how human systems are affected. Emphasis is placed on prevention and treatment of diseases. Students will differentiate between normal and abnormal physiology.

HPRS 4316 Applied Medical Microbiology
Students in Medical Microbiology study the morphology and physiology of microbes and the relationship between microbes and health maintenance. Emphasis is placed on the role of microbes in infectious diseases. Prerequisites: BIOL 1406 (or BIOL 1487) or BIOL 2401, or permission of the instructor.

HPRS 4330 Independent Study
This course will offer the student the opportunity for an in-depth exploration of a topic or a clinical skill in the health sciences. May be repeated twice for credit.

HPRS 4334 Issues and Trends in Health Care
This course will address current events, issues and attitudes pertinent to health care. This course maybe repeated twice for credit with permission of instructor. Prerequisites: 3 hours of advanced coursework.

## Health-Related Programs

HRPT 2303 Medical Terminology
This course is designed to introduce the student to analysis techniques and to correct spelling and pronunciation of medical terms. The student will have the opportunity to learn a medical vocabulary, develop skills in recognizing medical terms by analyzing their elements and relating them to the corresponding anatomical site.

Interprofessional Collaborative Practice
IPCP 3320 Foundations of Interprofessional Collaborative Practice
This course will introduce health professions students to the foundations of interprofessional collaborative practice. The course will focus on fostering an understanding of the roles of various health professionals and on developing competence in interprofessional communication, conflict management, and effective interprofessional teamwork.

## Kinesiology

KINE 1164 Introduction to Fitness and Sport
This is a survey course that is designed to develop in each student an understanding of the importance of physical fitness and knowledge of how to attain a health-enhancing level of fitness. Nutritional awareness and stress management are also covered. It carries one hour of Kinesiology activity credit.

KINE 1200 Swimming
This course is a basic swimming class that includes techniques, skills, and strategic elements; strategies for teaching and safety practices.

The course will consist of exercises using a Step Bench ranging from slow, stretching movements to vigorous activity, set to a variety of music. The intent is to promote physical fitness and well being in a fun manner and will not focus on specific dance styles. Exercise programming may also include high/low floor aerobics, cardiokickbox aerobics, and circuit training.

KINE 1202 Angling and Baitcasting
This course develops basic skills in angling and baitcasting through knowledge of the history, safety precautions through class activity.

KINE 1203 Archery
This course develops basic skills and strategies in archery through knowledge of the history, rules, and terminology and through class activity.

KINE 1204 Badminton
This course develops basic skill and strategies in badminton through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1205 Ballet I
Fundamental skills in Ballet and knowledge appreciate for ballet movements to enhance cultural awareness and total well-being.

KINE 1206 Ballet II
Advance skills in Ballet and knowledge appreciate for ballet movements to enhance cultural awareness and total well-being.

KINE 1207 Basketball
This course develops basic skills and strategies in basketball through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1208 Body Mechanics (Women Only)
Fundamental skills in body mechanic and knowledge appreciate for body mechanic for women to enhance cultural awareness and total well-being.

KINE 1209 Bowling
This course develops basic skills and strategies in bowling through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1210 Flag Football
This course develops basic skills and strategies in flag football through the knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1211 Folk and Square
This course develops basic dance skills in square and folk dances. The course also teaches proper etiquette and appreciation of dance. Lifetime health benefits related to proper nutrition and exercise physiology are examined.

KINE 1212 Folklorico
Fundamental skills in Folklorico and knowledge appropriate for Folklorico movements to enhance cultural awareness and total well-being.

KINE 1213 Golf
This course develops basic skills and strategies in golf through the knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1214 Gymnastics
[0-0-2]
The course develops basic skills in the various gymnastics apparatus and includes instruction of its history and safety.

KINE 1215 Jazz and Modern Dance
[0-0-2]
Fundamental skills in Jazz and Modern Dance and knowledge appropriate for Jazz and Modern Dance movements to enhance cultural awareness and total well-being.
KINE 1216 Jogging
This course is designed to promote cardiovascular and respiratory endurance which is conducive to reducing the risk of chronic and degenerative diseases associated with the heart, lungs, and vascular system.

KINE 1217 Paddle Tennis
[0-0-2]
This course develops basic skills and strategies in paddle tennis through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1218 Pington
This course develops basic skills and strategies in pington through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1219 Racquetball
[0-0-2]
This course develops basic skills and strategies in racquetball through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1220 Sailing
[0-0-2]
Fundamental skills in Sailing and knowledge appropriate for Sailing movements to enhance cultural awareness and total well-being.

KINE 1221 Sailing
This is a hands-on course in the fundamentals of safety, sail handling, sailing upwind and down, man overboard, anchoring, docking, and undocking.

KINE 1222 Self-Defense
This course is designed to teach the verbal, psychological and physical skills needed in order to prevent an attack from occurring or to use when confronted with a stressful or threatening situation. This is not a martial arts course and is designed for the beginner learner.

KINE 1223 Soccer
[0-0-2]
This course develops basic skills and strategies in soccer through knowledge of the history, rules, and terminology and through participation in game situations.
KINE 1224 Softball
This course develops basic skills and strategies in softball through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1225 Table Tennis
[0-0-2]
This course develops basic skills and strategies in table tennis through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1226 Tap Dance
[0-0-2]
Fundamental skills in Tap Dance and knowledge appropriate for Tap Dance movements to enhance cultural awareness and total well-being.

This course develops basic skills and strategies in tennis through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1228 Tennis II
Advanced skills in Tennis and knowledge appropriate for Tennis movements to enhance cultural awareness and total well-being.
KINE 1229 Volleyball
This course develops basic skills and strategies in volleyball through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1230 Weight Training
[0-0-2]
This course is to help students build a solid foundation of current knowledge and practice in beginning weight training. The course will cover exercise information consistent with the recommendations of the National Strength and Conditioning Associations (NSCA) and the American College of Sports Medicine.

KINE 1231 Wrestling
[0-0-2]
This course develops basic skills and strategies in wrestling through knowledge of the history, rules, and terminology and through participation in game situations.

KINE 1232 Surfing
This course develops basic skills in surfing becoming knowledgeable of the types of equipment and water safety.
KINE 1233 Physical Conditioning
The course offers students the opportunity to learn and practice health related fitness components and wellness principles that may lead to an enhanced quality of life. The course will consist of short lectures, aerobic exercises, strength training and conditioning, stretching techniques, and other exercises that may help achieve the studen's fitness goals.

KINE 1234 Basic Sport Skills
This course is for Health and Human Performance student majors only. It includes the basic fundamental skills necessary to perform skillfully in a majority of sports/activities taught in Elementary and Secondary schools.

KINE 1235 Tai Chi
Fundamental skills in Taichi and knowledge appropriate for Taichi movements to enhance cultural awareness and total well-being.

KINE 1236 Aikido
Fundamental skills in Aikido and knowledge appropriate for Aikido movements to enhance cultural awareness and total well-being.

KINE 1237 Fencing
Fundamental skills in Fencing and knowledge appropriate for Fencing movements to enhance cultural awareness and total well-being.

KINE 1238 Backpacking
Fundamental skills in Backpacking and knowledge appropriate for Backpacking movements to enhance cultural awareness and total well-being.

KINE 1239 Camping and Hiking
Fundamental skills in Camping and Hiking and knowledge appropriate for Camping and Hiking movements to enhance cultural awareness and total well-being.

KINE 1240 Pilates
Fundamental skills in Pilates and knowledge appropriate for Pilates movements to enhance cultural awareness and total well-being.

KINE 1241 Yoga
Fundamental skills in Yoga and knowledge appropriate for Yoga movements to enhance cultural awareness and total well-being.

KINE 1242 Scuba Diving
Scuba Diving is a course that leads up to Scuba Certification. The objectives of the course are to teach the student the knowledge, skills, and attitudes necessary for him/her to become safe on, in, or near the water as envisioned by NAUI (National Association of Underwater Instructors). Students have the option to be certified as a NAUI Scuba Diver. This course satisfies the two hour activity/wellness component of the general education requirement. It includes a concentrated two-three week wellness component with additional information presented throughout the course.

KINE 1243 Karate
Fundamental skills in Karate and knowledge appropriate for Karate movements to enhance cultural awareness and total well-being.

KINE 1244 Mixed Martial Arts
Fundamental skills in mixed martial arts and knowledge appropriate for different martial arts movements to enhance cultural awareness and total well-being.

KINE 1301 Wellness
This course is designed for students to learn basic knowledge concerning all aspects of healthy wellbeing and a specific physical activity for lifelong use, for example, swimming, jogging or another lifetime fitness activity. The course will be taught as a hybrid through a combination of online learning for knowledge and in a laboratory setting for a specific physical activity, for example swimming, jogging or another lifetime fitness activity. Through acquisition of knowledge, assessment of knowledge in the form of written tests and developing a Wellness Assessment Log which includes proper nutrition and an exercise program, students will learn and practice health-related wellness concepts leading to an enhanced quality of life.

KINE 1306 First Aid and First Responder
Basic knowledge for safe and effective living. The essential aspects of home, work, motor vehicle, and public safety. Includes both theoretical and practical aspects of emergency care. Standard First Aid, Personal Safety, and Cardiopulmonary Resuscitation (CPR). Certification upon completion of specific requirements.

KINE 1351 Introduction to Sports and Exercise Science
A survey course designed to introduce the prospective kinesiology education major to the history, philosophy, scientific foundations, objectives, and current status of sports and exercise in educational and recreational settings. Required for Kinesiology Majors and Minors.

This course involves and introduction to outdoor adventure activities (such as rock climbing, orienteering, canoeing, backpacking, and camping) as well as an introduction to experiential activity as teaching methodology. Topics covered require academic preparation and active student participation.

KINE 2305 Team Sports
Motor skill acquisition, knowledge, and safety issues in selected team sports (i.e. flag football, volleyball, soccer, softball, etc.). Prerequisites: Kinesiology Major and KINE 1351.

KINE 2315 Individual Sports
Motor skill acquisition, knowledge, and safety issues in selected individual or lifetime sports (i.e. tennis, badminton, golf, archery, etc.). Prerequisites: Kinesiology Major and KINE 1351.

KINE 2320 Movement Arts
Motor skill acquisition, knowledge, and safety issues in selected movement art activities (i.e. martial arts, dance activities, movement exploration, rhythmical activities, yoga, etc.). Prerequisites: Junior or senior standing.

KINE 2334 History and Philosophy of PE
Study of the sporting events of early civilizations and their evolution into modern society. Includes the Olympic Games, the European influence on sports in the United States, and the modern sports movement in the United States including intercollegiate and interscholastic sports.

KINE 3153 Physiology of Exercise Lab
Emphasis on demonstration of lecture concepts through hands on experiences in the lab. Maximal oxygen consumption and aerobic fitness assessment, human thermoregulation, body composition analysis, pulmonary function testing are among the topics explored. Prerequisites: Co-requisite: KINE 3353.

KINE 3160 Exercise Testing and Prescription Lab
Practical application of concepts discussed in lecture. ACSM client screening, fitness assessment, metabolic equations required for prescription and development of exercise prescriptions using volunteer subjects and cases studies. All methodologies required ACSM certification explored. Prerequisites: KINE 3353, KINE 3153

KINE 3300 Theory of Football
The analysis and interpretation of coaching techniques, rules, strategies, and fundamentals of football. Prerequisites: Junior or senior standing.

KINE 3302 Teaching Individual Sports
A study of current theories of teaching selected individual sports. Participation required.
Prerequisites: Junior or senior standing.
KINE 3303 Theory of Basketball
The analysis and interpretation of coaching techniques, rules, strategies, and fundamentals of basketball. Prerequisites: Junior or senior standing.

KINE 3304 Theory of Baseball
The analysis and interpretation of coaching techniques, rules, strategies, and fundamentals of baseball. Prerequisites: Junior or senior standing.

KINE 3305 Theory of Track and Field
The analysis and interpretation of coaching techniques, rules, strategies, and fundamentals of track and field. Prerequisites: Junior or senior standing.

KINE 3314 Teaching Movement Arts to Children and Adolescents
Developmentally-appropriate curriculum selection, instructional methods, and management techniques to enable young learners to acquire the knowledge, skills, and attitudes necessary to continue engaging in dance and other movement arts for a lifetime. Prerequisites: Junior or senior standing.

KINE 3330 Coaching of Sports
Study of the coaching profession as a multi-dimensional 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. Prerequisites: Junior or senior standing.
KINE 3333 Theory of Soccer
The analysis and interpretation of coaching techniques, rules, strategies, and fundamentals of soccer. Prerequisites: Junior or senior standing.

KINE 3340 Elementary and Middle School Kinesiology Activities
Motor skill acquisition, knowledge and safety issues in selected elementary and middle school activities (i.e. movement education, activities using small equipment, dance, tumbling, games, and modified team and individual sports). Prerequisites: Junior or senior standing.

KINE 3341 Principles of Conditioning 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. Prerequisites: Junior or senior standing.

KINE 3342 Lifestyle Management
Behavioral considerations related to establishing and maintaining personal, commercial, corporate, or clinically-based exercise programs. Emphasis on strategies for tailoring physical activity, increasing adherence, and edurcing attrition through incorporation of psychological models.
KINE 3344 Sports Officiating
An introduction to the theories, strategies, terminology, rules, and applications of officiating for various sports. Directed officiating experiences may be required. Prerequisites: Junior or senior standing.
KINE 3352 Care, Treatment, and Prevention of Athletic Injuries
Prevention and correction of accidents in physical education and athletic activities. The use of proper personal and field equipment, support methods, conditioning exercises, therapeutic aids, medical examinations, and massage. Prerequisites: Junior or senior standing.

KINE 3353 Physiology of Exercise
Basic systemic adaptations to exercise with specific emphasis in teaching kinesiology and on training and conditioning athletes. Prerequisites: BIOL 2401.

KINE 3354 CPR for the Professional Rescuer
Knowledge and skills necessary to provide care in respiratory and cardiac emergencies. The skills include performing two-rescuer CPR and techniques for special rescue situations, using resuscitation masks and bag-value masks for ventilating victims, and the proper use of an Automated External Defibrillator (AED). Prerequisites: Junior or senior standing.

KINE 3355 Health and Motor Development
A 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. Prerequisites: Junior or senior standing.

KINE 3356 Motor Development
Study of motor skill and physical development throughout the lifespan, with an emphasis on early childhood and the elderly. Study of neurological, physiological, intellectual, social, and environmental and emotional factors that affect gross and fine motor movement. Prerequisites: Junior or senior standing.

KINE 3358 Sports Nutrition
This course helps students to develop a comprehensive understanding of the role nutrients play in athletic training, exercise/recovery and performance. Examined components will emphasize micronutrients (vitamin/mineral) and water as related to wellness, physical fitness and sports performance. Students learn optimum nutrition requirements for various sports.
Prerequisites: Junior or senior standing.
KINE 3360 Exercise Testing and Prescription
Development and implementation of exercise prescription for health-related fitness with specific respect to the following cardiorespiratory endurance, muscular strength and endurance, flexibility, and optimal body composition. Client screening, fitness assessment for prescription and metabolic equations following ACSM guidelines included. Prerequisites: KINE 3353/3153.

KINE 3365 Physiology and Techniques of Strength/Power Fitness
Advanced concepts in the conditioning of muscular strength, endurance, and power are taught. Exercise prescription for health-related fitness for the general public is detailed as well as prescription for athletic performance. In addition, the theory and use of periodization, plyometrics, and interval training for sports are covered. Prerequisites: KINE 3353/3153; and KINE 3360/3160.

## KINE 3368 Kinesiology Workshop

This course is designed to give a student experience in research or in-depth study/readings in a substantive area not normally covered within standard courses. Course topics will vary according to student interest. May be repeated one time for credit with different topics. Prerequisites: Junior or senior standing.

KINE 3370 Biomechanics
A study of the structural and mechanical factors that interact with human movement. Prerequisites: BIOL 1309/1109 or BIOL 2401.

KINE 3378 Planning and Use of Facilities
This class will cover numerous issues associated with facility use and management. Topics will include a variety of issues from construction-related concerns, marketing facilities, naming rights, concession practices and basic facility operations including water needs, heating, cooling, and ventilation, and safety. This is a comprehensive course focused on applied rather than theoretical knowledge designed to educate the learner about the hands-on elements of running a sport/exercise facility. Prerequisites: Junior or senior standing.

KINE 3379 Sports Marketing and Technology
This course examines the intersection of marketing and technology in sport business management. In addition to defining the elements of marketing, the course examines the impact of technology on the marketing of sport, and the reciprocal influence of marketing upon technology. Further, it addresses ways in which current technological advances may be utilized to powerfully market sport businesses, athletic programs, and not-for-profit sport organizations, making it essential for sport business leaders. Finally, it examines how future changes in technology may continue to affect sport marketing, and the ways in which current sport business leaders may prepare to meet those changes. Prerequisites: Junior or senior standing.

KINE 3415 Advanced Sport Skills
Advanced Sport Skills: Instructional methods, study, and assessment of advanced sport skills related to team sports, individual sports, and outdoor education. Prerequisites: Junior or senior standing.

KINE 4310 Measurement Techniques in Physical Education and Sport
The use, interpretation, evaluation and administration of valid tests in kinesiology. Also involves the application of elementary statistical procedures. Prerequisites: Junior or senior standing.

KINE 4311 Psychology of Sport and Exercise
A study of the affects of psychological factors on performance in sport as well as the affects of sport/exercise participation on psychological development and wellness. Prerequisites: Junior or senior standing.

KINE 4313 Seminar in Sports, Dance, and Exercise Science
Selected topics on sports, dance or exercise science. Current trends and theories are included. Course covers skills, legal implications, and specific topics in the areas of perceptual motor skills, sports, dance, and exercise science that are not available as part of the regular course offerings. Courses may be repeated for credit when topics vary, but not more than nine hours will apply to a bachelor's degree. Prerequisites: Junior or senior standing.

KINE 4321 Advanced Athletic Training
Designed to provide the prospective student athletic trainer with a clinical approach to the various aspects of an athletic training environment including the prevention, care, and treatment of athletic related injuries. Prerequisites: KINE 3352, KINE 3370, and permission from Head Athletic Trainer.

KINE 4322 Rehabilitation/Therapeutic Modalities in Athletic Training
Designed to enable the student athletic trainer to assess, measure, and document various degrees of athletic related injuries; and subsequently, develop appropriate progressive rehabilitation/therapeutic modalities including strengthening, conditioning, flexibility, and neuromuscular development designed to enhance the repair and recovery of athletic injuries. Prerequisites: KINE 4321.

KINE 4323 Adapted Aquatics and Rehabilitation
This course is designed to provide students with current therapeutic, recreational, and educational, and adapted aquatic intervention techniques for individuals with mental, physical, sensory, and/or health-related impairments. Students will learn practical hands-on applications of adapted aquatics using theoretical models and best practices in the field. Prerequisites: Junior or senior standing.

KINE 4330 Structure and Organization of Recreational Programs
Through the investigation of various local recreational serving organizations, such as Park and Recreation, Boys and Girls Club, YMCA, etc. This course provides an understanding of free-time settings that can offer the community the supports, opportunities, programs, and settings residents can enjoy recreationally. Prerequisites: Junior or senior standing.

KINE 4351 Adapted Kinesiology
The selection and planning of kinesiology for students whose activity must be adapted due to demands by gravity, trauma, injury, congenital defect, illness, or disease. Pedagogy labs and field experiences are required. Prerequisites: Junior or senior standing.

KINE 4355 Pediatric Exercise Physiology
The purpose of this course is to provide knowledge and experience for future professionals in the field of exercise physiology that pertains primarily to children and adolescents. Training protocols and health-related fitness programs tailored to meet the developmental needs of children are covered. Prerequisites: BIOL 2401.

KINE 4356 Motor Development
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. Prerequisites: Junior or senior standing.

KINE 4360 Clinical Exercise Physiology
Exercise prescription for special populations is covered. Clinical description of specific medical problems is presented as well as their potential impact on the exercise prescription. Groups considered include those afflicted with diabetes, cardiovascular disease, metabolic syndrome, respiratory disorders, arthritis, cancer, HIV, and neuromuscular disorders. Prerequisites: KINE 3360/3160.

KINE 4361 Physical Education for All-Level Kinesiology
This course is designed for students in all-level Kinesiology to learn strategies and practice with materials necessary to design and implement developmentally appropriate physical education curriculum. It is aligned with EC-12 Texas Essential Knowledge and Skills (TEKS) and English Language Proficiency Standards (ELPS). Prerequisites: Junior or senior standing.

KINE 4370 Management in Exercise and Health Promotion
Applied knowledge for the operation of fitness centers emphasizing the development of practical skills for management, equipment acquisition, and staffing of commercial, corporate, and clinical centers. Prerequisites: Junior or senior standing.

KINE 4375 Motor Learning
A study of applications of principles of psychology to learning situations involved in motor skill acquisitions. Emphasis will be given both to general learning situations involved in the mastery of motor skills and to special situations involved with individual and group problems of motivation and response. Prerequisites: BIOL 2401.

KINE 4380 Exercise Science Internship
The course consists of practical general training and experiences in health-related fitness environments. The structure if the field experience is developed in consultation with the internship site. Prerequisites: KINE 3365, KINE 4355, and KINE 4370.

KINE 4382 Kinesiology Practicum
University work and field placement in a public and/or private setting where the student applies the combination of theory and practice in various disciplines of the field of Kinesiology and Exercise Science. Ten hours of field work per week are required. The structure if the field experience is developed in consultation with the internship site.

KINE 4402 Kinesiology Curriculum for Elementary Students
This course focuses on knowledge and theory related to designing appropriate and optimal physical curriculum for young children. Emphasis will be given to curriculum development and implementation supportive of the Texas Essential Knowledge and Skills (TEKS) for elementary school students. Prerequisites: Junior or senior standing.

KINE 4409 Kinesiology Curriculum for Secondary School Students
This course focuses on knowledge and theory related to designing an appropriate and optimal physical education curriculum for adolescents. Emphasis will be given to curriculum development and implementation supportive of the Texas Essential Knowledge and Skills (TEKS) for middle and high school students. Prerequisites: Junior or senior standing.

Nursing
NURS 2301 Wellness
This course introduces theories, concepts, and practices related to wellness, with an emphasis on selfcare. Opportunities are provided to practice and demonstrate competency in selected self-care skills in a simulated situation. Prerequisites: Prerequisite or corequisite of BIOL 2401 and BIOL 2402, or consent of the course coordinator.

NURS 3107 Health Promotion
This course expands on the concepts of wellness, health promotion, health maintenance, health restoration, and health protection (disease prevention) across the life span. Critical thinking, teachinglearning, and the nursing process are highlighted. Students must receive course credit in order to progress in the BSN Program. Prerequisites: NURS 2301, NURS 3302, NURS 3403, and NURS 3604 or consent of the BSN Coordinator.

NURS 3301 Professional Mobility
This course presents historical, philosophical, theoretical, sociocultural, economic, political, ethicolegal, and technological concepts impacting nursing and health care delivery systems (lay, folk, professional). For registered nurses only. Prerequisites: BSN Program admission or consent of the BSN Coordinator.

NURS 3302 Pharmacology
This course introduces pharmacological concepts, nursing responsibilities, and use of the nursing process in medication therapy, including drug calculation and safe administration. Prerequisites: BSN Program admission or consent of the BSN Coordinator.

NURS 3306 Research
This course presents a critical orientation to the research process, including various methods of inquiry, research evaluation for appropriate application to practice, and ethical considerations. Prerequisites: BSN Program admission or consent of the BSN Coordinator.

NURS 3307 Special Topics in Nursing
This course presents contemporary issues and practices in the nursing profession. The course may be repeated for credit when the topics vary. Prerequisites: Consent of the BSN Coordinator.

NURS 3308 Clinical Concentration
This course presents an opportunity to utilize the nursing process while caring for clients in a selected supervised clinical nursing site. Prerequisites: Consent of the BSN Coordinator.

NURS 3309 Women's Health Issues
This course introduces theories, concepts, issues, and practices related to women's health, with an emphasis on self-care and maximizing wellness.

NURS 3310 Foundations of Holistic Nursing
This course provides a foundation for holistic nursing practice with an emphasis on creating optimal healing environments through relationship-centered care. Content includes philosophy of and theories on holism, transpersonal human caring, the holistic caring process, holistic healing modalities, ethics in holistic care, and nurturing the nurturer. Prerequisites: Consent of BSN Coordinator.

NURS 3403 Client Assessment
This course incorporates anatomy, physiology, and assessment skills with psychosociocultural, developmental, spiritual, and ethicolegal considerations in client health assessment. Opportunities are provided in a simulated setting to practice cognitive, affective, and psychomotor skills and demonstrate systematic client assessment competency. Prerequisites: BSN Program admission or consent of the BSN Coordinator.

NURS 3505 Mental Health Nursing
This course presents continued use of nursing concepts, including the nursing process, as they pertain to mental health as well as to clients experiencing altered mental health or psychosocial integrity. Prerequisites: NURS 3302, NURS 3403, and NURS 3604 or consent of the BSN Coordinator.

NURS 3604 Nursing Fundamentals
This course introduces fundamental nursing and health care concepts, including the nursing process. Opportunities are provided to demonstrate skill competency in a simulated situation prior to application in a secondary health care setting. Prerequisites: NURS 2301 and BSN Program admission.

NURS 3608 Adult Health I
This course presents continued use of nursing concepts, including the nursing process, in the care of two or more adult clients with health alterations to selected body systems/functions in a secondary health care setting. Prerequisites: NURS 3302, NURS 3403, and NURS 3604.

NURS 4303 Issues in Nursing
This course addresses issues, trends, and problems in nursing as well as their impact on health care delivery systems (lay, folk, professional). Prerequisites: Consent of the BSN Coordinator.

NURS 4504 Community Health Nursing
This course addresses the community health nurse's role and scope, utilizing the nursing process to plan and provide primary care to individuals and groups in a multidimensional community or rural setting, taking complex sociocultural, political, economic, health, and ethicolegal issues into consideration. Prerequisites: NURS 4601 and NURS 4602 or consent of the BSN Coordinator.

NURS 4601 Adult Health II
This course presents continued use of nursing concepts, including the nursing process, in the care of two or more adult clients experiencing crisis and/or complex health alterations to selected body systems in a secondary health care setting. Prerequisites: NURS 3403, NURS 3505, NURS 3107, and NURS 3608.

NURS 4602 Family Health Care
This course focuses on the utilization of the nursing process in the care of families throughout the perinatal cycle, childhood, and adolescence. Theoretical concepts and selected research findings will be applied to developmental and familial issues in both normal and high-risk settings. Prerequisites: NURS 3403, NURS 3505, NURS 3107, and NURS 3608.

NURS 4605 Leadership in Nursing
This course addresses nursing leadership theories, organizational structures, health care management, transition from student-to-professional role, and the nursing process as it relates to leadership and management in clinical settings. Prerequisites: NURS 4601 and NURS 4602 or consent of the BSN Coordinator.

## Pharmacy

PHAR 3320 Pharmacy Independent Research
This three-credit course is designed as a foundational course to introduce undergraduate students to conduct Pharmacy related research. The course is designed for students to be working directly with a faculty member of the Cooperative Pharmacy Program in a mentor-mentee relationship. Students may participate in research being conducted by the instructor, but will also be encouraged to identify a research topic that is of interest to them. Admission requires prior approval of the instructor.

## Rehabilitative Services

REHS 2301 Introduction to Rehabilitation
Introduction to the field of rehabilitation and rehabilitation professions and specialties (e.g., Rehabilitation Counseling, Vocational Evaluation, Work Adjustment, Job Placement). The course addresses theory and practice of rehabilitation as well as the history, philosophy and legislative basis for the programs and profession. Includes an overview of the needs of individuals with disabilities and the effects disabilities have upon personal, social, and vocational adjustment. The independent living rehabilitation movement and the vocational rehabilitation process are discussed, along with the impact individuals with disabilities have upon the nation's economy. Community resources and agencies are explored. May include field trips, guest lectures and community oriented assignments.

REHS 2321 Introduction to Addiction Studies
Provides an introduction to the antecedents and the rehabilitation of the disability of substance abuse in the areas of vocational, social, familial, personal, and physical areas. Includes information about multiple disabilities (e.g. physical, emotional disability and substance abuse).

Provides a survey of psychological and social aspects of disability, with an emphasis on severe mental and physical disability. Describes major disability groups focusing on the general and specific psychological processes that are observed in individuals and their families as they cope with the consequences of disability. Disability groups will include sensory impairments, major neurological and muscular conditions, cardiovascular and endocrine system disorders, digestive system disorders, developmental and learning disabilities, mental retardation and major psychiatric conditions.

REHS 3303 Case Management I
Introduction to case management skills and techniques including interviewing will be taught. Applied and supervised learning experiences will be emphasized. Prerequisites: GPA 2.40.

REHS 3311 Disability Policy and Advocacy
Provides an overview of legislation and policies (both federal \& state) that impact people with disabilities. Issues related to incentives and disincentives of returning to work, insurance, and federal benefits will be covered. Consumer empowerment and independent living will also be explored.

REHS 3315 Hearing Disorders and Assistive Technology
The seminar course includes a basic orientation to sound, anatomy and physiology of the human hearing mechanism, pathology of hearing, impact of age of onset, with an emphasis in pure tone and speech discrimination. Extensive training in types of hearing losses, techniques and technology used in aural rehabilitation and other aspects of vocational rehabilitation for the deaf and hard of hearing are provided.

REHS 3320 Family and Disability
Covers relevant issues concerning the family of a person with a disability. Topics such as family dynamics, family support systems, and the role of the family in adjustment to disability will be explored. Particular attention will be given to the Mexican American family.

REHS 3325 Medical Aspects of Disability I
Provides essential medical information to prepare students for working with individuals with disabilities, physicians, and employers. Information on etiology, prognosis, treatment procedures, and vocational and independent living implications will be covered for each disability group. Also included in the course is information on medical specialties, therapeutic services, restorative techniques, and medical terminology. This course will enable the student to assess the total problem of the client more perceptively and accurately, and to assist the client in making more realistic vocational/independent living plans. Prerequisites: GPA 2.40.

REHS 3330 Medical Aspects of Disability II
This course will provide extensive medical information on etiology, prognosis, treatment procedures, and vocational implications of various disabilities. The major disabilities to be covered are diabetes, spinal cord injury, traumatic brain injury, visual impairments, hearing impairments, neuromuscular disorders, cardiovascular disorders, cerebral palsy, mental retardation, HIV/AIDS, epilepsy, and neurological disorders. An overview of other disabilities will be covered. Prerequisites: GPA 2.40.

REHS 3335 Sign Language III
This course is a continuation of Intermediate Sign Language (COMD 1320), and emphasizes expansion and refinement of functional grammatical structure while focusing on medically-related vocabulary and situations. The spontaneous use of American Sign Language is stressed through discussion of the deaf community and other activities being held by the deaf community. Prerequisites: COMD 1320.

REHS 3340 Intermediate Aspects of Addiction Studies
Provides an examination of cultural, ethical, legal, biological, psychopharmacological, and familial aspects of addictions. Included will be issues related to dual diagnoses in the area of mental health and addictions. Prerequisites: REHS 2321 or consent of instructor.

REHS 3345 Lifespan Development and Disability
The purpose of the course is to introduce the student to the different periods in the lifespan of a human being from birth to death with a focus on disability. The course emphasizes an understanding of important methods, terms, theories, and findings in the field of developmental psychology. The course will examine possible causes or sources of developmental change focused on a primary normative development. Special attention will be provided on disability-related issues as they impact human growth and development. Different theoretical perspectives will be explored to understand how these perspectives affect or determine the research and applications that arise from them. The course will take a chronological approach to development through the major lifespan stages: prenatal period, infancy, childhood, adolescence, and adulthood.

REHS 3350 Prevention of Addictive Behaviors
This course provides a comprehensive overview of substance abuse prevention theories and prevention programming applications. Course topics include theories and models basic to prevention, science based prevention strategies and model programs, strategic planning and outcome evaluation. Prerequisites: REHS 2321 and GPA 2.40.

REHS 4300 Independent Study
Individualized study and investigation of rehabilitation topic under the direct supervision of a faculty member. A minimum of 25 clock hours per credit hour is required. May be repeated a total of two times. Prerequisites: Consent of instructor.

REHS 4301 Assessment in Human Services
The course will focus on the assessment of people within the rehabilitation process. Students will be oriented to vocational evaluation, psychometrics, behavioral observations, work samples, situational assessments as well as modifications in assessment techniques needed to effectively evaluate people with disabilities. Prerequisites: REHS 2301.

REHS 4302 Job Placement
A study of job placement theories, approaches, and techniques will occur. The student will be introduced to the vocational implications of disability. Job seeking skills, labor market surveys, job analysis, resume writing, and transferable skills analysis are some of the skills that are taught. Prerequisites: REHS 4301 and GPA 2.40.

REHS 4303 Case Management II
Advanced case management skills and techniques such as interviewing, case history development, and program planning within the rehabilitation process will be taught. IWRP development and reviews of client case records will occur in an applied, supervised environment. Legal and ethical issues in service delivery will be addressed. Prerequisites: REHS 3303.

REHS 4310 Rehabilitation Research
This course provides an examination of research methods, designs, and statistical analysis as it applies to the field of rehabilitation. The application of research information and literature to guide effective practice for the rehabilitation professional will be covered. The course will address research with a conceptual rather than a statistical approach. Prerequisites: GPA 2.40.

REHS 4315 Psychological and Social Aspects of Deafness
This course provides an applied psychological perspective to the field of deafness. Psychological processes: sensory, perceptual, cognitive and linguistics will be reviewed. Current issues and topics: demographic trends, culture, human rights, literacy, communication methods, bilingual/bicultural, mental health, multiple disabilities, low-functioning deafness, accessibility, and impact of technology will be reviewed. Prerequisites: GPA 2.40.

REHS 4330 Practicum I
This course will focus on priority clinical issues and provide concentrated study in specific areas in rehabilitative services. The focus will be placed on independent projects presentation of papers and group discussions. A field-based clinical study with a minimum of 50 hours will be required. Prerequisites: To be taken the semester prior to practicum and program approval. Prerequisites: Majors Only / REHS 2301; REHS 4301; GPA 2.40.

## REHS 4335 Sign Language IV

Sign Language IV is a continuation of Sign Language III and emphasizes expansion and refinement of functional grammatical structure while focusing on vocational and job placement related vocabulary and situations. The spontaneous use of American Sign Language is stressed through discussion of the deaf community and other activities being held by the deaf community. Prerequisites: REHS 3335.

REHS 4340 Clinical Issues in Addiction Studies
The course focuses on treatment, prevention, and intervention approaches as these relate to addictions. Therapeutic rehabilitation approaches (group, individual, family, conjoint) are addressed in relation to the various populations. Evaluation, assessment, consultation, and referral are processed in the therapeutic approaches that are covered. Crisis intervention is an essential area when working with the addictive populations and is included in the therapeutic approaches. Prerequisites: REHS 2321.

REHS 4345 Culture and Family in Addiction Studies
This course overviews diverse populations' in order to present the impact of family, culture, and society upon substance use and abuse. Evaluation, treatment, prevention, and intervention techniques and practices will be addressed. Legal and ethical aspects related to diverse populations who have addictions will be explored. Prerequisites: REHS 2321.

REHS 4350 Special Topics in Rehabilitation
Selected topics in Rehabilitation. Including Multicultural Issues, Independent Living, Private Rehabilitation, and Advanced Seminar in Public Sector Rehabilitation. May be repeated for up to six hours credit when topics vary.

REHS 4355 Multicultural Issues in Human Services
This is a multidisciplinary course with the purpose of providing students with an overview of the complex relationship between culture and values. Students will develop an awareness of their personal values, the roles of culture race and gender, and how those interrelationships are reflected in the human services. Students will develop an awareness of and the ability to articulate crosscultural perspectives on social, psychological, educational, cultural, and interpersonal issues. The course includes conceptual models for resolving cross-cultural conflicts. Prerequisites: REHS 2301 and GPA 2.40.

REHS 4360 Assistive Technology in Rehabilitation
Issues related to technology and people with disabilities will be examined. Types of technology, service delivery models, funding, training, and technology abandonment will be covered. As much as possible, examples of technology will be brought into the classroom. Prerequisites: REHS 2301 and GPA 2.40.

REHS 4380 Animals in Rehabilitation
This course is an introduction to the human-animal health connection and its therapeutic applications. It is designed for students in a wide variety of fields who wish to further their knowledge and explore career opportunities in this emerging, multi-disciplinary field. Students will examine how contact with animals can enhance human health and wellbeing when incorporated into rehabilitation, health care, social services, psychology, education, physical, occupational and speech therapy, and many more fields. The course will explore conceptual frameworks, research, and practical techniques that will empower students to introduce animals in a variety of milieus. Students will learn to protect the rights of the animal in accordance with nationally endorsed standards of care for the inclusion of animals in therapeutic settings.

REHS 4602 Practicum II
[0-0-26]
Supervised, field-based, clinical experience in a public or private setting assisting people with disabilities. The practicum setting must meet specific Program requirements and be approved by the Program Practicum Supervisor. Weekly assignments will focus on components of the rehabilitation process and will be treated in a weekly group session. 360 clock hrs. at 36 (summer) 30 (fall) 26 (spring) field hrs. weekly plus 2 hrs . of regularly scheduled group supervision weekly. Prerequisite: Completion of all REHS concentration courses and Program approval. Prerequisites: Majors Only; REHS 4330; GPA 2.40.

Social Work
SOCW 2361 Introduction to the Social Work Profession
Traces the philosophy and historical development of social work, reflecting its social welfare European roots and its historical evolution in America. A general overview of the social work profession, functions, and services as they relate to various fields of practice will be studied. Volunteer work in the community will be required.

SOCW 2362 The Social Welfare Institution
This course emphasizes the social welfare institution, its laws, societal responses, and parallel social work services. Specific welfare legislation and programs that impact the profession of social work will be examined.

SOCW 2375 Statistical Methods
This course orients the students to basic statistics concepts and procedures that are needed for generalist social work practice. Students have the opportunity to learn techniques for data analysis using chi-square, t-test, Pearson Correlation Coefficient, and ANOVA. Additionally, students use statistical software to compute inferential statistics. Prerequisites: MATH 1314 or higher math.

SOCW 3314 Social Welfare Policy and Programs
This course examines economic, political, intellectual, socio cultural, leadership, values, and ideologies and other such factors that shape social welfare policy, programs, and services. Addresses various frameworks for studying social policy and examines the roles of policy-makers, process of social change, and the role of the social worker as a facilitator of change. Prerequisites: SOCW 2362 and Admission to BSW Program.

SOCW 3321 Human Behavior and the Social Environment I
This course presents an overview of theories that form social work practice with individuals and families. There is an emphasis on application of theory to practice. Prerequisites: SOCW 1313.

SOCW 3322 Human Behavior and the Social Environment II
This course presents an overview of theories that form social work practice with groups and communities. There is an emphasis on application of theory to practice. Prerequisites: SOCW 1313.

SOCW 3323 Social Work Practice I
Through classroom and skills lab, the student will have the opportunity to examine some of the necessary knowledge, values, and skills upon which problem-solving is based. The student will also have the opportunity to learn the generalist approach to practice. Prerequisites: SOCW 1313, SOCW 2314, and admission to BSW Program.

SOCW 3333 Special Topics in Social Work Issues
An analysis of conceptual frameworks, content, laboratory experiences, and research opportunities in current social issues with particular relevance to our community, requiring the social worker's intervention, problem-solving knowledge, values and skills, and preparing the social work student and other helping professionals for interdisciplinary collaboration in achieving effective social change objectives. Sequential registration for up to 6 hours is permitted as topics vary. Topics will vary according to timeliness of issues, student demand, and availability of faculty. Prerequisites: Approved by Instructor and Dept. Chair.

SOCW 3334 Social Work Practice with Aging Family
Students will have the opportunity to study interviewing, assessment and intervention, demographics of an aging population in America, roles and functions of families, the quality of life of the elderly, societal and cultural issues for older adults, supportive resources and networks as well as services for the aged and their family members. The generalist approach is applied to work with older clients through case examples and community assignments.

SOCW 3342 Substance Abuse and the Family
Provides an introduction to the basic dynamic nature of the substance-abusing family, including structures, relationships and development in the process of its societal evolution. The function of the family as a socialization agent will be studied. Focus will be given to value transmission, learning patterns of interaction, impact on varieties of relationships, and coping styles.

SOCW 3351 School Social Work
Examines the major social issues confronting education, as well as how school social workers can interface with educators to address the problems of student absenteeism and underachievement, and the violence, racism, and discrimination that are perpetuated by and against students. The roles and functions of school social workers are described.

SOCW 3360 Child Welfare
Examines child welfare history, policies, programs, and practices. Best practices in child risk assessment, foster care, and adoption and prevention of child abuse and neglect are highlighted.

SOCW 3361 Child Maltreatment
Explores all facets of child maltreatment. It covers the tenets child protection, major types of child maltreatment, factors contributing to child maltreatment, and the relationship between child maltreatment and child protective services. Moreover, the course examines federal and state laws and the role of the court system for providing intervention and social services in the prevention of child maltreatment.

SOCW 3362 Foster Care and Adoption
Explores foster care and adoptions as integrated components of child welfare services. The course examines the many aspects that are involved in providing foster care services to children and families. In addition, the course focuses on permanency planning for children when family reunification is not possible.

SOCW 3363 Working with Resistant Clients
This course identifies and examines working approaches that are conducive to effective changes or outcomes when working with involuntary or resistant clients.

SOCW 3364 Social Work Values and Ethics
This course is designed to examine social work values in the context of ethical decision making in social work practice. Students will learn to apply principles, techniques, and tools that can be used for ethical assessment and decision making. They will learn to recognize ethical issues in social work practice and will examine how values affect decision making. They will learn to consider competing arguments in resolving ethical dilemmas, as well as the strengths and limitations of their own position in order to reach thoughtfully reasoned conclusions. Special emphasis will be placed on ethical practice in the child welfare arena.

SOCW 3365 Social Work with Diverse Populations
This course is designed to instruct students on the tasks and skills required for effective services to diverse client population. The generalist intervention model will be incorporated into this course.

SOCW 4301 Social Work Practice II
Designed to provide social work students with knowledge of direct practice with families and small groups using the problem-solving approach. Students will have the opportunity to selectively use concepts and techniques from various models (e.g., systems perspective, psychosocial theory, behavior modification, and family-focused work) as frameworks to develop strategies in clinical and cross-cultural intervention. Prerequisites: SOCW 3323.

SOCW 4302 Social Work Practice III
This course provides students with knowledge of direct practice with communities and large organizational systems. Students will have the opportunity to learn how to apply the problem-solving process to bring about social and economic justice. Prerequisites: SOCW 3323.

SOCW 4311 Research for the Social Services
This course introduces students to the scientific method and how it is used by social workers to effect social change, improve the delivery of social services and to evaluate practice. Prerequisites: SOCW 2375 or approved statistics course and admission into BSW prog.

SOCW 4320 Social Work in Health Care
This course focuses on the health care system, clients as consumers of health and health care issues as they relate to social work practice. An examination of health-related settings and the diverse skills, roles, and functions of social workers will be studied within a team intervention approach with emphasis on gender, ethnic, and cultural aspects of health care.

This course will examine the phenomenon of domestic violence. Students will have the opportunity to study family structure in which violence occurs, the range of abuse (from verbal to homicide), and its extent in society and the various attitudes toward it. Understanding of the basic theories, identification of support services, and systems for victims of domestic violence and development of basic communication skills for assisting the victims will be expected of the student. Prerequisites: Junior standing or consent of the instructor.

SOCW 4352 Substance Abuse Counseling in the Community
Patterns of street substance abuse, community education and agency consultation, resource evaluation of such support systems as AA, halfway houses, networking, divergency programs, therapy with the abuser, and family are emphasized as follow-up and outreach social work intervention at the community level. Counseling processes studied will include vocational rehabilitation. Cultural assessment, evaluation of treatment effectiveness, and legal-ethical issues will be examined in the context of social service delivery.

SOCW 4353 Integrative Field Seminar
This course is taken concurrently with SOCW 4619 Field Education. A seminar format facilitates the intern's integration of the field education experience and the program's generalist curriculum. Emphasis is placed on linking classroom learning with practice in the field and integrating theory with professional practice. Field practicum situations and issues are used for discussion and analysis. Prerequisites: Concurrent enrollment with SOCW 4619 or SOCW 4354.

SOCW 4354 Field Education I
This course is the first half of the social work practicum requirement for undergraduate social work students who choose to complete their practicum in two consecutive semesters. The course requires a minimum of 240 hours in the first semester of in-the-field experience in established social agencies or community settings under joint supervision of the agency social worker and a Department of Social Work faculty member. The course is taken concurrently with SOCW 4353 Integrative Seminar. Prerequisites: Completion of all social work core courses and approval by the Office of Field Education.

## SOCW 4355 Field Education II

This course is the second half of the social work practicum requirement for undergraduate social work students who have successfully completed Field Education I and have chosen to complete their practicum in two consecutive semesters. The course requires a minimum of 240 hours in the first semester of in-the-field experience in established social agencies or community settings under joint supervision of the agency social worker and a Department of Social Work faculty member.
Prerequisites: SOCW 4354; Completion of all social work core courses and approval by the Office of Field Education.

SOCW 4370 Mexican American Mental Health
This course examines cultural and systematic barriers which limit access to mental health services by Mexican Americans. Attention also given to the development of strategies for improving service delivery.

SOCW 4399 Independent Studies
Designed to give students experience in research or in-depth theoretical/empirical in a substantive area not normally covered within standard courses. Research projects or advanced readings will vary according to student interest and faculty availability. Prerequisites: Approved by Instructor and Dept. Chair.

SOCW 4619 Field Education Block
[0-0-32]
This course requires a minimum of 480 hours (four days a week for one semester) of in-the-field experiences in established social agencies or community settings under joint supervision of the agency social worker and a Department of Social Work faculty member. SOCW 4619 is taken concurrently with SOCW 4353. Prerequisites: Completion of all social work core courses and approval by the Office of Field Education. Concurrent enrollment with SOCW 4353.

# COLLEGE OF LIBERAL ARTS (CLA) 

# Department of Communication 

Dr. John Cook<br>Chair, Department of Communication<br>Location: Main 1.210A (UTRGV Brownsville Campus)<br>Phone: 956-882-8851<br>Fax: 956-882-6813<br>Email: john.cook@utrgv.edu

## BACHELOR OF ARTS (BA)

## WITH A MAJOR IN COMMUNICATION STUDIES

The Bachelor of Arts in Communication - Communication Studies prepares a student to work in fields as
2. Students will be able to demonstrate effective presentational speaking abilities: selecting and narrowing a topic, formulating a central idea, using appropriate support material and evidence, using appropriate organizational pattern, using language appropriate to the audience, using vocal variety, articulation, pronunciation and grammar, and using nonverbal.
3. Students will be able to demonstrate discipline-appropriate technology applications throughout their program (i.e., presentation software, library databases, search engines, etc.)
4. Students will be able to explain the components of the communication model, and list and explain the significance of two theories from the following list: interpersonal, small group, intercultural, and persuasion.
5. Students will be able to identify different parts of a research article and explain their significance to the scientific process.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

```
        Required
            Integrative and Experiential Learning - 3 hours
                COMM 1311 Introduction to Communication
        Recommended
        Creative Arts - 3 hours
            Choose one:
                THTF }1310\mathrm{ Theatre Appreciation
                THTF }2366\mathrm{ Cinema Appreciation
            B - MAJOR REQUIREMENTS - 48 HOURS (39 advanced)
            1- Communication Core - 24 hours (15 advanced)
            COMM 1315 Public Speaking
            COMM 1318 Interpersonal Communication
            COMM 2333 Small Group Communication
            COMM 3316 Intercultural Communication
            COMM 3331 Interviewing: Theory and Practice
            COMM 3333 Theories of Communication
            COMM 3350 Research in Communication
            COMM 4315 Persuasive Communication
            2 - Advanced Communication Electives - 24 hours (24 advanced)
                    C - FREE ELECTIVES - }12\mathrm{ HOURS (3 advanced)
            Students are recommended to take COMM 4337/4624 Internship and/or COMM }4303
            D - MINOR - 18 HOURS (6 advanced)
            TOTAL CREDIT HOURS FOR GRADUATION - }120\mathrm{ HOURS
            TOTAL ADVANCED HOURS - 48 HOURS
            ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
            Admission requirements
            COMM 1311 in the core with in their first year.
            Progression requirements
            All courses in the major require grade of 'C' or better.
Graduation requirements
In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.
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## BACHELOR OF ARTS (BA) <br> WITH A MAJOR IN <br> COMMUNICATION STUDIES (8-12 TEACHER CERTIFICATION)

The Bachelor of Arts in Communication - Communication Studies prepares a student to work in fields as varied as sales, education, training and development, management, law enforcement, and in administrative roles in information and service industries such as health care organizations. Our graduates also work in public relations, events planning, advertising, and with public and private agencies and organizations as Press Secretaries and Information Officers. The Bachelor of Arts in Communication also prepares the students to pursue graduate programs in Communication, Media Management, Law, Social Work, Education, Health Management, Rehabilitation Counseling, and Public Administration.

## STUDENT LEARNING OUTCOMES:

1. Students will be able to demonstrate interpersonal skills: active listening and perspective taking. Students will be able to ask appropriate questions, paraphrase content and emotions, use nonverbal responsive behaviors, and withhold judgment while listening.
2. Students will be able to demonstrate effective presentational speaking abilities: selecting and

## A - GENERAL EDUCATION CORE - 42 HOURS <br> Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Integrative and Experiential Learning - $\mathbf{3}$ hours
COMM 1311 Introduction to Communication

## Recommended

Creative Arts - 3 hours
Choose one:
THTF 1310 Theatre Appreciation
THTF 2366 Cinema Appreciation
B - MAJOR REQUIREMENTS - 24 HOURS (15 advanced)
COMM 1315 Public Speaking
COMM 1318 Interpersonal Communication

COMM 2333 Small Group Communication
COMM 3316 Intercultural Communication
COMM 3331 Interviewing: Theory and Practice
COMM 3333 Theories of Communication
COMM 3350 Research in Communication
COMM 4315 Persuasive Communication

C - EDUCATION COMPONENT - 46 HOURS ( 34 advanced)
1 - Communication Component - 19 hours (10 advanced)
COMM 1307 Introduction to Mass Communication
COMM 2335 Argumentation and Debate
COMM 3317 Communication for Classroom Teacher
COMM 3335 Advanced Public Speaking
COMM 4103 Practicum: Communication
THTF 3321 Creative Drama
THTF/ENGL 2313 Readings in Dramatic Literature
$\mathbf{2}$ - Teacher Certification - $\mathbf{2 7}$ hours (24 advanced)
Area of Certification: Speech (7-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories, and Student Learning EDUC 3303 Teaching in Today's Diverse Classrooms EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

C - ELECTIVES - 8 HOURS
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 49 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Admission requirements
COMM 1311 in the core within their first year.
Progression requirements
All courses in the major require grade of ' $C$ ' or better. Students unable to be admitted to EDUC 4611 will be required to substitute 6 advanced hours, as recommended by advisor. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours.

Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF ARTS (BA) <br> WITH A MAJOR IN <br> MASS COMMUNICATION

The Bachelor of Arts in Communication - Mass Communication prepares a student to work in fields as varied as print journalism, broadcast journalism, public relations, advertising and agencies and organizations requiring Press Secretaries and Information Officers in private and public sectors. Employment opportunities also exist in Training and Development, and administrative roles in information and service industries as well as law enforcement and health care organizations. The Bachelor of Arts in Communication also prepares the students to pursue graduate programs in Communication, Journalism, and Media Management.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate effective oral communication skills.
2. Students will demonstrate competency in journalistic writing skills.
3. Students will demonstrate competence in using technology appropriate for their area of specialization.
4. Students will demonstrate knowledge of the basics of television production in the studio such as broadcast script writing, audio, video, lighting and control room procedures.
5. Students will demonstrate an understanding of the principles of AP style.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Integrative and Experiential Learning - 3 hours
COMM 1311 Introduction to Communication
Recommended
Creative Arts - 3 hours
Choose one:
THTF 1310 Theatre Appreciation
THTF 2366 Cinema Appreciation

[^9]> COMM 3349 Multi-Media Storytelling
> COMM 3350 Research in Communication COMM 4313 Communication Law and Ethics COMM 4332 Visual Communication
> 2 - Concentrations - 33 hours ( 21 advanced minimum) a - Advertising and Public Relations - 33 hours (21 advanced)
> i - Advertising and Public Relations Core - $\mathbf{1 2}$ hours (12 advanced)
> COMM 3304 Advertising: Theory and Practice
> COMM 3321 Public Relations: Theory and Practice
> COMM 4334 Communication Campaigns
> COMM 4335 Creative and Media Strategies
> ii - Cluster area - 9 hours ( 9 advanced)
> Choose one cluster:
> Public Relations
> COMM 3305 Copy Editing
> COMM 3327 Reporting I
> COMM 4322 Public Relations Writing
> Advertising
> COMM 3348 Copy Writing COMM 3353 Broadcast Advertising Production COMM 4310 Media Planning
> iii - Free Electives - $\mathbf{1 2}$ hours
> Choose 12 hours of other electives. Internship in Mass Communication is recommended.
> b - Print Journalism - 33 hours (24 advanced)
> i - Print Journalism Core - 15 hours (15 advanced)
> COMM 3305 Copy Editing
> COMM 3306 Feature Writing
> COMM 3327 Reporting I
> COMM 3329 Reporting II
> COMM 3326 Photojournalism
> ii - Print Journalism Electives - 9 hours ( 9 advanced)
> Choose 9 hours of advanced Mass Communication.
> iii- Free Electives - 9 hours
> Choose 9 hours of other electives. Internship in Mass Communication is recommended.
> c - Broadcast - 33 hours (21 advanced)
> i - Broadcast Core - $\mathbf{2 4}$ hours ( 21 advanced)
> COMM 2310 Video and Film Editing I
> COMM 3327 Reporting I
> COMM 3339 Broadcast Audio Production
> COMM 3351 Broadcast News Writing
> COMM 3352 Television News Production and Reporting
> COMM 3353 Broadcast Advertising Production
> COMM 4312 Video and Film Editing II

Choose one:
COMM 3338 University Radio/Television
COMM 4314 Advanced Television/Film Production
ii - Free Electives - 9 hours
Choose 9 hours of other electives. Internship in Mass Communication is recommended.

## C - MINOR or FREE ELECTIVES - $\mathbf{1 8}$ HOURS ( 6 advanced minimum)

Broadcast concentration and Advertising and Public Relations concentration will be required to complete 9 advanced hours.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 48 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:<br>Progression requirements

COMM 1311 in the core with in their first year. All courses in the major require grade of ' C ' or better.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017

The Bachelor of Arts in Communication - Mass Communication prepares a student to work in fields as varied as print journalism, broadcast journalism, public relations, advertising and agencies and organizations requiring Press Secretaries and Information Officers in private and public sectors. Employment opportunities also exist in Training and Development, and administrative roles in information and service industries as well as law enforcement and health care organizations. The Bachelor of Arts in Communication also prepares the students to pursue graduate programs in Communication, Journalism, and Media Management.

## STUDENT LEARNING OUTCOMES:

1. Oral Communication: Students will demonstrate the capability to communicate effectively as a professional in oral situations.
2. Writing Skills: Students will demonstrate excellent writing skills.
3. Ethical Standards: Students will understand the legal and ethical standards in Journalism.
4. Photography: Students will demonstrate an understanding of the principles and procedures of photography.
5. AP Style: Students will demonstrate an understanding of the principles of AP style.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Integrative and Experiential Learning - 3 hours
COMM 1311 Introduction to Communication
Recommended
Creative Arts - 3 hours
Choose one:
THTF 1310 Theatre Appreciation THTF 2366 Cinema Appreciation

B - MAJOR REQUIREMENTS - 39 HOURS ( 33 advanced)
1 - Mass Communication Core Courses - 24 hours (18 advanced)
COMM 1307 Introduction to Mass Communication
COMM 1336 Television Production
COMM 3303 Writing for Mass Media
COMM 3333 Theories of Communication COMM 3349 Multi-Media Storytelling COMM 3350 Research in Communication COMM 4313 Communication Law and Ethics COMM 4332 Visual Communication
2 - Teacher Certification Concentration - 15 hours (15 advanced)
COMM 3304 Advertising: Theory and Practice
COMM 3305 Copy Editing
COMM 3306 Feature Writing
COMM 3326 Photojournalism
COMM 3327 Reporting I
C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)
Area of Certification: Journalism (7-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories, and Student Learning
EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level
D - MINOR or FREE ELECTIVES - $\mathbf{1 2}$ HOURS
Students may elect to complete a minor or 12 hours in an outside area.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS <br> TOTAL ADVANCED HOURS - 57 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

COMM 1311 in the core with in the first year.
Progression requirements
All courses in the major require ' $C$ ' or better. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students. Students unable to be admitted to EDUC 4611 will be required to substitute 6 advanced hours, as recommended by advisor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)
A minor in Communication Studies (non-certification) requires a total of 18 hours of Communication Studies, of which 9 hours must be advanced. All courses must be completed with a course grade of ' $C$ ' or better. Students should consult with a departmental advisor for guidance with course selection for a minor that develops a concentration from the fields of Communication Studies and Mass Communications.

MINOR IN
COMMUNICATION

## MINOR IN <br> COMMUNICATION STUDIES

A - MINOR REQUIREMENTS - $\mathbf{1 8}$ HOURS ( 6 advanced minimum)
Students should consult with a departmental adviser for guidance with course selection for a minor that develops a concentration in an area of Communication Studies. Internship hours and practicum hours cannot be counted toward the minor. All courses must be completed with a grade of ' $C$ ' or better.

# 1 - Communication Studies Core - 6 hours ( 3 advanced) <br> COMM 3316 Intercultural Communication Choose one: <br> COMM 1311 Introduction to Communication COMM 1315 Public Speaking <br> 2 - Communication Studies Electives - $\mathbf{1 2}$ hours ( $\mathbf{3}$ advanced minimum) Choose 12 hours of Communication Studies, of which 3 hours must be advanced. 

## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)

Applicants must complete 18 hours of Mass Communication, of which 9 hours must be advanced. All courses must be completed with a grade of 'C' or better. Students should consult with a departmental adviser for guidance with course selection for a minor that develops a concentration in an area of Mass Communication.

# Department of Criminal Justice 

Dr. Steve Wilson<br>Chair, Department of Criminal Justice<br>Location: SETB*MO (UTRGV Brownsville Campus)<br>Phone: 956-882-7110<br>Email: steve.wilson@utrgv.edu

## BACHELOR OF SCIENCE IN CRIMINAL JUSTICE (BSCJ) <br> WITH A MAJOR IN CRIMINOLOGY AND CRIMINAL JUSTICE

The Bachelor of Science in Criminology and Criminal Justice Online is designed for students who have already completed their General Education Core or an Associate of Arts or Associate of Science Degree. The online degree is designed to help professionals in the field complete their education and advance their career as well as for any student interested in a career in criminal justice (e.g., law enforcement, parole, probation, or corrections). Courses are designed to cover the workings of the justice system and to help students develop skills to enhance their career success, like critical thinking skills, communication skills, and problem solving skills. The degree also helps prepare students interested in pursuing a graduate degree by providing an academic foundation in criminological theory and research methods.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate knowledge of the structure, operations, and practices of the major components of the criminal justice system which include police, courts, corrections, and laws.
2. Explain the fundamentals of research methods used in criminal justice research.
3. Apply critical thinking, creativity, problem solving, and written communication skills through online assignments.
4. Demonstrate knowledge of criminological theory and crime control techniques.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Social and Behavioral Sciences - $\mathbf{3}$ hours
PSYC 2301 General Psychology
B - MAJOR REQUIREMENTS - 70 HOURS ( 67 advanced)
Courses offered online through The University of Texas Rio Grande Valley (CRIJ Prefix), The University of Texas-Arlington (CRCJ Prefix), and The University of Texas-Permian Basin (CCJO Prefix).

1 - Criminal Justice Core - $\mathbf{6 1}$ hours (58 advanced)
Choose one:
CRCJ 2334 Introduction to Criminal Justice
CRIJ 1301 Introduction to the Criminal Justice System
CCJO 3312 Criminal Justice Administration
CRIJ 3315 Forensic Investigation I
CRIJ 3331 Legal Aspects of Corrections
CCJO 3332 Juvenile Delinquency and Justice
CRCJ 3350 Research Methods in Criminology
CRCJ 3380 Race, Crime, and Justice
CRCJ 4301 The American Judicial Systems
CRIJ 4312 Principles of Law Enforcements and Supervision
CRIJ 4313 Seminar: Issues in Law Enforcement
CRCJ 4315 Criminal Careers and Behavior Systems
CCJO 4316 Theories of Criminal Behavior
CRCJ 4333 Institutional Corrections
CRIJ 4341 Correctional Casework and Counseling
CCJO 4354 Ethics in Criminal Justice
CCJO 4356 Probation and Parole
CCJO 4364 Police and the Community
CRIJ 4370 Senior Seminar: Policy Issues
CRCJ 4380 Comparative Criminal Justice Systems
PSYC 3405 Behavior Modification
2 - Advanced Criminal Justice Electives - 9 hours (9 advanced)
Choose 9 hours of approved Criminal Justice courses.

## C - FREE ELECTIVES - 8 HOURS

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 67 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

## Admission requirements

For admission, students must have completed the General Education Core (42 hours) and Texas Success Initiative (TSI) or other test approved by the State of Texas.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF SCIENCE IN CRIMINAL JUSTICE (BSCJ) <br> WITH A MAJOR IN CRIMINAL JUSTICE 

A Bachelor of Science degree in Criminal Justice prepares students interested in criminal justice careers like law enforcement, parole and probation, corrections, and youth services. While students will learn about the inner workings of the justice system, our courses are also designed to develop skills that will make their careers more successful, like critical thinking skills, good communication skills, problem solving skills, and an ability to grow and learn after college. Finally, the degree prepares students interested in pursuing a graduate degree by providing a strong academic foundation in criminological theory, research methods, and statistics.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate knowledge of the structure, operations, and practices of the major components of the criminal justice system which include police, courts, corrections, and laws.
2. Explain the fundamentals of research methods and statistical techniques used in criminal justice research.
3. Apply critical thinking, creativity, problem solving, and communication skills through classroom assignments.
4. Demonstrate knowledge of criminological theory and crime control techniques.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Recommended

Mathematics - $\mathbf{3}$ hours
Any available course, except MATH 1332.

B - MAJOR REQUIREMENTS - 51 HOURS ( 33 advanced minimum)
1 - Criminal Justice Core - $\mathbf{3 0}$ hours (18 advanced)
CRIJ 1301 Introduction to the Criminal Justice System
CRIJ 1306 Courts Systems and Practices
CRIJ 2313 Correctional Systems and Practices
CRIJ 2328 Police Systems and Practices
CRIJ 3303 Criminology/Nature of Crime
CRIJ 3304 Criminal Justice Research Methods
CRIJ 3305 Statistical Applications in Criminal Justice
CRIJ 3310 The Constitution and Criminal Law
Choose one:
CRIJ 4399 Criminal Justice System Capstone CRIJ 4364 Field Internship
SOCI 4331 Social Theory for Non-Majors
2 - Criminal Justice Electives - 21 hours (15 advanced minimum)
Choose from:
CRIJ 1307 Crime in America
CRIJ 1313 Juvenile Justice System
CRIJ 3316 Criminal Evidence and Proof
CRIJ 3322 Juvenile Delinquency and Justice
CRIJ 3325 Violent Crime and Offenders
CRIJ 3331 Legal Aspects of Corrections
CRIJ 3341 Probation and Parole
CRIJ 3344 Gender, Crime, and Criminal Justice
CRIJ 4320 Criminal Justice Organization and Management
CRIJ 4312 Principles of Law Enforcements and Supervision
CRIJ 4313 Seminar: Issues in Law Enforcement
CRIJ 4314 Private Security and Loss Prevention
CRIJ 4316 Environmental Crime and Justice
CRIJ 4321 White-Collar and Organized Crime
CRIJ 4335 Restorative and Community Justice
CRIJ 4341 Correctional Casework and Counseling
CRIJ 4343 Current Issues in Corrections
CRIJ 4350 Peace, Nonviolence, and Justice
CRIJ 4355 Current Issues in Courts
CRIJ 4356 Law and Society
CRIJ 4357 Crime Prevention Techniques
CRIJ 4322 Terrorism
CRIJ 4361 Comparative Criminal Justice Systems
CRIJ 4362 Special Topics in Criminal Justice
CRIJ 4365 Independent Studies in Criminal Justice
CRIJ 4370 Senior Seminar: Policy Issues

## C - MINOR - 18 HOURS ( 6 advanced)

D - FREE ELECTIVES - 9 HOURS
Advanced hours will vary to meet 51 advanced hour requirement.
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 51 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN <br> CRIMINAL JUSTICE

## A - MINOR REQUIREMENTS - 18 HOURS ( 9 advanced)

1 - Criminal Justice Core - 9 hours
CRIJ 1301 Introduction to the Criminal Justice System CRIJ 2328 Police Systems and Practices CRIJ 2313 Corrections Systems and Practices
2 - Advanced Criminal Justice Electives - 9 hours (9 advanced)
Choose 9 hours of advanced Criminal Justice electives.
Department of History

Dr. Thomas Britten<br>Chair, Department of History<br>Location: SETB*MO (UTRGV Brownsville Campus)<br>Phone: 956-882-7379<br>Email: thomas.britten@utrgv.edu

BACHELOR OF ARTS (BA)
WITH A MAJOR IN HISTORY

As an integral part of a liberal arts education, history courses introduce students to different historical eras, diverse cultures, famous and ordinary women and men, and a variety of geographical settings. Our courses challenge students to think critically, express themselves clearly, and become informed and responsible citizens in an increasingly interconnected world. Students majoring or minoring in history may become teachers or seek employment in business or government. History is an excellent background for those who wish later to go to law school or enter journalism.

## STUDENT LEARNING OUTCOMES:

1. Students demonstrate critical historical thinking.
2. Students demonstrate competency in applying historical skills.
3. Students communicate historical information effectively in both oral and written expression.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements.

## B - MAJOR REQUIREMENTS - 42 HOURS (36 advanced)

1 - History Core - 12 hours (6 advanced)
HIST 2321 World History I
HIST 2322 World History II HIST 3300 Historiography and Methods HIST 4399 Senior Research Seminar
2 - History Electives - $\mathbf{3 0}$ hours ( $\mathbf{3 0}$ advanced) a - United States History - 6 hours (6 advanced)

Choose from:
HIST 3320 Colonial America to 1763
HIST 3321 The United States, Revolution, and the New Nation, 1763-1814
HIST 3322 Rise of the American Nation, 1814-1848
HIST 3323 Era of Sectional Conflict, 1848-1877
HIST 3324 The Emergence of Modern American, 1877-1929
HIST 3325 Twentieth Century America
HIST 3326 Indians of North America
HIST 3327 The American Military Experience
HIST 3328 History of the American Presidency
HIST 3329 American Legal History
HIST 3330 The U.S. as a World Power
HIST 3331 History of American Religious Traditions
HIST 3332 Mexican-American History
HIST 3333 Texas History
HIST 3334 History of the American West
HIST 3335 American Environmental History
HIST 4320 Atlantic America
HIST 4321 The Spanish Southwest to 1821
HIST 4322 The American Southwest after 1821
HIST 4323 History of the Old South
HIST 4324 History of the New South since 1877
HIST 4325 The United States: War, Prosperity, and Depression, 1917-1945
HIST 4326 The United States since 1945
HIST 4327 History of American Family and Childhood
HIST 4328 Gender in the American West
HIST 4329 Black History and Thought
HIST 4330 Race and Ethnicity in America
HIST 4331 Mexican-American Civil Rights
HIST 4332 Chicano Movement
HIST 4392 Special Topics in US History

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b - Europe, Latin America, World, or Asian/Middle Eastern History - }6\mathrm{ hours (6
advanced)
    Complete 3 hours each from two of the following areas:
        i - European History
        Choose from:
            HIST 3340 Medieval Europe
            HIST 3341 Early Modern Europe
            HIST 3342 Revolutionary Europe, 1789-1850
            HIST }3343\mathrm{ Europe's Age of Imperialism, 1850-1919
            HIST }3344\mathrm{ Contemporary Europe, }1919\mathrm{ to the Present
            HIST 3345 History of England to 1686
            HIST 3346 History of England after }168
            HIST 3347 History of Spain
            HIST 4340 Ancient Greek History
            HIST 4341 Ancient Roman History
            HIST 4342 The Renaissance and Reformation, 1300-1650
            HIST 4343 Russia since 1905
            HIST 4344 Absolutism and Enlightenment in Europe, 1650-1789
            HIST 4391 Special Topics in European History
ii - Latin American History
        Choose from:
            HIST 3360 Pre-Conquest Mexico and Central America
            HIST 3361 Colonial Latin America
            HIST 3363 Mexico from Pre-Conquest to the Present
            HIST 3364 Mexico through Independence
            HIST 3365 Mexico since Independence
            HIST 3366 Latin American Women in the Modern Era
            HIST 3367 Women in Colonial Latin America
            HIST 4360 Mexico's First Century as an Independent Republic
            HIST 4361 Contemporary Mexico
            HIST 4362 History of Mexican Culture
            HIST 4363 History of Mexican Cinema
            HIST 4364 Brazil after Independence
            HIST 4365 Spanish South America since Independence
            HIST }4366\mathrm{ The Caribbean and Central America
            HIST }4393\mathrm{ Special Topics in Latin American History
iii - World History
        Choose from:
            HIST 3301 World History Studies
            HIST }3302\mathrm{ Geography and Environment in History
            HIST 3303 Classical and Post-Classical World, 500 BCE to }145
            HIST 3304 First Globalization, 1450-1750
            HIST 3305 The Modern World, 1750-present
            HIST 3306 Great Discoveries in Archaeology and History
            HIST 3307 Women in History
            HIST 4300 The Atlantic World
            HIST 4301 Maritime Archaeology and History
            HIST 4302 Comparative Colonialism
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> HIST 4303 Public Health in the Americas HIST 4304 U.S.-Latin American Relations HIST 4305 History of World Wars I and II HIST 4306 History of the Cold War HIST 4390 Special Topics in World History
> iv - Asian/Middle Eastern History
> Choose from:
> HIST 3370 Early Middle East History
> HIST 3371 Modern Middle Eastern History HIST 3372 Introduction to East Asian History I HIST 3373 Introduction to East Asian History II HIST 3374 History of the Ottoman Empire HIST 3375 History of Modern Japan
> HIST 3376 History of Modern China HIST 4394 Special Topics in Asian and Middle Eastern History
> c - History Electives - $\mathbf{1 8}$ hours (18 advanced)
> Choose 18 hours of advanced History.

C - MINOR or MULTIDISCIPLINARY SUPPORT FIELD - 36 HOURS (18 advanced minimum)
Students may complete either a minor or a Multidisciplinary Support Field:
1 - Minor Track - 36 hours (18 advanced)
a - Minor - 18 hours (6 advanced)
b - Free Electives - 18 hours (12 advanced)
2 - Multidisciplinary Support Field Track - 36 hours ( 30 advanced)
a - Multidisciplinary Support Field - 24 hours (18 advanced)
The Multidisciplinary Support Field will contain 6 hours modern languages, 6 advanced hours in Liberal Arts, 6 advanced hours in Fine Arts, and 6 advanced hours in History or another related field.
b - Free Electives - 12 hours (12 advanced)
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS (MINIMUM) - 54 HOURS
ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Progression requirements
Majors must earn a grade of 'C' or better in HIST 3300 before taking advanced courses, or may progress at the discretion of the instructor.

# BACHELOR OF ARTS (BA) <br> WITH A MAJOR IN <br> HISTORY <br> (7-12 TEACHER CERTIFICATION) 

As an integral part of a liberal arts education, history courses introduce students to different historical eras, diverse cultures, famous and ordinary women and men, and a variety of geographical settings. Our courses challenge students to think critically, express themselves clearly, and become informed and responsible citizens in an increasingly interconnected world. Students majoring or minoring in history may become teachers or seek employment in business or government. History is an excellent background for those who wish later to go to law school or enter journalism.

## STUDENT LEARNING OUTCOMES:

1. Students demonstrate critical historical thinking.
2. Students demonstrate competency in applying historical skills.
3. Students communicate historical information effectively in both oral and written expression.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements.
B - MAJOR REQUIREMENTS - 45 HOURS (39 advanced)
1 - History Core - 15 hours (9 advanced)
HIST 2321 World History I
HIST 2322 World History II
HIST 3300 Historiography and Methods
HIST 3333 Texas History
HIST 4399 Senior Research Seminar
2 - History Electives - 30 hours (30 advanced)
a - United States History - 6 hours ( 6 advanced)
Choose from:
HIST 3320 Colonial America to 1763
HIST 3321 The United States, Revolution and the New Nation, 1763-1814
HIST 3322 Rise of the American Nation, 1814-1848
HIST 3323 Era of Sectional Conflict, 1848-1877
HIST 3324 The Emergence of Modern America, 1877-1929
HIST 3325 Twentieth Century America
HIST 3326 Indians of North America
HIST 3327 American Military Experience
HIST 3328 History of the American Presidency
HIST 3329 American Legal History
HIST 3330 The U.S. as a World Power
HIST 3331 History of American Religious Traditions
HIST 3332 Mexican-American History
HIST 3334 History of the American West
HIST 3335 American Environmental History
HIST 4320 The Atlantic America HIST 4321 The Spanish Southwest to 1821
HIST 4322 The American Southwest after 1821
HIST 4323 History of the Old South
HIST 4324 History of the New South since 1877
HIST 4325 The United States: War, Prosperity, and Depression, 1917-1945 HIST 4326 The United States since 1945
HIST 4327 History of American Family and Childhood HIST 4328 Gender in the American West HIST 4329 Black History and Thought HIST 4330 Race and Ethnicity in America HIST 4331 Mexican-American Civil Rights HIST 4332 Chicano Movement
b - Europe, Latin America, World, or Asian/Middle Eastern History - 6 hours (6 advanced)
Choose two from the following areas:

## European History

Choose only one:
HIST 3340 Medieval Europe
HIST 3341 Early Modern Europe
HIST 3342 Revolutionary Europe, 1789-1850
HIST 3343 Europe's Age of Imperialism, 1850-1919
HIST 3344 Contemporary Europe, 1919 to the Present
HIST 3345 History of England to 1686
HIST 3346 History of England after 1686
HIST 3347 History of Spain
HIST 4340 Ancient Greek History
HIST 4341 Ancient Roman History
HIST 4342 The Renaissance and Reformation, 1300-1650
HIST 4343 Russia since 1905
HIST 4344 Absolutism and Enlightenment in Europe, 1650-1789
Latin American History
Choose only one:
HIST 3360 Pre-Conquest Mexico and Central America
HIST 3361 Colonial Latin America
HIST 3362 Modern Latin America
HIST 3363 Mexico from Pre-Conquest to the Present
HIST 3364 Mexico through Independence
HIST 3365 Mexico Since Independence
HIST 3366 Latin American Women in the Modern Era
HIST 3367 Women in Colonial Latin America
HIST 4360 Mexico's First Century as an Independent Republic
HIST 4361 Contemporary Mexico
HIST 4362 History of Mexican Culture
HIST 4363 History of Mexican Cinema
HIST 4364 Brazil after Independence
HIST 4365 Spanish South America since Independence HIST 4366 The Caribbean and Central America

[^10]D - FREE ELECTIVES - 6 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

Majors must earn a ' C ' or better in HIST 3300 before taking advanced courses, or may progress at the discretion of the instructor. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR2301 which is open to all students. Students unable to be admitted to EDUC 4611 will be required to substitute 6 advanced hours, as recommended by advisor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF ARTS (BA)

WITH A MAJOR IN SOCIAL STUDIES COMPOSITE

As an integral part of a liberal arts education, history courses introduce students to different historical eras, diverse cultures, famous and ordinary women and men, and a variety of geographical settings. Our courses challenge students to think critically, express themselves clearly, and become informed and responsible citizens in an increasingly interconnected world. Students majoring or minoring in history may become teachers or seek employment in business or government. History is an excellent background for those who wish later to go to law school or enter journalism.

## STUDENT LEARNING OUTCOMES:

1. Students demonstrate critical historical thinking.
2. Students demonstrate competency in applying historical skills.
3. Students communicate historical information effectively in both oral and written expression.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Social and Behavioral Sciences - 3 hours
ECON 2301 Principles of Macroeconomics

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B - MAJOR REQUIREMENTS - 60 HOURS (51 advanced)
1 - Social Studies Composite Core - 18 hours (9 advanced)
ECON 2302 Principles of Microeconomics
HIST 2321 World History I
HIST 2322 World History II
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                                    HIST 3300 Historiography and Methodology
                                    HIST 3302 Geography and Environment in History
                                    HIST 4399 Senior Research Seminar
                                    2 - Social Studies Composite Electives - 42 hours (42 advanced)
                                    a - United States History - }12\mathrm{ hours (12 advanced)
            Choose from:
                    HIST 3320 Colonial America to 1763
                    HIST 3321 The United States, Revolution and the New Nation, 1763-1814
                    HIST 3322 Rise of the American Nation, 1814-1848
                    HIST 3323 Era of Sectional Conflict, 1848-1877
                    HIST 3324 The Emergence of Modern American, 1877-1929
                    HIST 3325 Twentieth Century America
                    HIST 3326 Indians of North America
                    HIST 3327 The American Military Experience
                    HIST 3328 History of the American President
                    HIST 3329 American Legal History
                    HIST 3330 The U.S. as a World Power
                    HIST 3331 History of American Religious Traditions
                    HIST 3332 Mexican-American History
                    HIST 3333 Texas History
                    HIST 3334 History of the American West
                            HIST 3335 American Environmental History
            HIST 4320 Atlantic America
            HIST }4321\mathrm{ The Spanish Southwest to }182
            HIST 4322 The American Southwest after 1821
            HIST 4323 History of the Old South
            HIST 4324 History of the New South Since }187
            HIST 4325 The United States: War, Prosperity and Depression, 1917-1945
            HIST }4326\mathrm{ The United States since 1945
            HIST 4327 History of American Family and Childhood
            HIST 4328 Gender in the American West
            HIST 4329 Black History and Thought
            HIST 4330 Race and Ethnicity in America
            HIST 4331 Mexican-American Civil Rights
            HIST 4332 Chicano Movement
            HIST 4392 Special Topics in US History
b - European History - }6\mathrm{ hours (6 advanced)
    Choose from:
            HIST 3340 Medieval Europe
            HIST 3341 Early Modern Europe
            HIST 3342 Revolutionary Europe, 1789-1850
            HIST }3343\mathrm{ Europe's Age of Imperialism, 1850-1919
            HIST 3344 Contemporary Europe, }1919\mathrm{ to the Present
            HIST 3345 History of England to 1686
            HIST 3346 History of England after 1686
            HIST 3347 History of Spain
            HIST 4340 Ancient Greek History
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HIST 4341 Ancient Roman History
HIST 4342 The Renaissance and Reformation, 1300-1650
HIST 4343 Russia Since 1905
HIST 4344 Absolutism and Enlightenment in Europe, 1650-1789
HIST 4391 Special Topics in European History
c - Latin American History - 3 hours ( $\mathbf{3}$ advanced)
Choose from:
HIST 3360 Pre-Conquest Mexico and Central America
HIST 3361 Colonial Latin America
HIST 3362 Modern Latin America
HIST 3363 Mexico from Pre-Conquest to the Present
HIST 3364 Mexico through Independence
HIST 3365 Mexico since Independence
HIST 3366 Latin American Women in the Modern Era
HIST 3367 Women in Colonial Latin America
HIST 4360 Mexico's First Century as an Independent Republic
HIST 4361 Contemporary Mexico
HIST 4362 History of Mexican Culture
HIST 4363 History of Mexican Cinema
HIST 4364 Brazil After Independence
HIST 4365 Spanish South America Since Independence
HIST 4366 The Caribbean and Central America
HIST 4393 Special Topics in Latin American History
d - World History - 3 hours (3 advanced)
Choose from:
HIST 3301 World History Studies
HIST 3303 Classical and Post-Classical World 500 BCE to 1450
HIST 3304 First Globalization 1450-1750
HIST 3305 The Modern World 1750 - Present
HIST 3306 Great Discoveries in Archaeology
HIST 3307 Women in History
HIST 3370 Early Middle East History
HIST 3371 Modern Middle Eastern History
HIST 3372 Introduction to East Asian History I
HIST 3373 Introduction to East Asian History II
HIST 3374 History of the Ottoman Empire
HIST 3375 History of Modern Japan
HIST 3376 History of Modern China
HIST 4300 Atlantic World
HIST 4301 Maritime Archaeology and History
HIST 4302 Comparative Colonialism
HIST 4303 Public Health in the Americas
HIST 4304 U.S. - Latin American Relations
HIST 4305 History of World War I and II
HIST 4306 History of the Cold War
HIST 4390 Special Topics in World History
e - Restricted Electives - $\mathbf{1 8}$ hours (18 advanced)
Choose 6 hours of advanced History, 6 hours of advanced Political Science, and 6 hours of advanced Economics.

## C - FREE ELECTIVES - 18 HOURS (12 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

 TOTAL ADVANCED HOURS - 63 HOURS
## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Majors must earn a grade of 'C' or better in HIST 3300 before taking advanced HIST classes, or may progress at the discretion of the instructor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF ARTS (BA)

## WITH A MAJOR IN

 SOCIAL STUDIES COMPOSITE (7-12 TEACHER CERTIFICATION)As an integral part of a liberal arts education, history courses introduce students to different historical eras, diverse cultures, famous and ordinary women and men, and a variety of geographical settings. Our courses challenge students to think critically, express themselves clearly, and become informed and responsible citizens in an increasingly interconnected world. Students majoring or minoring in history may become teachers or seek employment in business or government. History is an excellent background for those who wish later to go to law school or enter journalism.

## STUDENT LEARNING OUTCOMES:

1. Students demonstrate critical historical thinking.
2. Students demonstrate competency in applying historical skills.
3. Students communicate historical information effectively in both oral and written expression.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

## Social and Behavioral Sciences - $\mathbf{3}$ hours

ECON 2301 Principles of Macroeconomics

## B - MAJOR REQUIREMENTS - 57 HOURS (45 advanced)

1 - Social Studies Composite Core - 21 hours (12 advanced)
ECON 2302 Principles of Microeconomics
HIST 2321 World History I
HIST 2322 World History II
HIST 3300 Historiography and Methodology
HIST 3302 Geography and Environment in History HIST 3333 Texas History HIST 4399 Senior Research Seminar
2 - Social Studies Composite Electives - 36 hours (33 advanced) a - United States History - 12 hours (12 advanced)

Choose from:
HIST 3320 Colonial America to 1763
HIST 3321 The United States, Revolution and the New Nation, 1763-1814
HIST 3322 Rise of the American Nation, 1814-1848
HIST 3323 Era of Sectional Conflict, 1848-1877
HIST 3324 The Emergence of Modern America, 1877-1929
HIST 3325 Twentieth Century America
HIST 3326 Indians of North America
HIST 3327 The American Military Experience HIST 3328 History of the American President HIST 3329 American Legal History HIST 3330 The U.S. as a World Power HIST 3331 History of American Religious Traditions HIST 3332 Mexican-American History HIST 3334 History of the American West HIST 3335 American Environmental History HIST 4320 Atlantic America HIST 4321 The Spanish Southwest to 1821
HIST 4322 The American Southwest after 1821
HIST 4323 History of the Old South
HIST 4324 History of the New South Since 1877
HIST 4325 The United States: War, Prosperity, and Depression, 1917-1945
HIST 4326 The United States since 1945
HIST 4327 History of American Family and Childhood
HIST 4328 Gender in the American West
HIST 4329 Black History and Thought
HIST 4330 Race and Ethnicity in America
HIST 4331 Mexican-American Civil Rights
HIST 4332 Chicano Movement
HIST 4392 Special Topics in US History
b - European History - 6 hours (6 advanced)
Choose from:
HIST 3340 Medieval Europe
HIST 3341 Early Modern Europe
HIST 3342 Revolutionary Europe, 1789-1850

HIST 3343 Europe's Age of Imperialism, 1850-1919
HIST 3344 Contemporary Europe, 1919 to the Present
HIST 3345 History of England to 1686
HIST 3346 History of England after 1686
HIST 3347 History of Spain
HIST 4340 Ancient Greek History
HIST 4341 Ancient Roman History
HIST 4342 The Renaissance and Reformation, 1300-1650
HIST 4343 Russia Since 1905
HIST 4344 Absolutism and Enlightenment in Europe, 1650-1789
HIST 4391 Special Topics in European History
c - Latin American History - $\mathbf{3}$ hours ( $\mathbf{3}$ advanced)
Choose from:
HIST 3360 Pre-Conquest Mexico and Central America
HIST 3361 Colonial Latin America
HIST 3362 Modern Latin America
HIST 3363 Mexico from Pre-Conquest to the Present
HIST 3364 Mexico through Independence
HIST 3365 Mexico since Independence
HIST 3366 Latin American Women in the Modern Era HIST 3367 Women in Colonial Latin America HIST 4360 Mexico's First Century as an Independent Republic HIST 4361 Contemporary Mexico HIST 4362 History of Mexican Culture HIST 4363 History of Mexican Cinema HIST 4364 Brazil after Independence HIST 4365 Spanish South America since Independence HIST 4366 The Caribbean and Central America HIST 4393 Special Topics in Latin American History
d - World History - $\mathbf{3}$ hours ( $\mathbf{3}$ advanced)
Choose from:
HIST 3301 World History Studies
HIST 3303 Classical and Post-Classical World 500 BCE to 1450
HIST 3304 First Globalization 1450-1750
HIST 3305 The Modern World 1750 - Present
HIST 3306 Great Discoveries in Archaeology
HIST 3307 Women in History
HIST 4300 Atlantic World
HIST 4301 Maritime Archaeology and History
HIST 4302 Comparative Colonialism
HIST 4303 Public Health in the Americas
HIST 4304 U.S. - Latin American Relations
HIST 4305 History of World Wars I and II
HIST 4306 History of the Cold War
HIST 3370 Early Middle East History
HIST 3371 Modern Middle Eastern History HIST 3372 Introduction to East Asian History I HIST 3373 Introduction to East Asian History II

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    HIST 3374 History of the Ottoman Empire
    HIST 3375 History of Modern Japan
    HIST 3376 History of Modern China
    HIST }4390\mathrm{ Special Topics in World History
e - Social Studies Composite Electives - 12 hours (9 advanced)
    i-Geography Component - 3 hours
        GEOG 1303 World Regional Geography
    ii - History Component - 3 hours (3 advanced)
        Choose 3 hours of advanced History.
    iii - Political Science Component - 6 hours (6 advanced)
        Choose from:
        POLS 3311 Contemporary Texas Politics
        POLS }3312\mathrm{ U.S. Political Parties
        POLS 3330 International Politics
        POLS 3355 U.S. Public Policy
        POLS 4310 U.S. Judicial Process
        POLS }4311\mathrm{ U.S. U.S. Constitutional Law: Federalism
        POLS 4312 U.S. U.S. Constitutional Law: Civil Liberties
        POLS 4313 U.S. Legislative Process
        POLS 4314 U.S. Executive Process
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    C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)
    Area of Certification: Social Studies (7-12)
        EDFR 2301 Intercultural Context of Schooling
    EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
    EDUC 3302 Human Development, Learning Theories, and Student Learning
    EDUC 3303 Teaching in Today's Diverse Classrooms
    EDUC 3304 Instructional Planning, Classroom Management and Assessment to Promote Student Learning
    EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
    READ 4305 Content Area Literacy
    EDUC 4611 Student Teaching Secondary or All-Level
    TOTAL CREDIT HOURS FOR GRADUATION - 126 HOURS
TOTAL ADVANCED HOURS - 69 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Social Studies Composite Majors must earn a 'C' or better in HIST 3300 before taking advanced HIST classes, or may progress at the discretion of the instructor. For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved
through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN HISTORY

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)

1 - History Core - 9 hours
HIST 1301 US History I (or HIST 1387 US History I Honors) HIST 1302 US History II (or HIST 1388 US History II Honors) Choose one:

HIST 2321 World History I
HIST 2322 World History II
2 - History Electives - 9 hours (6 advanced)
Choose 9 hours of History, of which 6 must be advanced.

# School of Interdisciplinary Programs and Community Engagement 

Dr. William Donner

Associate Professor, Center for Survey Research and Disaster Studies Location: SBSC 104 (UTRGV Edinburg Campus)

Phone: 956-665-3047
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Dr. Clyde Barrown
Professor, Center for Survey Research and Disaster Studies Location: SBSC 338 (UTRGV Edinburg Campus)

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Ms. Ruby De La Garza
Director, USDA Hispanic-Serving Institutions Program Location: SBSC 317 (UTRGV Edinburg Campus)

Phone: 956-665-7436

Dr. Russell Skowronek
Professor, Community Historical Archaeology Project with Schools (CHAPS) Location: SBSC 317 (UTRGV Edinburg Campus)

Phone: 956-665-3231
Email: russell.skowronek@utrgv.edu

Dr. Roseann Bacha-Garza<br>Program Manager, Community Historical Archaeology Project with Schools (CHAPS) Location: SBSC 317 (UTRGV Edinburg Campus)

# Applied Arts and Sciences 

Ms. Letty Hernandez<br>Advisor II, Applied Arts and Sciences Location: SOUH 115 (UTRGV Edinburg Campus)<br>Phone: 956-665-7120<br>Email: leticia.hernandez@utrgv.edu

## BACHELOR OF APPLIED ARTS AND SCIENCES (BAAS) <br> WITH A MAJOR IN APPLIED ARTS AND SCIENCES

The Bachelor of Applied Arts and Sciences degree offers students with and Associate of Applied Science Degree an opportunity to achieve a Bachelor's degree. With highly in-demand and customizable specializations, the career opportunities are limitless.

## STUDENT LEARNING OUTCOMES:

1. Evaluate evidence and identify appropriate conclusions.
2. Explain how new information can change a problem.
3. Integrate information to solve problems.
4. Write essays that are well-structured, well-developed, and well-edited, with correct punctuation, grammar, and paragraph/sentence structure.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements.

## B - AAS DEGREE OR EQUIVALENT - 36 HOURS

AAS degree or equivalent is required. Student wishing Prior Learning Assessment credit may contact CAEL or other agencies that provide credit for prior learning assessment. (No EXPL)

Degree Major: $\qquad$
Date:
Institution:

## C - MAJOR REQUIREMENTS - 42 HOURS

Choose two advanced specializations, available within advisement. All prerequisites for advanced coursework must be met.

1 - Specialization I-18-21 hours
2 - Specialization II-18-21 hours
3 - Free Electives - 0-6 hours

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

AAS degree or equivalent is required. Allied Health program specialization required admission approval.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# Mexican American Studies 

Dr. Marci R. McMahon<br>Associate Professor, Mexican American Studies<br>Location: EDUC 2.216B (UTRGV Edinburg Campus)<br>Phone: 956-665-3212 or 956-665-3770<br>Email: marci.mcmahon@utrgv.edu

## BACHELOR OF ARTS (BA)

WITH A MAJOR IN
MEXICAN AMERICAN STUDIES

The mission of the UTRGV Mexican American Studies (MASC) program is to prepare students to critically investigate community knowledge and socio-political, economic, cultural, and artistic conditions of and contributions by Mexican Americans, Chicana/os and Latina/os to the history, culture, and institutions of the United States and broader Americas. The Mexican American Studies program offers a Bachelors of Arts in Mexican American Studies, a Minor in Mexican American Studies, a Master of Arts in Interdisciplinary Studies in Mexican American Studies, and a Graduate Certificate.

The goal of the BA in MASC is to recognize, validate, and engage students, faculty, and Mexican American, Chicana/o and Latina/o communities as agents of conocimiento and knowledge. Our placebased pedagogies and transdisciplinary methods provide a holistic approach to the study of complex and dynamic Mexican American experiences. We prepare students to critically investigate community
knowledge and socio-political, economic, cultural, and artistic conditions of and contributions by Mexican Americans, Chicana/os and Latina/os.

Students develop the skills to engage in self-discovery and to communicate their conocimientos to produce salient applied research to effect positive social change in their comunidades. Our position en la frontera requires and enables MASC to have a simultaneous local and hemispheric concentration. This unique transcultural context shapes academic and public conversations regionally, nationally, and globally.

## STUDENT LEARNING OUTCOMES:

1. Students will articulate an understanding of the cultural, artistic, and intellectual knowledge of Mexican American communities through skills in the areas of writing, literature, reading, oral communication, and media literacy.
2. Students will analyze and interpret a variety of texts central to the debates and issues concerning Mexican American identity, specifically as identity is related to language, race, gender, sexualities, ethnicity, and class.
3. Students will demonstrate a broad and foundational knowledge of the Mexican American experience within the larger context of the Americas and demonstrate knowledge of the Mexican American experience within a transdisciplinary context.
4. Students will demonstrate an appreciation and understanding for the scope and breadth of Mexican American history.
5. Students will apply appropriate research methodologies to demonstrate how Mexican American experiences connect to the opportunities and challenges faced by Mexican Americans in contemporary society.
6. Students will apply experiential learning to demonstrate a responsibility to the Mexican American community that enacts positive social change as part of their capstone experience.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Recommended

Creative Arts - 3 hours MASC 1307 Mexican Folk Music
Language, Philosophy, and Culture - 3 hours
MASC 2301 Introduction to Mexican American Studies (or MCLL 2301)

B - MAJOR REQUIREMENTS - 36 HOURS (12 advanced minimum)
1 - Mexican American Studies Core - 15 hours ( 6 advanced)
MASC 2301 Introduction to Mexican American Studies (or MCLL 2301)
MASC 3332 Mexican-American History (or HIST 3332) MASC 4300 Learning and Reflective Service (Capstone) Any 6 hours of SPAN
2 - Mexican American Studies Electives - 21 hours (6 advanced minimum) a - Humanities Electives - $\mathbf{6}$ hours

Choose from:
MASC 1307 Mexican Folk Music (or MUSI 1307)
MASC 2302 Border Corrido (or MCLL 2301)
MASC 2303 Border Literature (or MCLL 2301)
MASC 2351 Introduction to Mexican American Literature (or ENGL 2351)
MASC 3308 Introduction to Latino/a Literature (or SPAN 3308)
MASC 3365 Chicana and Latin American Feminisms (or PHIL 3365)
MASC 4300 Learning and Reflective Service (may repeat once)
MASC 4317 Mexican-American Literature (or ENGL 4317)
MASC 4331 Mexican-American Civil Rights (or HIST 4331)
MASC 4332 The Chicano Movement (or HIST 4332)
MASC 4348 Sociolinguistics and Latino Health (or SPAN 4348)
MASC 4357 Latin@ Art History (or ARTS 4357)
MASC 4370 Introduction to Border Language (or ENGL 4370)
MASC 4385 Topics in Border Studies (or ENGL 4385)
MASC 4392 Special Topics in Mexican American Studies
The following courses are only allowable when topic is Chican@/Latin@:
ENGL 4395 Advanced Topics in English
HIST 3307 Women in History
HIST 4393 Special Topics in Latin American History
SPAN 4317 Special Topics in Hispanic Linguistics
SPAN 4335 Special Topics in Hispanic Literature
b - Social Behavioral Sciences, Education, and/or Health Sciences Electives - 6 hours ( 6 advanced)
Choose from:
ANTH 3323 Mexican American Culture
ANTH 3375 Mexican American Folklore
ANTH 4348 Peoples and Cultures Mexico
ANTH 4350 Mexican-American Folk Medicine
ANTH 4353 Folklore of the Lower Rio Grande Valley
MASC 3322 Foundations of Bilingual Education and ESL (or EDBE 3322)
MASC 3325 Latino Health (or HLTH 3325)
MASC 3346 Hispanics in Global Society (or SOCI 3346)
MASC 4316 U.S. Latin@ Politics (or POLS 4316)
MASC 4333 U.S.-Mexico Border Relations (or POLS 4333)
MASC 4354 Immigration, Race, and Citizenship (or POLS 4354)
MASC 4323 The Mexican American Experience (or SOCI 4323)
MASC 4328 Psychological Issues in the Mexican American Community (or PSYC 4328)
c - Mexican American Electives - 9 hours
Choose 9 hours of Electives from the above sections or listed below. New courses and special topics courses appear frequently. Any course with a minimum 50\% MASC content may be petitioned as part of a students' degree plan to the MASC program by presenting course syllabus.
ANTH 4385 Topics in Anthropology
ANTH 4369 Archeology of Mexico and Central America
ARTS 3350 Pre-Hispanic Mesoamerican Art and Architecture
ARTS 3356 Mexican Viceregal Art and Architecture
ARTS 4352 Latin American Art and Architecture
ARTS 4354 Modern Mexican Art, 1785-1940
ARTS 4355 Modern Mexican Art Since 1940

ARTS 4352 Latin American Art and Architecture
ARTS 4357 Latin@ Art History
ARTS 4358 Research Methods in Latin American Art and Architectural History COMM 3336 Media, Race, and Ethnicity
DANC 2250/2349 Folklorico I
DANC 3250/3349 Folklorico II
DANC 4250/4349 Folklorico III
DANC 1249 Introduction to Folklorico I
DANC 1250 Introduction to Folklorico II
ENGL 4318 South Texas Literature
GEOG 3333 Latin American Geography
HIST 3333 Texas History
HIST 3363 Mexico Pre-Conquest to Present
HIST 3361 Colonial Latin America
HIST 4321 The Spanish Southwest to 1821
HIST 4322 The American Southwest after 1821
HIST 4362 History of Mexican Culture
HIST 4361 Contemporary Mexico
HIST 4363 History of Mexican Cinema
HIST 3364 Mexico through Independence
HIST 3365 Mexico since Independence
HIST 3362 Modern Latin America
HIST 4393 Special Topics in Latin American History
LAMS 2301 Introduction to Inter-American Studies
LAMS 3377 Latin-American Womanhood in the Modern Era
LAMS 3378 Women in Colonial Latin America
LAMS 4301 Seminar on Latin American Studies
LAMS 4391 Latin American Philosophy: Special Topics
MCLL 2301 Special Topics: Mexican American Language, Literature, and Culture
PHIL 1305 Introduction to Latin American Philosophy
PHIL 3365 Chicana and Latin American Feminisms PHIL 4305 Special Topics in Latin American Philosophy PSYC 4328 Psychological Issues in the Mexican-American Community POLS 4354 Immigration, Race \& Citizenship
POLS 4320 Latin American Politics
POLS 4321 Central American and Caribbean Politics
SOCI 4313 Race and Ethnic Relations
SOCI 4352 Social Stratification
SOCI 4380 Social Protest and Social Movements
SOCW 4370 Mexican American Mental Health
SPAN 1311 Spanish for Non-Native Speakers I
SPAN 1312 Spanish for Non-Native Speakers II
SPAN 2313 Spanish for Native/Heritage Speakers I
SPAN 2315 Spanish for Native/Heritage Speakers II
SPAN 2317 Spanish for Healthcare Professionals I
SPAN 2318 Spanish for Healthcare Professionals II
SPAN 3300 Advanced Spanish Grammar \& Composition I
SPAN 3301 Advanced Spanish Grammar \& Composition II

> SPAN 3322 Masterpieces Spanish American Literature I SPAN 3323 Masterpieces Spanish American Literature II SPAN 4320 The Mexican Novel SPAN 3307 Introduction to Latin American Literature SPAN 4318 Spanish Language Media Studies SPAN 2320 Latina/o Culture and Civilization in Spanish SPAN 2340 Fundamentals of Hispanic Culture SPAN 3348 Advanced Spanish for Healthcare Professionals SPAN 4321 Mexican Literature SPAN 4328 Mexico's Contemporary Literature SPAN 4323 Spanish American Novel The following courses are only allowable when topic is Chican@/Latin@: ANTH 1354 The Anthropology of Expressive Culture ANTH 4345 Anthropological Theory and Methodology ARTS 4359 Seminar on Topics in Art History COMM 4303 Special Topics ENGL 4395 Advanced Topics in English ENGL 3370 Language and Culture ENGL 3337 Children's and Adolescent Literature ENGL 4313 Topics in Single Author HIST 4393 Special Topics in Latin American History INTS 4315 Discovering The Rio Grande Valley PSYC 4383 Special Problems SPAN 4338 Children's Literature in Spanish SPAN 4360 Topics Studies in Hispanic Culture SPAN 4352 Hispanic Theater

## C - DOUBLE-MAJOR or MINOR - 42 HOURS

Credit hours should be used to attain minor and/or second major in a different discipline. After earning enough credit hours for a minor and/or second major in a different discipline, students may choose advanced MASC courses, a second minor, or use as advanced electives in other disciplines.

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN <br> MEXICAN AMERICAN STUDIES

A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)<br>1 - Mexican American Studies Core - 6 hours ( $\mathbf{3}$ advanced)<br>MASC 2301 Introduction to Mexican American Studies (or MCLL 2301) MASC 3332 Mexican-American History (or HIST 3332)<br>2 - Mexican American Studies Electives - $\mathbf{1 2}$ hours (3 advanced minimum)<br>MASC Electives should be drawn from the 1) MASC Humanities Courses 2) MASC Social Behavioral Sciences, Education, and/or Health Sciences Courses 3) and Electives Courses. These courses are listed on the Degree plan for the MASC Major.

# Multidisciplinary Studies 

Mr. William Yaworsky<br>Associate Professor, Multidisciplinary Studies<br>Location: Education and Business Complex 1.428 (UTRGV Brownsville Campus)<br>Phone: 956-882-7846<br>Email: william.yaworsky@utrgv.edu

## BACHELOR OF MULTIDISCIPLINARY STUDIES (BMS)

## WITH A MAJOR IN MULTIDISCIPLINARY STUDIES

The Multidisciplinary Studies degree program allows students to custom design a plan of study that brings together course work from three disciplines rather than the two disciplines reflected by the traditional academic major/minor format.

## STUDENT LEARNING OUTCOMES:

1. Multidisciplinary Approach: As a result of their work within three distinct specializations, students will benefit from a multidisciplinary perspective that prepares them well to deal with the diversity of today's interconnected world.
2. Versatility: The grounding provided by three strong specializations will empower students by giving them the versatility to pursue employment or further study in a variety of disciplines.
3. Objectives: Specializations within this degree have content that meets or exceeds traditional minor requirements, and Student Learning Outcomes of the respective minor disciplines would also potentially apply here.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements.
B - MAJOR REQUIREMENTS - 54 HOURS ( 36 advanced)
Choose three approved minors of at least 18 hours each. Each minor must include 12 advanced hours.

C - FREE ELECTIVES - 24 HOURS (6 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# Spanish Translation and Interpreting 

Ms. Carmela Garcia<br>Lecturer II, Spanish Translation and Interpreting Location: ARHU 318 (UTRGV Edinburg Campus) Phone: 956-665-3446<br>Email: carmela.garcia@utrgv.edu

## BACHELOR OF ARTS (BA)

WITH A MAJOR IN
SPANISH TRANSLATION AND INTERPRETING

Being the first and most complete BA program in Spanish Translation and Interpreting in the State of Texas, the program scope is to help future practitioners of the art and science of Translation and Interpreting to play a vital role in shaping the global society of the 21st century. The program will contribute to the development of analytical skills, cultural literacy, linguistic competence, and professionalism, skills needed for superior translators and interpreters. In addition to course offerings in Modern Languages, the program encourages students to complete a thorough translation and interpreting curriculum that matches the standard international requirements, which also consists of a combination of three operational languages.

## STUDENT LEARNING OUTCOMES:

1. Students will develop critical reading skills in both English and Spanish by learning to differentiate stylistic, formal, denotative, and connotative aspects within a text.
2. Students will develop superior writing skills in both English and Spanish by producing stylistically and grammatically cogent textual materials in both languages without strong reciprocal interference.
3. Students will translate general texts from English into Spanish and vice versa at a professional level by considering cultural, morpho-syntactical and formal differences between both languages, and by successfully dealing with major syntactical and lexical problems while accurately conveying meaning both at a denotative and at a connotative level
4. Students will meet the technological demands of the professional translation and interpreting market, by acquiring terminological research techniques, advanced word-processing capabilities, advanced use of Internet resources, and basic management of translation memories and terminological databases.
5. Students will translates specialized texts from English into Spanish and Spanish into English in the areas of legal, commercial, scientific, medical and technical translation at a quasi-professional level.
6. Students will reflect characteristics of professional interpreters and cultural mediators by developing short-memory building strategies, décalage reading capabilities for sight-translation, and note-taking techniques for consecutive interpreting.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements.
B - MAJOR REQUIREMENTS - 51 HOURS (42 advanced)
SPAN 2313 Spanish Native/Heritage Speakers I
SPAN 2315 Spanish Native/Heritage Speakers II
SPAN 2389 Academic Cooperative - English to Spanish Translation
SPAN 3300 Advanced Spanish Grammar and Composition I
SPAN 3301 Advanced Spanish Grammar and Composition II
Choose one:
ENGL 3342 Technical Communication
ENGL 3343 Business Communication
ENGL 4344 Writing for Lawyers
TRSP/SPAN 3341 Spanish to English Translation
TRSP/SPAN 3342 Advanced Spanish to English Translation
TRSP/SPAN 3343 Advanced English to Spanish Translation
TRSP/SPAN 3344 Advanced Spanish for Healthcare Professionals I
Choose one:
TRSP/SPAN 3346 Business Spanish
TRSP/SPAN 3348 Advanced Spanish for Healthcare Professionals II
TRSP/SPAN 4342 Interpreting
TRSP/SPAN 4344 Legal Translation
Choose one:
TRSP/SPAN 4345 Topics Translation (can be taken 3 times as topic varies)
TRSP/SPAN 4348 Sociolinguistics and Latino Health
Choose one:

TRSP/SPAN 4347 Translation Technologies
TRSP/SPAN 4341 Advanced Spanish Composition for Health Professions (ITV)
TRSP/SPAN 4346 Commercial Translation
TRSP/SPAN 4349 Capstone Project/Mini-thesis

C - RESTRICTED ELECTIVES - 9 HOURS
Choose any advanced TRSP course(s) or any of the following:
SPAN 2316 Comparative Grammar on English and Spanish
SPAN/TRSP 2342 Spanish for Legal Environments and Public Administration
SPAN/TRSP 2344 Spanish for Business Administration
SPAN 2387 Introduction to World Literature I in Spanish
SPAN 2388 Introduction to World Literature II in Spanish
SPAN 3302 Creative Writing in Spanish
COMM 3316 Intercultural Communication
COMM 3312 Difficult Dialogues for Valuing Diversity
BLAW 3337 Business Law I
INTB 3331 International Law
ENGL 3362 English Grammar
ENGL 3342 Technical Communication
ENGL 3343 Business Communication
ENGL 3346 Writing and Culture
ENGL 3370 Language and Culture
ENGL 4362 Contrastive Grammar
ENGL 3344 Advanced Composition
ENGL 3340 Survey Rhetorical Theory
ENGL 3309 Introduction to Cultural Studies
ENGL 4344 Writing for Lawyers
ENGL 4362 Contrastive Grammar
FREN 3330 French-English Translation
FREN 4330 English-French Translation
SPAN 3311 Spanish Phonology and Phonetics
SPAN 4311 Spanish in Social Context

D - FREE ELECTIVES - 18 HOURS

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
SPANISH TRANSLATION

## A - MINOR REQUIREMENTS - 21 HOURS (12 advanced)

1 - Spanish Translation Core - 12 hours (3 advanced)
SPAN 2313 Spanish Native/Heritage Speakers I SPAN 2315 Spanish Native/Heritage Speakers II SPAN 2389 Academic Cooperative - English to Spanish Translation TRSP 3341 Spanish to English Translation (or SPAN 3341)
2 - Advanced Spanish Translation Electives - 9 hours ( 9 advanced) Choose 9 hours of advanced TRSP.

# Environmental Studies 

Dr. Amy Hay<br>Associate Professor, Environmental Studies Location: ARHU 343 B (UTRGV Edinburg Campus)<br>Phone: 956-665-5366<br>Email: amy.hay@utrgv.edu

MINOR IN
ENVIRONMENTAL STUDIES

A - MINOR REQUIREMENTS - 18 HOURS MINIMUM (6 advanced minimum)
1 - Environmental Studies Core - $\mathbf{3}$ hours
ENST 1301 Introduction To Environmental Studies
2 - Environmental Studies Electives - 15 hours (6 advanced minimum)
a - Environmental Science - 4-8 hours
Choose from:
ENVR 1401 Introduction to Environmental Science I ENVR 1402 Introduction to Environmental Science II GEOL 1403 Physical Geology CHEM 1311 General Chemistry I and CHEM 1111 General Chemistry I Lab BIOL 2406 Environmental Biology ENVR 4302 Environmental Impact Analysis ENVR 4302 Environmental Impact Anal GEOL 4302 Environmental Geology
b - Environmental Studies - 9-12 hours
Choose from:
Choose only one:
ENST 4380 Environmental Studies Directed Research

# ENST 4390 Environmental Studies Internship PHIL 2328 Environmental Ethics HIST 3302 Geography and Environment in History ENVR 3302 Environmental Ethics ENVR 3304 Environmental Approaches to Sustainable Development SOCI 3312 Environmental Sociology PHIL 3352 Religion and the Environment POLS 4356 U.S. Environmental Policy HIST 3335 American Environmental History ANTH 4314 Environmental Anthropology CRIJ 4316 Environmental Crime and Justice MGMT 4362 Business and Sustainability ELEE 4373 Renewable Energy MECE 4360 Solar Energy The following courses are allowable when topic is Environmental Studies: <br> SOCW 3333 Special Topic: The Natural Environment and Human Well-Being PAFF 4363 Special Topic: Politics of Scarcity and Ecology PAFF 4363 Special Topic: Government and Economy 

## Gender and Women's Studies

Dr. Caroline Miles<br>Associate Professor, Gender and Women's Studies<br>Location: ARHU 269 (UTRGV Edinburg Campus)<br>Phone: 956-665-8780<br>Email: caroline.miles@utrgv.edu

MINOR IN
GENDER AND WOMEN'S STUDIES

## A - MINOR REQUIREMENTS - 18 HOURS ( 6 advanced)

1 - Gender and Women's Studies Core - 3 hours (3 advanced)
PHIL 3360 Feminist Theories
2 - Gender and Women's Studies Electives - 15 hours (3 advanced minimum)
With approval from Director of Gender and Women's Studies, additional courses with 50\% or more gender and women's studies content may be accepted. Students may also choose from:

ANTH 4309 Anthropology of Women
CRIJ 3344 Gender, Crime and Criminal Justice
ENGL 3334 Ethnic Women Writers
ENGL 3335 Women's Literature
ENGL 3336 Latin American Women Writers
ENGL 3347 Women's Rhetoric \& Language

HIST 3307 Women in History
HIST 3366 Latin American Women in the Modern Era
HIST 3367 Women in Colonial Latin America
LAMS 3377 Latin American Womanhood in the Modern Era
LAMS 3378 Women in Colonial Latin America
MUSI 3307 Music, Gender, and Sexuality
NURS 3309 Women's Health Issues
PHIL 3360 Feminist Theories
PHIL 3365 Chicana and Latin American Feminisms
POLS 3313 U.S. Gender Politics
PSYC 3338 Psychology of Gender
SOCl 4310 Sociology of Gender

# Medical Humanities 

Dr. Cynthia Jones<br>Associate Professor, Medical Humanities<br>Location: LEAC 156 (UTRGV Edinburg Campus)<br>Phone: 956-665-8081<br>Email: medh@utrgv.edu

## MINOR IN

MEDICAL HUMANITIES

The humanities provide insight into the human condition, suffering, personhood, and our responsibility to each other, and offer a broad understanding of wellness, illness, and healthcare through interdisciplinary scholarship and research. In bringing together the visions and analytical approaches from diverse scholars, the UTRGV Medical Humanities Minor offers students an interdisciplinary curriculum designed to develop an understanding of the cultural, economic, gender, and historical factors that influence health and healing. At the same time, the program will foster respect for the pluralistic diversity in society at large. For those who are interested in the practice of healthcare, this minor will be invaluable in examining crucial components of the healing arts, including ethical considerations in patient/clientcaregiver relations and humanistic elements of positive healthcare delivery, such as effective communication, respect amongst patients/clients and providers, integrity, excellence, compassion, empathy, altruism, and service. By participating in this program of study, students will have the unique opportunity to work with faculty in the humanities who have strong teaching and research interests in the area of healthcare. This minor encourages students to think innovatively about their own roles in improving health throughout the world, no matter their future profession or past background.

## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)

Choose 18 hours of Medical Humanities coursework, of which 6 hours must be advanced.

MEDH 4301 Critical Thinking and Medical Humanities
2-Social Science Electives - 6 hours
Choose two courses (6 hours) from two different areas:
a - Psychology Perspectives - $\mathbf{3}$ hours
Choose one:
PSYC 2301 General Psychology
PSYC 3324 Social Psychology
PSYC 3332 Developmental Psychology: Infancy through Adolescence
PSYC 3333 Psychology of Adulthood: Maturity and Old Age
PSYC 3337 Developmental Psychology: Lifespan
PSYC 3338 Psychology of Gender
PSYC 4312 Female and Male
b - Sociology Perspectives - $\mathbf{3}$ hours
Choose one:
SOCI 1301 Introduction to Sociology
SOCI 3324 Sociology of Health
SOCI 3393 Sociology of Aging
3 - Humanities and Health Electives - 6 hours ( 6 advanced)
Choose two advanced elective courses (6 hours) from two different areas:
a -Humanities Perspectives - $\mathbf{3}$ hours (3 advanced)
Choose one:
SPAN 4348 Sociolinguistics and Latino Health
SPAN 4335 Special Topics in Hispanic Literatures
COMM 3316 Intercultural Communication
COMM 3336 Media, Race, and Ethnicity
COMM 3337 Global Communication
COMM 3345 Gender and Communication
COMM 3346 Health Communication
COMM 4309 Nonverbal Communication
HIST 4303 Public Health in the Americas
PHIL 3322 Research Ethics: Biology
PHIL 3340 Intermediate Logic
PHIL 3360 Feminist Theories
PHIL 3365 Chicana and Latin American Feminisms
PHIL 4316 Philosophy of Science
PHIL 4314 Philosophy of Mind
ENGL 3370 Language and Culture
ARTS 3396 Contemporary Art
b - Health Perspectives - $\mathbf{3}$ hours ( $\mathbf{3}$ advanced)
Choose one:
ANTH 4311 Medical Anthropology
ANTH 4350 Mexican American Folk Medicine
COMM 4303 Special Topics*

FREN 4339 Special Topics in French* HIST 4303 Public Health in the Americas
HLTH 3375 Consumer Health
HLTH 3373 Human Sexuality
HLTH 4380 Principles of Public Health PHIL 4302 Special Topics in Applied Ethics* REHS 3320 Family and Disability REHS 4315 Psychological and Social Aspects of Deafness REHS 4355 Multicultural Issues in Health Services SPAN 3348 Advanced Spanish for Health Professionals II SPAN 4348 Sociolinguistics and Latino Health SPAN 4335 Special Topics in Hispanic Literatures* NURS 3309 Women's Health Issues ENGL 3342 Technical Communication* ENGL 4320 Literature and Psychoanalysis ARTS 4359 Seminar on Topics in Art History*
*Only if health-focused with prior approval.

Department of Literature \& Cultural Studies

Dr. Caroline Miles
Chair, Department of Literature \& Cultural Studies Location: ARCH 211 (UTRGV Edinburg Campus)

Phone: 956-665-8780
Email: caroline.miles@utrgv.edu

# BACHELOR OF ARTS (BA) 

WITH A MAJOR IN<br>ENGLISH

The English degrees at The University of Texas Rio Grande Valley, which include the BA in English, MA in English, MA in English as a Second Language, and MA in Interdisciplinary Studies, cultivate in students scholarly and creative achievement through graduate and undergraduate courses in literature, language, rhetoric and composition, creative writing, and secondary English language arts. We promote student literacy - specifically the abilities to read, write, and think critically - as well as an appreciation for the English language. We encourage faculty to pursue excellence in teaching, foster collegiality, contribute scholarly research, and engage in service to the university and Rio Grande Valley community. The English degrees, as a collaboration among the Department of Literatures and Cultural Studies, the Department of Writing and Language Studies, and the Creative Writing Program in the College of Fine Arts, support culturally responsive pedagogy and community engagement. A student with an English major possesses skills in critical thinking, writing, and reading. English majors can enter professions such as teaching, writing, editing, media production, the law, public service, and advocacy, and they are prepared for continued graduate or professional study.

## STUDENT LEARNING OUTCOMES:

1. Students will analyze and interpret a variety of texts and patterns of language, using a range of theoretical approaches and disciplinary modes of inquiry.
2. Students will demonstrate a broad and foundational knowledge of the traditions of American, British, Ethnic, and/or World literatures by critically situating specific works of literature within these traditions.
3. Students will write coherently and demonstrate a consistent use of the conventions of a variety of genres, including, but not limited to, the academic essay.
4. Students will apply appropriate research methodologies, including appropriate use of electronic media, to understand and/or illuminate specific questions about language and literature.
5. Students in certification tracks will demonstrate knowledge and skills in the areas of writing, literature, reading, oral communication, media literacy, and English language arts pedagogy.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Recommended

Language, Philosophy, and Culture - 3 hours
ENGL 23XX level courses will count as in English electives in degree plan.
B - MAJOR REQUIREMENTS - 48 HOURS
1 - English Core - 27 hours (27 advanced) a - English Foundation - 6 hours ( 6 advanced)

ENGL 3300 Introduction to English Studies
ENGL 4390 Senior English Capstone
b - Literature - 9 hours (9 advanced)
i - Survey - 3 hours (3 advanced)
Choose from:
ENGL 3301 Survey of British Literature I
ENGL 3302 Survey of British Literature II
ENGL 3303 Survey of American Literature I
ENGL 3304 Survey of American Literature II
ENGL 3305 Survey of World Literature
ii - Genre/Theme - 3 hours (3 advanced)
Choose from:
ENGL 3307 Intro to Film Studies
ENGL 3308 Literature and Film Adaptation ENGL 3309 Introduction to Cultural Studies
ENGL 3315 The English Novel to 1850
ENGL 3316 The English Novel from 1850 to Present
ENGL 3320 Development of the American Novel
ENGL 3323 Contemporary American Fiction
ENGL 3324 Poetry
ENGL 3327 Contemporary Drama
ENGL 3328 The Short Story and the Novella
ENGL 3329 Science Fiction
iii - Period/Single Author - $\mathbf{3}$ hours (3 advanced) Choose from:

ENGL 3310 Medieval Literature
ENGL 3311 English Renaissance Literature
ENGL 3312 The Eighteenth Century
ENGL 3313 The Romantic Period
ENGL 3314 The Victorian Period
ENGL 3321 19th-Century American Literature
ENGL 3322 Hemingway
ENGL 3326 Modern Poetry
ENGL 4310 Chaucer
ENGL 4311 Shakespeare
ENGL 4312 Milton
ENGL 4313 Topics in Single Author

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        c - Linguistics - 6 hours (6 advanced)
            i - Linguistics - 3 hours (3 advanced)
                Choose from:
                    ENGL 3360 Introduction to Language Studies
                    ENGL }3361\mathrm{ Introduction to Descriptive Linguistics
                    ENGL }3370\mathrm{ Language and Culture
                    ENGL 4365 History of the English Language
            ii - English Grammar - 3 hours (3 advanced)
                    ENGL 3362 English Grammar
        d - Rhetorical Writing - 3 hours (3 advanced)
        Choose from:
            ENGL 3340 Survey Rhetorical Theory
            ENGL 3344 Advanced Composition
            ENGL 3347 Women's Rhetoric and Language
            ENGL 3343 Business Communication
        e - Creative Writing - 3 hours (3 advanced)
        ENGL 3351 Creative Writing I
2- Concentrations - 21 hours (15 advanced minimum)
        a - Literature - 21 hours (21 advanced)
            i - Literary Theory - 3 hours (3 advanced)
            ENGL }3306\mathrm{ Survey of Literary Theory
        ii - Survey - }6\mathrm{ hours (6 advanced)
            Choose from:
            ENGL 3301 Survey of British Literature I
                    ENGL 3302 Survey of British Literature II
                    ENGL 3303 Survey of American Literature I
                    ENGL 3304 Survey of American Literature II
                    ENGL }3305\mathrm{ Survey of World Literature
    iii - British before 1800 Period/Genre/Single Author/Theme - 3 hours (3
    advanced)
        Choose from:
            ENGL 3310 Medieval Literature
            ENGL 3311 English Renaissance Literature
            ENGL }3312\mathrm{ The Eighteenth Century
            ENGL 3313 The Romantic Period
            ENGL 4310 Chaucer
            ENGL 4311 Shakespeare
            ENGL 4312 Milton
    iv - American in Period/Genre/Single Author/Theme - 3 hours (3 advanced)
        Choose from:
            ENGL 3320 Development of the American Novel
            ENGL 3321 19th-Century American Literature
            ENGL }3322\mathrm{ Hemingway
            ENGL 3323 Contemporary American Fiction
            ENGL 3324 Poetry
            ENGL 4313 Topics In Single Author
            ENGL 4316 Beat Generation
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ENGL 4318 South Texas Literature
ENGL 4319 American Literature of the South
v-World/Multicultural - $\mathbf{3}$ hours (3 advanced)
Choose from:
ENGL 3325 Literature of the Americas
ENGL 3332 World Drama
ENGL 3333 Multi-Cultural Autobiography
ENGL 3334 Ethnic Women Writers
ENGL 3336 Latin American Women Writers
ENGL 4302 Postcolonial Literature and Theory
ENGL 4317 Mexican American Literature
vi - Advanced Thematic or Topical Focus - $\mathbf{3}$ hours ( 3 advanced)
Choose from:
ENGL 4300 Advanced Topics in Literature and Cultural Studies
ENGL 4301 Topics in Literary Theory
ENGL 4307 Topics in Film Theory
ENGL 4308 Topics in International Film
ENGL 4309 Special Topics in Film
ENGL 4314 Advanced Topics in Contemporary Poetry
ENGL 4315 Advanced Topics in World Literature
ENGL 4316 Beat Generation
ENGL 4318 South Texas Literature
ENGL 4319 American Literature of the South
ENGL 4320 Literature and Psychoanalysis
b - Linguistics - 21 hours (15 advanced)
i - Linguistics Core - $\mathbf{3}$ hours (3 advanced)
ENGL 4361 Modern English Syntax
ii - Restricted Electives - 12 hours (12 advanced) Choose from:

ENGL 3361 Introduction to Descriptive Linguistics
ENGL 4317 Mexican American Literature
ENGL 3347 Women's Rhetoric and Language
ENGL 3370 Language and Culture
ENGL 3375 Introduction to English as a Second Language
ENGL 4362 Contrastive Grammar
ENGL 4365 History of the English Language
ENGL 4370 Introduction to Border Language
ENGL 4375 Language Acquisition
The following courses are only allowable when topic is linguistic or language:

ENGL 4385 Topics in Border Studies
ENGL 4395 Advanced Topics in English
iii - English Electives - $\mathbf{6}$ hours
Choose 6 hours of English courses.

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c - Creative Writing - 21 hours (15 advanced)
    i - Creative Writing Theory Core-3 hours (3 advanced)
            Choose from:
                    ENGL 4353 Forms and Techniques in Creative Writing
                    ENGL 4356 Advanced Creative Writing: Children's Literature
    ii - Advanced Creative Writing Electives -12 hours (12 advanced)
                    ENGL 3352 Creative Non-Fiction
                    ENGL 3350 Gallery
                    ENGL 4350 Advanced Creative Writing: Poetry
                    ENGL 4351 Advanced Creative Writing: Workshop In Playwriting
                    ENGL 4352 Advanced Creative Writing: Workshop In Fiction
                    ENGL 4354 Advanced Creative Writing: Graphic Literature
                    ENGL 4355 Advanced Creative Writing: Screenwriting
                    ENGL 4357 Advanced Creative Writing: Creative Writing and Social
                    Action
                    ENGL 4358 Advanced Creative Writing: Writing for Performance
                    ENGL 4359 Special Topics in Creative Writing
    iii - English Electives - 6 hours
            Choose 6 hours of English courses.
d - Rhetoric, Composition, and Literacy - }21\mathrm{ hours (15 advanced)
    i - Rhetoric, Composition, and Literacy Core - 15 hours (15 advanced)
                ENGL 3340 Survey Rhetorical Theory
                ENGL 3344 Advanced Composition
            ENGL }3345\mathrm{ Studies in Literacy
            ENGL 3346 Writing and Culture
            ENGL 4343 Composition Theory and Pedagogy
    ii - English Electives - }6\mathrm{ hours
            Choose 6 hours of English courses.
e - English Language Arts - 21 hours (15 advanced)
    i - English Language Arts Core - }6\mathrm{ hours (6 advanced)
            ENGL }3337\mathrm{ Children's and Adolescent Literature
            ENGL 4338 Teaching Secondary School Literature
            ii - Language Elective - 3 hours (3 advanced)
                ENGL }3370\mathrm{ Language and Culture
            ENGL 3375 Introduction to English as a Second Language
            ENGL 4360 Fundamentals of Language Development
            ENGL 4362 Contrastive Grammar
            ENGL 4370 Introduction to Border Language
            ENGL }4375\mathrm{ Language Acquisition
            iii - Writing - 3 hours (3 advanced)
            ENGL 3345 Studies in Literacy
            ENGL 4342 Assessing and Responding to Writing
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iv - Literature Survey - 3 hours (3 advanced)
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    ENGL 3301 Survey of British Literature I
        ENGL 3302 Survey of British Literature II
        ENGL 3303 Survey of American Literature I
        ENGL 3304 Survey of American Literature II
        ENGL 3305 Survey of World Literature
    v-English or Education Electives - $\mathbf{6}$ hours
Choose 6 hours of ENGL, READ, or EDUC.

# C - MINOR OR RESTRICTED ELECTIVES - 18 HOURS (6 advanced) <br> Students may choose between the completion of a minor or additional English coursework. 

## D - FREE ELECTIVES - 12 HOURS

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 60 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017

The English degrees at The University of Texas Rio Grande Valley, which include the BA in English, MA in English, MA in English as a Second Language, and MA in Interdisciplinary Studies, cultivate in students scholarly and creative achievement through graduate and undergraduate courses in literature, language, rhetoric and composition, creative writing, and secondary English language arts. We promote student literacy - specifically the abilities to read, write, and think critically - as well as an appreciation for the English language. We encourage faculty to pursue excellence in teaching, foster collegiality, contribute scholarly research, and engage in service to the university and Rio Grande Valley community. The English degrees, as a collaboration among the Department of Literatures and Cultural Studies, the Department of Writing and Language Studies, and the Creative Writing Program in the College of Fine Arts, support culturally responsive pedagogy and community engagement. A student with an English major possesses skills in critical thinking, writing, and reading. English majors can enter professions such as teaching, writing, editing, media production, the law, public service, and advocacy, and they are prepared for continued graduate or professional study.

## STUDENT LEARNING OUTCOMES:

1. Students will analyze and interpret a variety of texts and patterns of language, using a range of theoretical approaches and disciplinary modes of inquiry.
2. Students will demonstrate a broad and foundational knowledge of the traditions of American, British, Ethnic, and/or World literatures by critically situating specific works of literature within these traditions.
3. Students will write coherently and demonstrate a consistent use of the conventions of a variety of genres, including, but not limited to, the academic essay.
4. Students will apply appropriate research methodologies, including appropriate use of electronic media, to understand and/or illuminate specific questions about language and literature.
5. Students in certification tracks will demonstrate knowledge and skills in the areas of writing, literature, reading, oral communication, media literacy, and English language arts pedagogy.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Recommended

Language, Philosophy, and Culture - 3 hours
Any ENGL 2300-level literature course.
B - MAJOR REQUIREMENTS - 27 HOURS (27 advanced)
a - English Foundation - 6 hours ( 6 advanced)
ENGL 3300 Introduction to English Studies ENGL 4390 Senior English Capstone
b - Literature - 9 hours ( 9 advanced)
i - Survey - $\mathbf{3}$ hours (3 advanced)
Choose from:
ENGL 3301 Survey of British Literature I ENGL 3302 Survey of British Literature II ENGL 3303 Survey of American Literature I ENGL 3304 Survey of American Literature II ENGL 3305 Survey of World Literature
ii - Genre/Theme - $\mathbf{3}$ hours (3 advanced)
Choose from:
ENGL 3307 Introduction to Film Studies
ENGL 3308 Literature and Film Adaptation
ENGL 3309 Introduction to Cultural Studies
ENGL 3315 The English Novel to 1850
ENGL 3316 The English Novel from 1850 to Present
ENGL 3320 Development of the American Novel
ENGL 3323 Contemporary American Fiction
ENGL 3324 Poetry
ENGL 3327 Contemporary Drama
ENGL 3328 The Short Story and the Novella
ENGL 3329 Science Fiction
ENGL 3330 Dystopian Literature

ENGL 3335 Women's Literature ENGL 4300 Advanced Topics in Literature and Cultural Studies ENGL 4301 Topics in Literary Theory ENGL 4308 Topics in International Film ENGL 4309 Special Topics in Film ENGL 4314 Advanced Topics in Contemporary Poetry ENGL 4315 Advanced Topics in World Literature ENGL 4316 Beat Generation ENGL 4318 South Texas Literature ENGL 4319 American Literature of the South ENGL 4320 Literature and Psychoanalysis
iii - Period/Single Author - 3 hours (3 advanced) Choose from:

ENGL 3322 Hemingway
ENGL 4310 Chaucer ENGL 4311 Shakespeare ENGL 4312 Milton ENGL 4313 Topics in Single Author
c - Linguistics - 6 hours ( 6 advanced)
ENGL 3361 Introduction to Descriptive Linguistics ENGL 3362 English Grammar
d - Rhetorical Writing - $\mathbf{3}$ hours (3 advanced) ENGL 4343 Composition Theory and Pedagogy
e-Creative Writing - 3 hours ( 3 advanced)
ENGL 3351 Creative Writing I

C - English Language Arts/Reading - 57 HOURS (54 advanced)
1 - Children's/School Literature Concentration - 6 hours (6 advanced)
ENGL 3337 Children's and Adolescent Literature
ENGL 4338 Teaching Secondary School Literature
2 - Language - $\mathbf{3}$ hours (3 advanced)
Choose from:
ENGL 3375 Introduction to English as a Second Language
ENGL 4360 Fundamentals of Language Development
ENGL 4362 Contrastive Grammar ENGL 4370 Introduction to Border Language ENGL 4375 Language Acquisition
3 - Writing - 3 hours (3 advanced)
Choose from:
ENGL 3345 Studies in Literacy ENGL 4342 Assessing and Responding to Writing
4 - Literature Survey - 3 hours (3 advanced) Choose from:

ENGL 3301 Survey of British Literature I ENGL 3302 Survey of British Literature II ENGL 3303 Survey of American Literature I ENGL 3304 Survey of American Literature II

ENGL 3305 Survey of World Literature
5 - Reading Courses - 18 hours (18 advanced)
Choose one area:
a - Grades 4-8 Certification Preparation - 18 hours (18 advanced) Area of Certification: English Language Arts and Reading (4-8)

READ 3320 Early Literacy Development
READ 3324 Reading Comprehension and Assessment
READ 4340 Reflective Reading and Writing Assessment
READ 4341 Media Literacies for Secondary ELA/R Teachers
READ 4342 Narrative and Expository Analysis and Critical Literacy
READ 4343 Literacy, Culture, and Diverse Learners
b - Grades 7-12 Certification Preparation - 18 hours (18 advanced)
Area of Certification: English Language Arts and Reading (7-12)
READ 3324 Reading Comprehension and Assessment
READ 4340 Reflective Reading and Writing Assessment
READ 4341 Media Literacies for Secondary ELA/R Teachers
READ 4342 Narrative and Expository Analysis and Critical Literacy
READ 4343 Literacy, Culture, and Diverse Learners
READ 4344 Writing Methods, Inquiry, and Study Skills for ELA/R Teachers
6 - Teacher Certification - 24 hours (21 advanced)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools EDUC 3302 Human Development, Learning Theories, and Student Learning EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

## TOTAL CREDIT HOURS FOR GRADUATION - 126 HOURS TOTAL ADVANCED HOURS - 81 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
ENGLISH

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)

Choose 18 hours in any advanced English courses (courses determined by the student and the English faculty advisor).

## MINOR IN <br> FILM STUDIES

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced) <br> 1 - Film Studies Core - 12 hours (12 advanced)

FILM 3307 Introduction to Film Studies
FILM 3325 History and Significance of the Motion Picture FILM 4307 Topics in Film Theory Choose one:

FILM 4308 Topics in International Film
FILM 4309 Special Topics in Film
2 - Film Studies Electives - $\mathbf{6}$ hours (6 advanced)
FILM 3308 Literature and Film Adaptation FILM 3326 American Film Genre FILM 3331 Philosophy of Film FILM 3395 Movies and Politics FILM 4308 Topics in International Film* FILM 4309 Special Topics in Film* FILM 4363 History of Mexican Cinema
*Course may be taken up to two times for credit when the topic varies.

MINOR IN
LATIN AMERICAN STUDIES

## A - MINOR REQUIREMENTS - 21 HOURS (12 advanced)

An interdisciplinary minor in the history, literatures, politics, and cultures of Central and South America and the Caribbean. The minor consists of seven courses and fosters the acquisition of Spanish at a professional level.

1 - Latin American Studies Core - 21 hours (12 advanced)
Choose one:
SPAN 1311 Spanish for Non-Native Speakers I
SPAN 2313 Spanish for Native/Heritage Speakers I
Choose one:
SPAN 1312 Spanish for Non-Native Speakers II
SPAN 2315 Spanish for Native/Heritage Speakers II

LAMS 2301 Introduction to Inter-American Studies
LAMS 3377 Latin American Womanhood in the Modern Era LAMS 3378 Women in Colonial Latin America LAMS 4301 Seminar on Latin American Studies LAMS 4391 Latin American Philosophy: Special Topics

# Department of Philosophy 

Dr. Thomas Pearson<br>Associate Professor, Religious Studies<br>Location: Troxel Hall 107 West (UTRGV Edinburg Campus)<br>Phone: 956-665-3570<br>Email: thomas.pearson@utrgv.edu

## BACHELOR OF ARTS (BA)

## WITH A MAJOR IN PHILOSOPHY

The Department of Philosophy offers a major in Philosophy within the Bachelor of Arts degree, as well as a minor in Philosophy. The study of philosophy can serve many useful purposes, but perhaps the most important are:

Training in philosophy helps one think more clearly, more perceptively, and more effectively. Regardless of one's personal and occupational goals, and regardless of the projects in which one is interested, being able to think clearly and effectively about them is important. Americans today switch careers (not just jobs) two to three times on average over their lives. More than ever it is important to have the learning, critical thinking, and analytical skills that philosophy provides to be able to transition between different professions.

The study of philosophy uniquely helps one to better understand and appreciate oneself, the world outside, and how the two are related. In order to live a happy and fulfilled life, it is important to make sense of life and one's place in it. The satisfaction of that need is at the core of philosophy.
A major in Philosophy will provide strong preparation for a variety of careers, particularly careers in K-12 teaching, business, law, medicine, public policy, the ministry, and college teaching. A minor in Philosophy will provide excellent support for majors in numerous fields, including history, government, English, psychology, sociology, math and certain areas of science and business administration.

## STUDENT LEARNING OUTCOMES:

1. Critical Thinking and Reading: Will demonstrate well-developed critical thinking and reading skills orally and in writing.
2. History: Will describe the history of Philosophy, by identifying and distinguishing between the major historical and conceptual divisions of philosophy, the positions within those divisions, and major thinkers who contributed to those periods and specializations.
3. Communication: Will exhibit well-developed oral and written communication skills; will respond effectively to questions and criticisms of presented material.
4. Alternative Points of View: Will demonstrate the capacity to accurately present, analyze and evaluate historically underrepresented philosophical concerns, positions and traditions.
5. Personal, Civic, and/or Professional Development: Will articulate and evaluate their various activities, identities, values, and goals in order to develop a flexible strategy for ongoing personal growth, community engagement, and/or professional achievement.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements.

## B - MAJOR REQUIREMENTS - 78 HOURS (51 advanced)

1 - Philosophy Core - $\mathbf{2 1}$ hours (12 advanced minimum)
Within the Philosophy Core and Philosophy Electives section, Sole Philosophy Majors must complete a total of 30 hours in advanced Philosophy; Double-Majors/Minors must complete a total of 24 hours in advanced Philosophy. a - Philosophy Foundation - 15 hours (12 advanced)

PHIL 1340 Introduction to Logic (or PHIL 1388 Honors) PHIL 3301 Ancient Philosophy PHIL 3303 Modern Philosophy (1600-1800) Choose one:

PHIL 4310 Epistemology
PHIL 4312 Metaphysics
PHIL 4380 Senior Seminar
b - Value Theory - $\mathbf{3}$ hours
Choose from:
PHIL 1310 Ethics, Happiness, and the Good Life
PHIL 1312 Introduction to Social and Political Philosophy
PHIL 1330 Philosophy, Art, and Film
PHIL 1360 Understanding Society and Politics
PHIL 2320 Professional Ethics
PHIL 2322 Professional Ethics: Biomedical
PHIL 2324 Professional Ethics: Business
PHIL 2326 Professional Ethics: Engineering
PHIL 2328 Environmental Ethics
PHIL 3330 Aesthetics/Philosophy of Art
PHIL 4302 Special Topics in Applied Ethics
PHIL 4320 Moral Theory
PHIL 4322 Social and Political Philosophy
c - Diversity and Pluralism in Philosophy - 3 hours Choose from:

RELS 1304 Introduction to World Religions PHIL 1305 Introduction to Latin American Philosophy
PHIL 1306 Introduction to Asian Philosophy
PHIL 1362 Race, Sexuality, and Class
RELS 2350 Introduction to Religious Literature
PHIL 3360 Feminist Theories
PHIL 3365 Chicana and Latin American Feminisms
PHIL 4305 Special Topics in Latin American Philosophy
2-Tracks - 57 hours (33 advanced minimum)
Choose one track:
a -Philosophy Major - 57 hours ( 33 advanced)
i - Philosophy Electives $\mathbf{-} \mathbf{2 1}$ hours ( 12 advanced minimum)
Choose 21 hours of Philosophy, of which at least 12 hours must be advanced.
ii - Free Electives - $\mathbf{3 6}$ hours (12 advanced minimum)
b - Double-Major or Minor - 57 hours (33 advanced)
i - Philosophy Electives - $\mathbf{1 5}$ hours ( 6 advanced minimum) Choose 15 hours of Philosophy, of which at least 6 hours must be advanced.
ii - Double-Major or Minor $\mathbf{- 4 2}$ hours ( $\mathbf{1 8}$ advanced minimum)
Credit hours should be used to attain minor and/or second major in a different discipline. After earning enough credit hours for a minor and/or second major in a different discipline, students may choose advanced Philosophy courses, a second minor, or use as advanced electives in other disciplines.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 51 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Graduation requirements

1. Students must complete a Senior Seminar prior to graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN <br> PHILOSOPHY

## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced) <br> 1-Philosophy Core - 6 hours <br> Choose one: <br> PHIL 1301 Introduction to Philosophy (or PHIL 1387) <br> PHIL 1310 Ethics, Happiness, and the Good Life <br> Choose one: <br> PHIL 1300 Critical Thinking PHIL 1340 Introduction to Logic (or PHIL 1388 Honors) <br> 2 - Philosophy Electives - 12 hours (9 advanced) <br> Choose 12 hours of Philosophy, of which 9 must be advanced.

## MINOR IN <br> RELIGIOUS STUDIES

## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)

1 - Religious Studies Core - 9 hours
PHIL 1304 World Religions
Choose two:
RELS 2350 Introduction to Religious Literature
PHIL 1306 Introduction to Asian Philosophy (or RELS 1306)
RELS 2352 Introduction to Christianity
RELS 2356 Introduction to Judaism
RELS 2354 Introduction to Islam
$\mathbf{2}$ - Religious Studies Electives - 9 hours (9 advanced)
Choose from:
PHIL 3301 Ancient Philosophy
PHIL 3302 Medieval Philosophy
PHIL 3303 Modern Philosophy (1600-1800)
PHIL 3304 19 ${ }^{\text {th }}$ Century Philosophy
RELS 3305 Religion in Latin America
RELS 3306 Borderlands Religion and Spirituality
RELS 3307 Traditional Religions
PHIL 3350 Philosophy of Religion
PHIL 3352 Religion and the Environment (or RELS 3352)
PHIL 4350 Religion and Science
RELS 4304 Special Topics in Religion
SOCI 3363 Sociology of Religion (or RELS 3363)
HIST 4391 Special Topics in European History: The History of Christianity (or RELS 4391)

# Department of Political Science 

Dr. Clyde Barrow<br>Chair, Department of Political Science<br>Location: SBSC 208 (UTRGV Edinburg Campus)<br>Phone: 956-665-3341<br>Fax: 956-665-2805<br>Email: clyde.barrow@utrgv.edu

BACHELOR OF ARTS (BA)
WITH A MAJOR IN
POLITICAL SCIENCE

The concepts, skills, and knowledge acquired as part of a Bachelor of Arts in Political Science degree can lead to many diverse career fields, including but not limited to civil service, teaching, law, policy consultant, journalism, non-profit sector management, Foreign Service, politics, and government. Acquired skills include oral, written, and technological communication, critical thinking and problem solving, and quantitative and qualitative analysis. A degree in political science can lead to a Master of Arts and Ph.D. degrees. The Department of Political Science has divided the discipline into six fields:

1. U.S. Government \& Politics
2. Comparative Government \& Politics
3. International Relations
4. Political Theory
5. Public Policy \& Political Behavior
6. Research Methods

To achieve these goals, a student must earn 120 Credit Hours at The University of Texas Rio Grande Valley. These 120 Credit Hours consist of courses in the General Education Core (Part A: 42 Credit Hours), the Major Requirement (Part B: 36 Credit Hours), and Free Electives (Part C: 42 Credit Hours). To earn a Bachelor of Arts in Political Science students must earn a minor and/or second major in a different discipline.

## STUDENT LEARNING OUTCOMES:

1. To comprehend the origins and evolution of U.S. and Texas political systems, with a focus on the growth of political institutions, the constitutions of the U.S. and Texas, federalism, civil liberties, and civil and human rights.
2. To recognize and assume their responsibility as a citizen in a democratic society by learning to think for themselves, by engaging in public discourse, and by obtaining information through the news media and other appropriate information sources about politics and public policy.
3. To examine social institutions and processes across a range of historical periods, social structures, and cultures.
4. To develop and communicate alternative explanations or solutions for contemporary social issues.
5. To analyze the effects of historical, social, political, economic, cultural, and global forces on the area under study.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 1314 College Algebra
Government/Political Science - 6 hours
POLS 2301 US and Texas Government and Politics I (or POLS 2387 Honors) POLS 2302 US and Texas Government and Politics II (or POLS 2388 Honors)

B - MAJOR REQUIREMENTS - 36 HOURS (27 advanced)<br>1 - Political Science Core - 9 hours<br>a - Political Science Statistics - $\mathbf{3}$ hours<br>POLS 2370 Introductory Statistics for Political Science<br>(Recommended: dual enrollment in POLS 3370)<br>b - Political Science Electives - $\mathbf{6}$ hours<br>Choose from:

POLS 2340 Introduction to Political Theory POLS 2350 Political Economy

POLS 4310 U.S. Judicial Process
POLS 4311 U.S. Constitutional Law - Federalism
POLS 4312 U.S. Constitutional Law - Civil Liberties
b - Comparative Government and Politics - 3 hours ( 3 advanced)
Choose from:
POLS 3320 Introduction to Comparative Government \& Politics
POLS 3321 Comparative Politics of Developing Nations
POLS 3322 European Politics
POLS 3323 Middle Eastern Politics
POLS 3324 Asian Politics
POLS 3325 South American Politics
POLS 4320 Latin American Politics
POLS 4321 Central American \& Caribbean Politics
POLS 4322 Western European Politics
POLS 4323 Mexican Politics
POLS 4324 Contemporary Chinese Politics
c - International Relations - $\mathbf{3}$ hours ( $\mathbf{3}$ advanced)
Choose from:
POLS 3330 International Politics
POLS 3331 Global Security
POLS 3332 Revolution \& Reform in Developing Nations
POLS 3333 Gender Theory in World Politics
POLS 4330 Contemporary International Issues
POLS 4331 U.S. Foreign Policy
POLS 4332 International Organizations
POLS 4333 U.S. - Mexico Border Relations
d - Political Theory - $\mathbf{3}$ hours ( $\mathbf{3}$ advanced) Choose from:
POLS 3340 Classical Political Theory
POLS 3341 Modern Political Theory
POLS 3342 Contemporary Political Theory
POLS 4340 Politics \& Culture POLS 4341 U.S. Political Theory
e - Public Policy and Political Behavior - 3 hours ( 3 advanced)
Choose from:
POLS 3350 Voting Behavior, Campaigns \& Elections
POLS 3351 Interest Groups \& Political Movements
POLS 3352 Media \& Politics
POLS 3353 Urban Politics
POLS 3355 U.S. Public Policy
POLS 3356 U.S. Fiscal Policy
POLS 4350 Political Socialization \& Civic Engagement
POLS 4351 Public Opinion \& Political Behavior
POLS 4352 U.S. Race \& Ethnic Politics
POLS 4353 Race \& Gender: The Politics of Intersectionality
POLS 4354 Immigration, Race \& Citizenship
POLS 4355 U.S. Labor Policy
POLS 4356 U.S. Environmental Policy
f - Political Science Research Methods - 3 hours (3 advanced)
POLS 3370 Scope \& Methods (dual enrollment with POLS 2370 recommended)
g - Advanced Electives in Political Science - 6 hours ( 6 advanced)
Choose any course from the Advanced Political Science lists, or:
POLS 3190 Internship
POLS 3390 Independent Study
POLS 3391 Archer Internship
POLS 3392 Archer Policy Process
POLS 3394 Special Topics in Politics
POLS 3395 Movies \& Politics

## C - FREE ELECTIVES - 42 HOURS (27 advanced)

Credit hours can be used to attain minor and/or second major in a different discipline. After earning enough credit hours for a minor and/or second major in a different discipline, students may choose Political Science Advanced Courses, or a second minor, or use as Advanced Electives in other disciplines.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 54 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

1. Students must successfully complete a "capstone experience." This requirement may be satisfied by the completion of either: (1) POLS 3190 Internship (3 credit hours) or POLS 3391 Archer Internship, or (2) a "Capstone Eligible" course determined by department.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
LEGAL STUDIES

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)

Students may take and apply POLS 4390 toward the Legal Studies Minor via admission by application and acceptance into the Law School Preparation Institute.

1 - Legal Studies Core - 18 hours (18 advanced)
BLAW 3337 Business Law I
CRIJ 4356 Law and Society
ENGL 4344 Writing for Lawyers
HIST 3329 American Legal History
PHIL 3370 Philosophy of Law
POLS 4310 U.S. Judicial Process
POLS 4311 U.S. Constitutional Law - Federalism
POLS 4312 U.S. Constitutional Law - Civil Liberties
POLS 4390 Legal Research and Writing I
PSYC 4342 Psychology and Law

MINOR IN

## POLITICAL SCIENCE

## A - MINOR REQUIREMENTS - 18 HOURS MINIMUM

## 1 - Political Science Core - 9 hours

POLS 2301 U.S. and Texas Government and Politics (or POLS 2387) POLS 2302 U.S. and Texas Government and Politics (or POLS 2388) Choose one:

POLS 2340 Introduction to Political Theory
POLS 2350 Political Economy
2 - Political Science Electives - 9 hours (9 advanced)
Complete 9 hours of advanced Political Science courses.

# Department of Psychological Science 

Dr. Joseph Hovey<br>Chair, Department of Psychological Science<br>Location: SBSC 356A (UTRGV Edinburg Campus)

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## BACHELOR OF ARTS (BA)

WITH A MAJOR IN
PSYCHOLOGY

A college degree in psychology opens the door to one of the most challenging and rewarding professional fields today. Psychology students learn the necessary skills to assist people in improving their mental health; they also gain knowledge and abilities that are valued in many other fields, such as business and politics. At the bachelor's level, psychology graduates are sought in fields like mental health casework statistics, probation and corrections, public relations, health education, social work, human resources, recreational therapy, education, and physician assisting among others.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate knowledge of the major schools of thought in Psychology. Measurement will involve an embedded question in the final exam.
2. Students will be able to explain the APA ethical guidelines for professional psychology
3. Students will integrate knowledge of research methods, data collection and interpretation of data
4. Students will respect and use critical and creative thinking, skeptical inquiry, and when possible, the scientific approach to solve problems related to behavior and mental processes

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Social and Behavioral Science - $\mathbf{3}$ hours
Must be outside Psychology.
B - MAJOR REQUIREMENTS - 38 HOURS (18 advanced)
1 - Psychology Core - $\mathbf{2 0}$ hours (12 advanced)
PSYC 2301 General Psychology
PSYC 2102 Orientation for Psychology Majors
PSYC 2401 Basic Statistics for Psychologists
PSYC 3325 Research Methods in Psychology
PSYC 3343 Tests and Measurements in Psychology
PSYC 3353 Physiological Psychology
PSYC 4363 Systems and Theories in Psychology
2 - Psychology Core - 18 hours (6 advanced)
Choose 18 hours in PSYC, of which 6 hours must be advanced.
C - FREE ELECTIVES - 22 HOURS (12 advanced)
D - MINOR - 18 HOURS (12 advanced)
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

 Graduation requirementsIn addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN PSYCHOLOGY

A college degree in psychology opens the door to one of the most challenging and rewarding professional fields today. Psychology students learn the necessary skills to assist people in improving their mental health; they also gain knowledge and abilities that are valued in many other fields, such as business and politics. At the bachelor's level, psychology graduates are sought in fields like mental health
casework statistics, probation and corrections, public relations, health education, social work, human resources, recreational therapy, education, and physician assisting among others.

## STUDENT LEARNING OUTCOMES:

1. Students will demonstrate knowledge of the major schools of thought in Psychology. Measurement will involve an embedded question in the final exam.
2. Students will be able to explain the APA ethical guidelines for professional psychology.
3. Students will integrate knowledge of research methods, data collection and interpretation of data.
4. Students will respect and use critical and creative thinking, skeptical inquiry, and when possible, the scientific approach to solve problems related to behavior and mental processes.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Social and Behavioral Science - 3 hours
Must be outside Psychology.

B - MAJOR REQUIREMENTS - 38 HOURS (30 advanced)
1 - Psychology Core - 20 hours (12 advanced)
PSYC 2301 General Psychology
PSYC 2102 Orientation Majors for Psychology
PSYC 2401 Basic Statistics for Psychologists
PSYC 3325 Research Methods in Psychology
PSYC 3343 Tests and Measurements in Psychology
PSYC 3353 Physiological Psychology
PSYC 4363 Systems and Theories in Psychology
2 - Psychology Electives - 18 hours (18 advanced)
Choose at least one course from each area:
a - Cognitive Foundations - 3 hours minimum (3 advanced minimum)
Choose at least one:
PSYC 3345 Psychology of Learning
PSYC 3373 Sensation and Perception
PSYC 4319 Cognitive Psychology PSYC 4320 Memory
b - Theoretical Foundations - 3 hours minimum ( 3 advanced minimum)
Choose at least one:
PSYC 4318 Theories of Learning
PSYC 4333 Theories of Personality PSYC 4363 Systems and Theories in Psychology
c - Developmental/Social/Cultural Foundations - 3 hours minimum (3 advanced minimum)

Choose at least one:
PSYC 3324 Social Psychology
PSYC 3332 Developmental Psychology: Infancy Through Adolescence

PSYC 3333 Psychology of Adulthood: Maturity and Old Age
PSYC 3337 Developmental Psychology: Lifespan
PSYC 3338 Psychology of Gender
PSYC 4326 Cross-Cultural Psychology
PSYC 4328 Psychological Issues in the Mexican-American Community
d - Applications - 3 hours minimum ( 3 advanced minimum)
Choose at least one:
PSYC 3340 Stress Management
PSYC 3405 Behavior Modification
PSYC 4313 Abnormal Psychology
PSYC 4342 Psychology and Law
PSYC 4343 Human Factors

## C - FREE ELECTIVES - 14 HOURS

## D - RESTRICTED ELECTIVES - 8 HOURS

Choose 8 hours from any of the following disciplines: astronomy, biology, anatomy and physiology, chemistry, geology, physical science and physics.

E - MINOR - 18 HOURS (12 advanced)

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 42 HOURS
ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
PSYCHOLOGY

## A - MINOR REQUIREMENTS - $\mathbf{1 8}$ HOURS (6 advanced)

Complete 18 hours in psychology, of which 6 must be advanced.

# Department of Public Affairs \& Security Studies 

Dr. Terence Garrett<br>Chair, Department of Public Affairs \& Security Studies Location: SETB 1.126 (UTRGV Brownsville Campus)<br>Phone: 956-882-8825<br>Email: terence.garrett@utrgv.edu

MINOR IN
GLOBAL SECURITY STUDIES

A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)<br>GSST 4300 Global Security<br>GSST 4305 Open Source Research<br>GSST 4310 Interdisciplinary Research and Analysis<br>GSST 4315 Special Topics*<br>GSST 4315 Special Topics*<br>GSST 4320 Practicum in Global Security<br>*Topics must be substantially different.<br>\section*{MINOR IN<br><br>PUBLIC ADMINISTRATION}

A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)
Choose from:
PAFF 4300 Introduction to Public Administration
PAFF 4305 American State and Local Government
PAFF 4309 Public Fiscal Administration
PAFF 4310 Comparative Public Administration
PAFF 4311 American Public Policy
PAFF 4324 Bureaucracy and Organizational Theory
PAFF 4325 Public Personnel Administration
PAFF 4362 Independent Study
PAFF 4363 Special Topics
PAFF 4365 American Administrative Process
PAFF 4378 Management of Non-Profit Organizations

# Department of Sociology \& Anthropology 

Mr. Jesus M. Medina<br>Administrative Assistant II, Department of Sociology \& Anthropology Location: SBSC 344<br>Phone: 956-665-3321<br>Fax: 956-665-2343<br>Email: jesus.medina@utrgv.edu

## BACHELOR OF ARTS (BA)

WITH A MAJOR IN
ANTHROPOLOGY

The Anthropology Program strives to fulfill its responsibilities by providing quality undergraduate academic education in anthropology. Emphasis is placed on exposing students to a holistic approach to anthropology that incorporates four major subfields - cultural anthropology, physical anthropology, archaeology, and folklore. A major or minor in anthropology is especially appropriate for professionals closely involved with people. Our graduates acquire skills useful in many careers rather than just skills applicable to one job. Students trained in our program should have acquired oral and written communication skills, research skills, and "people" or "sociocultural" skills which qualify them well for careers in international business, government, politics, criminal justice, social work, and medicine or other health-related professions. Our graduates are especially well prepared to practice in south Texas or a comparable area made special by the meeting of different cultures.

## STUDENT LEARNING OUTCOMES:

1. Critical Thinking: Students will demonstrate the ability to use the tools of anthropology to think and write critically about topics dealing with humankind.
2. Multiple Fields: Students will develop a solid base of anthropological knowledge informed by key areas inquiry including cultural anthropology, archaeology, human evolution, and folklore.
3. Holistic Approach: Students will develop a holistic understanding of individuals and cultures that reflects the multidimensionality of human experience.
4. Methodology: Students will apply appropriate research methodologies to understand cultural phenomena.
5. Applied: Students will demonstrate the ability to apply anthropological concepts and knowledge.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Social and Behavioral Sciences - 3 hours
Must be outside Anthropology.

B - MAJOR REQUIREMENTS - 36 HOURS (24 advanced)
1 - Anthropology Core - 15 hours (3 advanced)

ANTH 1324 Human Evolution
ANTH 1353 Introduction to Folklore
ANTH 2302 Introduction to Archaeology
ANTH 2351 Introduction to Cultural Anthropology
ANTH 4345 Anthropological Theory and Methodology
2 - Restricted Electives - 21 hours ( 21 advanced)
Choose from:
ANTH 3304 Indians of North America
ANTH 3305 Great Discoveries in Archaeology
ANTH 3323 Mexican American Culture
ANTH 3333 United States and Other World Cultures
ANTH 3343 Museum Studies
ANTH 3344 Archive Studies
ANTH 3345 Anthropology Community Internship
ANTH 3346 Environment and Human Adaptation
ANTH 3347 Human Forensic Skeletal Biology
ANTH 3363 Archaeological Method and Theory
ANTH 3374 Religion in Society
ANTH 3375 Mexican American Folklore
ANTH 3380 Social Anthropology
ANTH 4302 Primate Behavior
ANTH 4306 Anthropology of Borders
ANTH 4307 Shipwrecks, Pirates and the Sea: An Introduction to Maritime Archaeology and History
ANTH 4308 Conquistadors and Chiefs: A Comparative Colonialism of Northern New Spain
ANTH 4309 Anthropology of Women
ANTH 4310 Food and Culture
ANTH 4311 Medical Anthropology
ANTH 4312 Political and Legal Anthropology
ANTH 4313 Anthropology of Popular Music
ANTH 4314 Environmental Anthropology
ANTH 4345 Anthropological Theory and Methodology
ANTH 4348 Peoples and Cultures of Mexico
ANTH 4350 Mexican American Folk Medicine
ANTH 4353 Folklore of the Lower Rio Grande Valley
ANTH 4355 Psychology and Mythology
ANTH 4365 Archaeology of South America
ANTH 4369 Archaeology of Mexico and Central America
ANTH 4373 The Archaeology of Ancient Egypt
ANTH 4374 Archaeology of North America
ANTH 4385 Topics in Anthropology
ANTH 4390 Directed Studies
ANTH 4395 Fieldwork in Anthropology
Choose only one:
ENGL 3361 Introduction to Descriptive Linguistics
ENGL 3370 Language and Culture

# TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS <br> TOTAL ADVANCED HOURS - 51 HOURS 

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

BACHELOR OF ARTS (BA)
WITH A MAJOR IN SOCIOLOGY

The degree in sociology will prepare students for civic and professional participation in an increasingly global society. The students will learn the skills to critically analyze the world; address social, ecological and other problems; and obtain employment opportunities that emphasize critical thinking, research and data analysis.

## STUDENT LEARNING OUTCOMES:

1. Students will be able to substantively discuss the core theoretical perspectives of the field.
2. Students will be able to substantively discuss core methodological approaches of the field.
3. Students will be able to carry out a research project integrating sociological theory and methodology.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements.
B - MAJOR REQUIREMENTS - 36 HOURS (27 advanced)
1 - Sociology Foundation - 21 hours ( 15 advanced)
SOCI 1301 Introduction to Sociology
SOCI 2305 Introduction to Social Research
SOCI 3301 Statistics for the Behavioral Sciences
SOCI 4301 Research Methods
SOCI 4333 Social Theory for Sociology Students
SOCI 4391 Senior Seminar in Research (Capstone)

Choose one:

> SOCI 4352 Social Stratification
> SOCl 4310 Sociology of Gender
> SOCI 4313 Race and Ethnic Relations

2 - Sociology Electives - 15 hours (12 advanced)
Choose from:
SOCI 1323 Social Problems
SOCI 3312 Environmental Sociology
SOCI 3313 Criminology
SOCI 3324 Sociology of Health
SOCI 3325 Social Psychology
SOCI 3333 Urban Sociology
SOCI 3344 World Religion in a Comparative Perspective
SOCI 3345 Sociology of Mass Communication
SOCI 3346 Hispanics in Global Society
SOCI 3347 Sociology of Immigration
SOCI 3348 Disaster and Society
SOCI 3363 Sociology of Religion
SOCI 3380 Religion, Race, and Ethnicity
SOCI 3393 Sociology of Aging
SOCI 4310 Sociology of Gender
SOCI 4313 Race and Ethnic Relations
SOCI 4314 Sociology of Deviance
SOCI 4320 The Sociology of the Family
SOCI 4323 The Mexican American Experience
SOCI 4325 Sociology of Culture
SOCI 4331 Social Theory for Non-Majors
SOCI 4326 Population and Society
SOCI 4352 Social Stratification
SOCI 4360 Sociology of Education
SOCl 4373 Latin American Society
SOCI 4380 Social Protest and Social Movements
SOCI 4385 Special Topics in Sociology
SOCI 4383 Independent Studies

C - FREE ELECTIVES - 42 HOURS (15 advanced)
Credit hours can be used to attain minor and/or second major in a different discipline. After earning enough credit hours for a minor and/or second major in a different discipline, students may choose Sociology courses, or a second minor, or use as advanced electives in other disciplines.

TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Graduation requirements
In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is
required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
ANTHROPOLOGY

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced minimum) <br> 1 - Anthropology Core - 9 hours ( 3 advanced) <br> ANTH 2351 Introduction to Cultural Anthropology <br> ANTH 1324 Human Evolution <br> ANTH 4345 Anthropological Theory and Methodology <br> $\mathbf{2}$ - Anthropology Electives - 9 hours ( $\mathbf{3}$ advanced minimum) <br> Choose 9 hours in Anthropology, of which at least 3 hours must be advanced.

MINOR IN
FOLKLORE

A - MINOR REQUIREMENTS - 18 HOURS MINIMUM (12 advanced)
1-Folklore Core - 3 hours
ANTH 1353 Introduction to Folklore
2 - Folklore Electives - $\mathbf{1 5}$ hours (12 advanced)
Choose one:
ANTH 1354 Anthropology of Expressive Culture MUSI 1308 Mexican Folk Music
ANTH 3344 Archive Studies
ANTH 4353 Folklore of the Lower Rio Grande Valley
ANTH 4350 Mexican-American Folk Medicine
ANTH 4355 Psychology and Mythology

## MINOR IN

SOCIOLOGY

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A - MINOR REQUIREMENTS - }18\mathrm{ HOURS (6 advanced)
    1-Sociology Core - }6\mathrm{ hours (3 advanced)
        SOCI 1301 Introduction to Sociology
        Choose one:
        SOCl 4333 Social Theory for Sociology Students
        SOCI 4352 Social Stratification
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2 - Sociology Electives - 12 hours (3 advanced) Choose 12 hours of Sociology, of which 3 must be advanced.

# Department of Writing \& Language Studies 

Dr. Colin Charlton<br>Chair, Department of Writing and Language Studies<br>Location: ARHU 211 (UTRGV Edinburg Campus)<br>Phone: 956-665-3447<br>Email: colin.charlton@utrgv.edu

## BACHELOR OF ARTS (BA)

## WITH A MAJOR IN

SPANISH

Globalization and the Internet Revolution have intensified contact among cultures, and hence an education in multiple languages and technology is an absolute imperative in the new Millennium. Pursuing a B.A. in Spanish not only insures bilingual and bicultural competencies, but also fosters critical and creative thinking skills through the study of literature, linguistics, translation, creative writing, Culture, and cultures. Our program promotes these skills by introducing students to philosophical issues examined in literature and art; to writing and analytical skills; and to the rich cultural complexities of languages, peoples, and nations across the globe.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate proficient Spanish listening comprehension and speaking skills in diverse situations.
2. Analyze and respond to various kinds of texts written in Spanish.
3. Apply Spanish orthographic code and grammatical concepts in written assignments.
4. Compose critical essays in Spanish that demonstrate logical analysis, reason, and well-supported arguments.
5. Understand the historical and geographical development, expansion, and influence of Spanish in the world.
6. Identify major trends, figures, and influences on the development of cultural and artistic production in the Hispanic world.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements.

B - MAJOR REQUIREMENTS - 42 HOURS (36 advanced)
1 - Spanish Core - 36 hours (30 advanced)
a - Language - 12 hours (6 advanced)
SPAN 2313 Spanish for Native/Heritage Speakers I
SPAN 2315 Spanish for Native/Heritage Speakers II
SPAN 3300 Advanced Spanish Grammar and Composition I

Choose one:
SPAN 3301 Advanced Spanish Grammar and Composition II SPAN 3302 Creative Writing in Spanish
b - Literature - $\mathbf{1 2}$ hours (12 advanced)
SPAN 3305 Techniques of Literary Analysis
SPAN 3306 Introduction to Spanish Literature SPAN 3307 Introduction to Latin American Literature SPAN 3308 Introduction to Latina/o Literature
c - Linguistics - $\mathbf{1 2}$ hours (12 advanced)
SPAN 3310 Introduction to Hispanic Linguistics SPAN 3311 Spanish Phonology and Phonetics Choose one:

SPAN 4310 Spanish Applied Linguistics
SPAN 4311 Spanish in Social Context
SPAN 4380 Senior Seminar
2 - Advanced Spanish Electives - 6 hours (6 advanced)
Choose 6 hours from any of the following areas:
a - Literature
SPAN 3320 Spanish Literature 1100-1750
SPAN 3321 Spanish Literature 1750 - Present
SPAN 3322 Masterpieces of Spanish American Literature I
SPAN 3323 Masterpieces of Spanish American Literature II
SPAN 4320 The Mexican Novel
SPAN 4321 Mexican Literature
SPAN 4322 Cervantes
SPAN 4323 Spanish American Novel
SPAN 4324 Medieval Spanish Literature
SPAN 4325 Contemporary Spanish Literature
SPAN 4326 Chicano Narrative
SPAN 4327 Caribbean Literature
SPAN 4328 Mexico's Contemporary Literature
SPAN 4329 Eighteenth Century Spanish Literature
SPAN 4330 Nineteenth Century Spanish Literature
SPAN 4331 The Spanish American Short Story
SPAN 4332 The Spanish American Essay
SPAN 4333 Golden Age Prose
SPAN 4334 Theater and Poetry of the Golden Age
SPAN 4335 Special Topics in Hispanic Literatures
SPAN 4336 Literature and Journalism in the Spanish Speaking World
SPAN 4337 Spanish Lyric Poetry
SPAN 4338 Children's Literature in Spanish
b - Linguistics
SPAN 4312 History of the Spanish Language
SPAN 4313 Problems and Issues Related to Language
SPAN 4314 Structure of the Spanish Language
SPAN 4315 Acquisition of the Spanish Language
SPAN 4316 Sociolinguistics and Latino Health

SPAN 4317 Special Topics in Hispanic Linguistics SPAN 4318 Spanish Language Media Studies<br>c - Creative Writing<br>SPAN 3330 CW in Spanish: Narrative<br>SPAN 3331 CW in Spanish: Poetry and Prose Poetry<br>SPAN 3332 CW in Spanish: Playwriting<br>SPAN 3333 CW in Spanish: Special Topics<br>d-Culture<br>SPAN 3338 The Hispanic World<br>SPAN 4350 Spanish Civilization<br>SPAN 4351 Hispanic Civilization<br>SPAN 4352 Hispanic Theater<br>SPAN 4360 Topic Studies in Hispanic Culture<br>e - Pedagogy<br>SPAN 4370 Teaching Spanish as a Heritage Language

## C - FREE ELECTIVES - 36 HOURS (6 advanced)

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF ARTS (BA)

WITH A MAJOR IN
SPANISH (EC - 12 TEACHER CERTIFICATION)

Globalization and the Internet Revolution have intensified contact among cultures, and hence an education in multiple languages and technology is an absolute imperative in the new millennium. Pursuing a B.A. in Spanish Education not only insures bilingual and bicultural competencies, but also fosters critical and creative thinking skills through the study of literature, linguistics, curriculum, pedagogy, cognition, Culture, and cultures. Our program promotes these skills by introducing students to philosophical issues examined in literature and art; to writing and analytical skills; to professional teaching skills; and to the rich cultural complexities of languages, peoples, and nations across the globe. In addition to Education (public and private K-12 schools, student exchange programs, corporate programs for foreign transfers), a student with a BA degree in Spanish Education may consider work in
the following areas: government (armed forces, Department of Justice, US Citizenship and Immigration Service), non-profit organizations (civic organizations, international exchange programs, social work and social services), commerce (customer service, translation and interpretation, research, marketing firms), travel and tourism (airlines and airports, travel agencies, convention centers), arts media \& entertainment (advertising, foreign news agencies, museums) or public service (civil service, international service organizations, social and rehab services).

## STUDENT LEARNING OUTCOMES:

1. Demonstrate proficient Spanish listening comprehension and speaking skills in diverse situations.
2. Analyze and respond to various kinds of texts written in Spanish.
3. Apply Spanish orthographic code and grammatical concepts in written assignments.
4. Compose critical essays in Spanish that demonstrate logical analysis, reason, and well-supported arguments.
5. Understand the historical and geographical development, expansion, and influence of the Spanish language around the globe.
6. Identify major trends, figures, and influences on the development of cultural and artistic production in the Hispanic world.
7. Demonstrate proficiency in developing Spanish curriculum and teaching Spanish reading, writing, listening, and speaking.
8. Demonstrate proficiency in teaching the historical and cultural development of Spanish and the Spanish-speaking world.

B - MAJOR REQUIREMENTS - 42 HOURS (36 advanced)
1 - Spanish Core - 12 hours (6 advanced)
SPAN 2313 Spanish for Native/Heritage Speakers I
SPAN 2315 Spanish for Native/Heritage Speakers II
SPAN 3300 Advanced Spanish Grammar and Composition I
SPAN 3301 Advanced Spanish Grammar and Composition II
2 - Literature - 12 hours (12 advanced)
SPAN 3305 Techniques of Literary Analysis
SPAN 3306 Introduction to Spanish Literature
SPAN 3307 Introduction to Latin American Literature
SPAN 3308 Introduction to Latina/o Literature
3 - Linguistics - 9 hours (9 advanced)
SPAN 4310 Spanish Applied Linguistics
SPAN 4315 Acquisition of the Spanish Language
Choose one:
SPAN 3311 Spanish Phonology and Phonetics SPAN 4311 Spanish in Social Context
4 - Support Courses - 9 hours (9 advanced)
SPAN 3338 The Hispanic World
SPAN 4370 Teaching Spanish as a Heritage Language
SPAN 4380 Senior Seminar

## C - TEACHER CERTIFICATION - 27 HOURS (24 advanced)

Area of Certification: Spanish (EC-12)
EDFR 2301 Intercultural Context of Schooling
EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
EDUC 3302 Human Development, Learning Theories, and Student Learning
EDUC 3303 Teaching in Today's Diverse Classrooms
EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
READ 4305 Content Area Literacy
EDUC 4611 Student Teaching Secondary or All-Level

D - FREE ELECTIVES - 9 HOURS
SPAN 3309 is recommended.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

 TOTAL ADVANCED HOURS - 60 HOURS
## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

Progression requirements
For teacher certification, students must apply for admission and be accepted to the College of Education and P-16 Integration prior to enrolling in teacher certification courses, except for EDFR 2301 which is open to all students. Students unable to be admitted to EDUC 4611 will be required to substitute for 6 advanced hours, as recommended by advisor.

## Graduation requirements

1. Students must pass Oral Proficiency Interview (ACTFL), pass the TExES LOTE Spanish Exam (TEA), and pass the TExES PPR exam (TEA).
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
ENGLISH AS A SECOND LANGUAGE INSTRUCTION (7-12)

## A - MINOR REQUIREMENTS - 18 HOURS (18 advanced)

The English as a Second Language Instruction for grades 7-12 is available to any student from any field who would like to pursue ESL as a teaching field and fulfills ESL supplemental standards for the Texas Education Agency. For purposes of meeting TEA standards for ESL teaching in secondary schools in Texas, these courses or their equivalent at the graduate level may be taken either all at one level or mixed at either level.

# 1 - English ESL Core - 15 hours (15 advanced) <br> ENGL 3375 Introduction to English as a Second Language ENGL 3361 Introduction to Descriptive Linguistics ENGL 3370 Language and Culture ENGL 3377 Methods and Assessment for English Language Learners ENGL 4377 Practical Experience in Secondary ESL 

3 - English ESL Elective - 3 hours (3 advanced)
Choose from:
ENGL 3338 Teaching Literature to Secondary English Language Learners
ENGL 3362 English Grammar
ENGL 4362 Contrastive Grammar
ENGL 4370 Introduction to Border Language
ENGL 4375 Language Acquisition
EDSL 4306 Content Area Methods in the ESL Classroom
EDSL 4308 Assessment in the ESL Classroom

## MINOR IN <br> FRENCH LANGUAGE, LITERATURE, AND CULTURE

The 18 hour minor in French Language, Literature and Culture within the Department of Writing and Language Studies expects students to develop proficiency in French by focusing on the four skills of reading, writing, listening and speaking. Content area courses serve to improve language, while broadening cultural knowledge of French and Francophone history, art, and literature. The program also prepares students for careers in teaching, translation, international relations and business, as well as graduate programs. Congruent with UTRGV's mission statement, it also encourages students to become more effective participants in the global community of the twenty-first century by fostering not only fluency in French, but also critical and creative thinking skills and a flexibility of the mind.

## STUDENT LEARNING OUTCOMES

1. Students will comprehend and interpret texts written in French.
2. Students will demonstrate the ability to understand and analyze French spoken by proficient speakers.
3. Students will be able to speak French in diverse situations.
4. Students will understand and apply correct grammatical principles of French and write accurately in French.
5. Students will write critical essays that demonstrate dialectical and logical analysis.
6. Students will define and differentiate major French and Francophone cultural features, in art, literature, philosophy, and history.

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)

## 1 - French Core - $\mathbf{1 2}$ hours

FREN 1311 Beginning French I FREN 1312 Beginning French II FREN 2311 Intermediate French I FREN 2312 Intermediate French II

# 2 - French Electives - 6 hours (6 advanced) <br> FREN 3321 Advanced French Grammar I Choose one: 

FREN 3322 Advanced French Grammar II
FREN 3323 Business French
FREN 4321 French / Francophone Literature
FREN 4322 Survey of French Literature I
FREN 4323 French for Medical \& Legal Professions
FREN 4324 Introduction to French Culture and Civilization I in French
FREN 4325 Introduction to French Culture and Civilization II in French
FREN 4326 Survey of French Literature II
FREN 4339 Special Topics in French
FREN 4331 Theater Practice in French
FREN 4330 English-French Translation
FREN 4120 French Culture on Location
FREN 4360 Seminar in French and Francophone Studies

MINOR IN
FRENCH TEACHING, TRANSLATION, AND CULTURE

The 24 hour Minor in French Teaching, Translation, and Culture within the Department of Writing and Language Studies expects students to develop proficiency in French by focusing on the four skills of reading, writing, listening and speaking. Content area courses serve to improve language, while broadening cultural knowledge of French and Francophone history, art, and literature. Advanced courses in language, literature, and culture as well as translation are designed to prepare students for careers in teaching and translation. Congruent with UTRGV's mission statement, the program also encourages students to become more effective participants in the global community of the twenty-first century by fostering not only fluency in French, but also critical and creative thinking skills and a flexibility of the mind.

## STUDENT LEARNING OUTCOMES

1. Students will comprehend and interpret texts written in French.
2. Students will demonstrate the ability to understand and analyze French spoken by proficient speakers.
3. Students will be able to speak French correctly in interpersonal situations.
4. Students will apply correct grammatical principles of French and write accurately and clearly in French.
5. Students will write critical essays that demonstrate dialectical and logical analysis.
6. Students will define and differentiate major French and Francophone cultural features, from art, literature, philosophy, and history.

A - MINOR REQUIREMENTS - 24 HOURS (12 advanced)
1 - French Core - 12 hours
FREN 1311 Beginning French I
FREN 1312 Beginning French II

FREN 2311 Intermediate French I
FREN 2312 Intermediate French II
2 - French Elective - 12 hours (12 advanced)
FREN 3321 Advanced French Grammar I
FREN 3330 French-English Translation
Choose two:
FREN 3322 Advanced French Grammar II
FREN 3323 Business French
FREN 4321 French / Francophone Literature
FREN 4322 Survey of French Literature I
FREN 4323 French for Medical \& Legal Professions
FREN 4324 Introduction to French Culture and Civilization I in French FREN 4325 Introduction to French Culture and Civilization II in French FREN 4326 Survey of French Literature II
FREN 4339 Special Topics in French
FREN 4331 Theater Practice in French
FREN 4330 English-French Translation
FREN 4120 French Culture on Location
FREN 4360 Seminar in French and Francophone Studies

The University of Texas Rio Grande Valley offers the nation's only full program in Medical Spanish for Heritage Learners. Language barriers significantly compromise the quality of healthcare for limited English proficient patients. Recent studies have shown that Spanish-speaking patients have disease, mortality, and pain burdens at least twice as high as English-speaking patients. These facts make language a crucial concern for the improvement of health among Latinos in the U.S. The Medical Spanish program aims to develop critical skill sets that future healthcare providers can use to improve communication with Spanish-speaking patients.

Additionally, the curriculum is designed to raise awareness about language issues that intersect with access to healthcare among Spanish-speaking patients in the U.S. Students in the program participate in a service-learning internship at a local community health center that serves primarily uninsured and limited English proficient patients. These activities are intended to prepare students for the National Board Certification Examination for Medical Interpreters. The program meets the Training Program Standards issued by the National Council on Interpreting in Health Care in 2011.

## A - MINOR REQUIREMENTS - 19 HOURS (7 advanced)

Choose one:
SPAN 1311 Spanish for Non-Native Speakers I
SPAN 2313 Spanish for Native/Heritage Speakers I
Choose one:
SPAN 1312 Spanish for Non-Native Speakers II
SPAN 2315 Spanish for Native/Heritage Speakers II
SPAN 2317 Spanish for Healthcare Professionals I
SPAN 2318 Spanish for Healthcare Professionals II
SPAN 4119 Spanish Internship
SPAN 3348 Advanced Spanish for Health Care Professionals II (or TRSP 3348)
SPAN 4348 Sociolinguistics and Latino/a Health (or TRSP 4348)

MINOR IN
SPANISH

Globalization and the Internet Revolution have intensified contact among cultures, and hence an education in multiple languages and technology is an absolute imperative in the new Millenium. Pursuing a minor in Spanish not only insures bilingual and bicultural competencies, but also fosters critical and creative thinking skills through the study of literature, linguistics, translation, creative writing, Culture, and/or cultures. Our program promotes these skills by introducing students to philosophical issues examined in literature and art; to writing and analytical skills; and the rich cultural complexities of languages, peoples, and nations across the globe.

A - MINOR REQUIREMENTS - 18 HOURS (12 advanced)
Choose 18 hours of Spanish coursework, of which 12 hours must be advanced.

## 1 - Basic Spanish Language Courses - 9 hours (3 advanced)

SPAN 2313 Spanish for Native/Heritage Speakers I
SPAN 2315 Spanish for Native/Heritage Speakers II
SPAN 3300 Advanced Spanish Grammar \& Composition I
2 - Spanish Electives - 9 hours (9 advanced)
Choose from:
SPAN 3301 Advanced Spanish Grammar \& Composition II
SPAN 3302 Creative Writing in Spanish
SPAN 3305 Techniques of Literary Analysis
SPAN 3306 Introduction to Spanish Literature
SPAN 3307 Introduction to Latin American Literature
SPAN 3308 Introduction to Latina/o Literature
SPAN 3310 Introduction to Hispanic Linguistics
SPAN 3311 Spanish Phonology and Phonetics
SPAN 4310 Spanish Applied Linguistics
SPAN 4311 Spanish in Social Context
SPAN 3320 Spanish literature 1100-1750
SPAN 3321 Spanish Literature 1750-Present
SPAN 3322 Masterpieces of Spanish American Literature I

SPAN 3323 Masterpieces of Spanish American Literature II
SPAN 4320 The Mexican Novel
SPAN 4321 Mexican Literature
SPAN 4322 Cervantes
SPAN 4323 Spanish American Novels
SPAN 4324 Medieval Spanish Literatures
SPAN 4325 Contemporary Spanish Literature
SPAN 4326 Chicano Narrative
SPAN 4327 Caribbean Literature
SPAN 4328 Mexico's Contemporary Literature
SPAN 4329 Eighteenth Century Spanish Literature
SPAN 4330 Nineteenth Century Spanish Literature
SPAN 4331 The Spanish American Short Story
SPAN 4332 The Spanish American Essay
SPAN 4333 Golden Age Prose
SPAN 4334 Theater and Poetry of the Golden Age
SPAN 4335 Special Topics in Hispanic Literatures
SPAN 4336 Literature and Journalism in the Spanish Speaking World
SPAN 4337 Spanish Lyric Poetry
SPAN 4312 History of the Spanish Language
SPAN 4313 Problems and Issues Related to Language
SPAN 4314 Structure of the Spanish Language
SPAN 4315 Acquisition of the Spanish Language
SPAN 4316 Sociolinguistics and Latino Health
SPAN 4317 Special Topics in Hispanic Linguistics
SPAN 4318 Spanish Language Media Studies
SPAN 3330 CW in Spanish: Narrative
SPAN 3331 CW in Spanish: Poetry and Prose Poetry
SPAN 3332 CW in Spanish: Playwriting
SPAN 3333 CW in Spanish: Special Topics
SPAN 3338 The Hispanic World
SPAN 4350 Spanish Civilization
SPAN 4351 Hispanic Civilization
SPAN 4352 Hispanic Theaters
SPAN 4360 Topic Studies in Hispanic Culture

## Course Inventory for College of Liberal Arts (CLA) <br> Applied Law

ALAW 3300 Foundations of Law
This course surveys the origins and development of the American legal system. Topics include legal principles and procedures, federal and state courts, legal terminology, research, and resources, professional organizations, and ethical responsibilities.

## ALAW 3307 Civil Litigation Advanced

This course covers concepts and procedures, research, and analysis of major concepts of civil litigation. Practical experiences include research and drafting of pre-trial, trial, post-trial documents.

## ALAW 3309 Workforce Ethics

This course provides students with theoretical definitions, ethical concepts, and situations related not only to business organizations but also to their personal lives. Ethical dilemmas provide opportunities for students to recognize a professional code of ethics.

## ALAW 3312 Evidence

This course covers the rules, techniques and methods applied to the acquisitions, admissibility and use of evidence in trial and administrative proceedings. Practical experiences include research and drafting legal documents in the context of evidentiary situations.

ALAW 3315 Criminal Law and Procedure - Advanced
This course will focus on the research and writing of constitutional and legal criminal law issues. The class will cover the critical analysis of legal issues as they relate to the criminal prosecution and defense and will include issues spotting, legal research, and synthesizing of the issue and research.

ALAW 4301 Legal Research and Writing
This course focuses on the goals and processes of legal research and the development of legal research, analysis and writing skills. Topics include traditional and electronic legal resources, correct citation of legal authority, and drafting of effective communication of legal analysis. Prerequisites: ENGL 1301 or ENGL 1387 with C or better.
ALAW 4310 Legal Analysis and Writing
This course focuses on the identification, research and analysis of legal issues. Topics include the appellate process and standards of review, application of key facts and relevant law, and effective use of mandatory and persuasive authority. Practical experience is gained by drafting legal forms.
Prerequisites: ENGL 1301 or ENGL 1387 with C or better.
ALAW 4368 Pre-Law Academy
This course is a preparatory course for students interested in becoming an attorney. Topics include an overview of the law and legal profession, preparation for law school application and Law School Admission Test, and introduction to the law school experience. Prerequisites: Approval by the PreLaw Committee upon application and review based on a minimum 80 hours of completed coursework and a 3.0 GPA at the conclusion of their applying semester.

## Anthropology

ANTH 1324 Human Evolution
An introduction to human biological and cultural evolution, hominid morphology, human variation and prehistoric development, done in the context of historical development, and multiculturalism using appropriate scientific methodologies and theoretical bases.

ANTH 1353 Introduction to Folklore
General introduction into the field of folklore. Emphasis on data collection, preservation, analysis, and interpretation of such themes as folk music, narrative, drama, art, ethics, medicine, and material culture, accomplished using appropriate social sciences methodologies and theories of folklore set in a historical and multicultural context.

ANTH 1354 The Anthropology of Expressive Culture
The examination of language of human expressive culture in a multicultural perspective. The course reviews such topics as human tradition, folkways, folk literature and poetry, folk drama, indigenous literature, architecture, and religious expressions. The objective of this course is to expand the student's knowledge of the human condition and human cultures, especially in relation to behaviors, ideas, and values articulated in the language of expressive behavior.

ANTH 2302 Introduction to Archeology
General introduction to the field of archaeology. Emphasis on methodology of data collection and analysis plus a comprehensive review of major archaeological discoveries as they reflect understanding of diverse historical and cultural development of both ancient and modern societies.

ANTH 2351 Introduction to Cultural Anthropology
An introduction to cultural anthropology. Major aspects of culture (social organization, economics, religion, etc.), cultural patterns, cultural processes, cultural diversity and sociocultural change are examined in the context of historical development, contemporary societal conditions, and multiculturalism using appropriate methodological and theoretical analyses.

ANTH 2401 Basic Statistics for Anthropologists
A practical study of the procedures used in handling psychological and sociological data including American Indian. Women and men will be equally considered in order to give a balanced view of the richness of these cultures. Equivalent course: HIST 3326. A student may receive credit in only one course. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3305 Great Discoveries in Archaeology
This course examines many of the most famous archaeological discoveries of the past century that have shed light on humans and their culture, human origins, world history and the development of human behavior. Popular assumptions about these finds will be evaluated in light of current anthropological theories and within the historical, context of the era in which they were found in order to discern a more accurate knowledge of the past. Equivalent course: HIST 3306. A student may receive credit in only one course. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3323 Mexican American Culture
This course is concerned with the culture and tradition of Mexican-Americans. The cultural history, organization of the family, traditions, lifestyle, kinship patterns, values, and social organization of Mexican-American culture will be emphasized. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

## ANTH 3333 United States and Other World Cultures

This course is concerned with the many aspects of human culture including traditions, customs, folkways, and religious beliefs at the local, national, and worldwide levels. It explores topics ranging from roles and responsibilities within the family unit to the interaction of different cultures with their social and physical environment. As the course assesses important contributions of various past and present cultures, considerable emphasis is placed on similarities and differences between the United States and other world cultures. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3343 Museum Studies
Provides students with practical, hands-on experience through active participation in museum work alongside museum professionals. While performing a variety of tasks, each student will receive instruction concerning key features common to all museums such as policies and procedures, artifact cataloging, care, and conservation, exhibit preparation, and education programs and publicity. May be repeated for a total of 6 hours, but no more than 12 hours may be earned through any combination of internship courses. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3344 Archive Studies
Students have the opportunity to gain practical firsthand experience by actively working alongside professionals within a variety of archival situations. While working with collections as diverse as photographic archives, historic documents and newspapers and the computerized Rio Grande Valley Folklore Archive, each student will receive instruction in proper policies and procedures for the collection, study, cataloging and conservation of archive materials. May be repeated for a total of 6 hours, but no more than 12 hours may be earned through any combination of internship courses. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3345 Anthropology Community Internship
Students have the opportunity to gain practical experience working in a community organization, government agency or business enterprise related to their career goals. Students work closely with agency staff and perform a variety of tasks essential to the mission and goals of the organization. Interns are considered professional staff and participate in staff meetings, conduct research, analyze data or other tasks deemed useful by the organization. By working closely with other professionals at the site, students learn firsthand how anthropological concepts and skills can be used to understand social problems in their community. Student evaluation by weekly journal, agency report, and meetings with internship coordinator. May be repeated for a total of 6 hours, but no more than 12 hours may be earned through any combination of internship courses. Prerequisites: 6 hours of anthropology (ANTH).

ANTH 3346 Environment and Human Adaptation
This a survey of the cultural and physiological factors that affect human survivability in a variety of environmental conditions. Native peoples of the world are able to thrive at altitude, on deserts, in tropical forests, and in the arctic. This course examines specific human cultures and seemingly impossible environments and the human evolutionary, physiological, and body shape changes which allow them to thrive.

ANTH 3347 Human Forensic Skeletal Biology
A survey of the identifying characteristics of the human skeleton with particular attention to fragment identification, age at death, gender, paleopathology, fossilization, and cultural markings. Additionally, this course examines the human skeleton in its role in forensic and criminal investigation including labeling, packaging, transportation, and its identification and presentation in the legal setting.

ANTH 3363 Archaeological Method and Theory
Reviews major theoretical orientations from a historical perspective with an emphasis on current approaches. Examines major aspects of archaeological methodology including excavation and laboratory procedures, sampling strategy, dating techniques, and floral and faunal analysis. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3374 Religion in Society
This course surveys both classical and newer approaches to the study of religion. The course is designed to give students a social science understanding of the leading approaches to religion. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3375 Mexican American Folklore
folklore. The course includes the study of Chicano legends, folk tales, riddles, folk music, ballads, and festivals. Students have the opportunity to learn how to collect and archive folklore materials. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 3380 Social Anthropology
A cross-cultural review of kinship, economic, and political organization. The course will review rules of marriage, descent groups, reciprocity, bands, tribes, and chiefdoms, among other topics.
Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4302 Primate Behavior
A review of the behavior of selected representatives of the order primates, based upon research conducted both in the laboratory and in the field. In addition, students will collect and analyze data on a representative primate group at the Gladys Porter Zoo in Brownsville. Must be taken concurrently with ANTH 4395 Fieldwork in Anthropology. Equivalent course: May be counted as PSY 4302. A student may receive credit for only one course. Prerequisites: PSYC 2301 and PSYC 3383 or ANTH 1324, or consent of professor.

ANTH 4306 Anthropology of Borders
Anthropology of Borders takes border zones and issues crucial to understanding them both as its field site and point of comparative analysis. From Spanish-French Catalonia to the borderlands of Indonesia, this course investigates issues commonplace to zones of contact such as linguistic variation and innovation as well as the role of the state in construction and codifying notions of citizenship. By looking at borders from a comparative ethnographic perspective, the course seeks to contextualize issues faced by borderlanders of South Texas within a global framework. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4307 Shipwrecks Pirates and Sea: An Introduction to Maritime Archaeology and History Maritime archaeology is a profession combining traditional fields and extensive practical experience. Anthropology, history, archaeology, geography, and related sciences provide the theoretical and practical methodology with which maritime sites are found, tested, and interpreted. This course is designed to provide students with the field's background, range, and relevant examples involving both history and archaeology. Equivalent course: HIST 4301. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4308 Conquistadors and Chiefs: A Comparative Colonialism of Northern New Spain This course covers Spanish and Native American interactions in what is today the Southeastern United States, Texas and California. Emphasis will be placed on how the social and natural environment was changed in these areas. Examination of these changes will be done through the documentary and archaeological records. Equivalent course: HIST 4302. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

## ANTH 4309 Anthropology of Women

This course is concerned with anthropological studies done by women and about women, and studies of gender roles and gender inequality beginning in the late 19th century. Employing a historical perspective, it encourages critical assessment of gender studies and uses cross-cultural studies to focus on gender in certain aspects of social life. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4310 Food and Culture
This course examines the interaction between human culture and food from an anthropological perspective. It examines the social roles of food and how economic forces are transforming food systems in the world today. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4311 Medical Anthropology
This course introduces students to the diverse field of medical anthropology. It examines the human experiences of health and disease in cross-cultural, historical, and evolutionary perspectives. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4312 Political and Legal Anthropology
This course involves the anthropological analysis of political and legal institutions as revealed in relevant theoretical debates and with reference to ethnographic examples. Topics included in this course are the development of political and legal anthropology and their key concepts; studies of the state, kingship and other forms of authority; forms of knowledge and power; political competition and conflict; indigenous responses to colonialism; civil society and citizenship; nationalism, ethnicity, and genocide; theories of order and normative domain; law as command and law as rules; the legal dimensions of hierarchy and authority; dispute institutions and processes, legal pluralism; Indian, Islamic and other non-Western legal systems. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4313 Anthropology of Popular Music
This course examines the roots and development of American popular music over the last 200 years. Included in class presentations are discussions and demonstrations of minstrel shows, jazz, ragtime, blues, big band swing, rock and roll, and other forms of contemporary music. The impact of African, Latin American, and other musical styles on popular music, and music's reflection of contemporaneous culture will be discussed and demonstrated. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4314 Environmental Anthropology
Introduction to human/environmental interactions from various anthropological perspectives. History of anthropological approaches to the environment, emphasizing the mutual interconnectedness of people and nature. Survey of evolutionary models, cultural ecology, systems approaches, indigenous knowledge, ethnoecology, nature and the state, political ecology, ecofeminism environmentalism, and environmental justice. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4315 Discovering the Rio Grande Valley
This is an interdisciplinary course where students will gain an understanding of the archeology, anthropology, geology, and biology of this borderlands region. Include lectures, films, group writing assignments, and hands-on research.

ANTH 4345 Anthropological Theory and Methodology
Instruction in the methodology (interviewing, participant observation, network analysis, etc.) and theoretical perspectives of anthropology. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4348 Peoples and Cultures of Mexico
This course provides an introduction to the diverse peoples and cultures of Mexico and Central America. The traditions, beliefs, and practices of different cultures will be examined through an emphasis on the ethnography and ethnohistory of indigenous cultures of the region. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

## ANTH 4350 Mexican American Folk Medicine

This course is concerned with popular medical traditions found among Mexicans and Mexican Americans. It identifies influences from European and Native American sources, and examines ongoing changes in the folk medical landscape. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

## ANTH 4353 Folklore of the Lower Rio Grande Valley

A field research approach to the folklore of the Valley. A review of the legends, fairy tales, ballads, proverbs, riddles, and folk life of the Lower Rio Grande Valley. Prerequisites: ANTH 1353 or ANTH 3375 and consent of instructor.

ANTH 4355 Psychology and Mythology
This course will study the impact and interrelationships of psychological thought and mythological theory. The impact of the theories of Freud, Adler, Jung, Levi-Strauss and others on mythology will be studied. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4365 Archaeology of South America
A study of the prehistory of South America, with an emphasis on the Andean area. Cultural development will be traced from the time of the first inhabitants through the Incas. The development of complex societies leading up to the Incas will be emphasized. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4369 Archaeology of Mexico and Central America
A study of the prehistory of Mexico and Central America beginning with the first cultures to inhabit the area and ending with the arrival of the Spanish. Major civilizations of the area, including the Olmecs, Mayas and Aztecs, will be emphasized. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

## ANTH 4373 Archaeology of Ancient Egypt

A study of the prehistory and history of ancient Egypt from the time of the first inhabitants in the area to the arrival of the Romans. Emphasis will be placed on the architectural and artistic achievements of Egypt during the time of the pharaohs. Aspects of ancient Egyptian social classes and religious beliefs and practices will also be explored. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

## ANTH 4374 Archaeology of North America

A study of the prehistory of North America north of Mexico. The course deals with cultural development from the time of the initial peopling of the New World until the arrival of Columbus. Major cultural developments in the southwestern and eastern United States will be emphasized. Prerequisites: 3 hours from any of these areas: anthropology (ANTH), economics (ECON), psychology (PSYC), sociology (SOCI), or consent of instructor.

ANTH 4385 Topics in Anthropology
Topics are varied according to availability of faculty and student interest. Course can be repeated as topics change. Prerequisites: 6 hours of anthropology (ANTH).

## ANTH 4390 Directed Studies

A study of selected topics in anthropology. Topics are varied according to availability of faculty and student interest. Course can be repeated for credit as topics change. Prerequisites: 6 hours of anthropology (ANTH).

ANTH 4395 Fieldwork in Anthropology
Students gain practical experience by participating in anthropological research projects that involve fieldwork. Each student will work closely with one or more professionals. This will enable students to learn about the specific topic under investigation as they gain practical experience in applying appropriate field research methods. May be repeated for a total of 9 hours as topics change. Prerequisites: 6 hours of anthropology (ANTH).

## Arabic

ARAB 1311 Beginning Arabic I
This course is a study of fundamental skills in listening, speaking, reading and writing. It includes basic vocabulary, grammatical structures, and culture.
ARAB 1312 Beginning Arabic II
This course is the second of two basic course in the Arabic language. It is a continuation of the study of fundamental skills in listening comprehension, speaking, reading and writing; including basic vocabulary, grammatical structures and culture. Prerequisites: ARAB 1311.

## Chinese

CHIN 1311 Beginning Chinese I
Fundamental skills in listening comprehension, speaking, reading and writing, including basic vocabulary, grammatical structures, and culture.

CHIN 1312 Beginning Chinese II
A continuation of CHIN 1311. Prerequisites: CHIN 1311 with a grade of 'C' or better.

## Communication

COMM 1300 Social Media Communication
This course introduces students to the nuances and dynamics of Web 2.0 technologies with an emphasis on social media platforms and how these apply to the field of communication. The course fosters the development of practical and theory-driven skills to develop and execute effective and dynamic social media strategies.

COMM 1307 Introduction to Mass Communication
Provides an overview of the relationship between the mass media and society from a historical perspective and will examine current trends such as the impact of media technology on society. The theories of mass communication will be examined.

COMM 1311 Introduction to Communication
The course is designed to provide students with an overview of areas in communication (e.g., interpersonal, small group, and public communication). Students will develop necessary communication skills including listening, teamwork, interviewing, and public speaking that will benefit them both personally and professionally.

COMM 1315 Public Speaking
Instruction and practice in speech preparation and delivery. Includes audience analysis, selecting and developing the topic, drafting the speech outline, arranging and intensifying the speech, use of visual aids and supporting materials, effective delivery techniques, and speech evaluation. Stresses logical thinking as a basis for formulation of the communication message.

COMM 1318 Interpersonal Communication
Instruction and activities in the principles of human communication and interaction. Includes selfconcept, self-disclosure and risk, defensiveness, perception, empathy, semantics and abstraction, emotions and behavior, nonverbal communication, listening and feedback, relational communication, assertiveness, and conflict management.

COMM 1336 Television Production
This course is an introduction to television studio operations with emphasis on television production. It covers cameras, microphones, lights, setting, and performers.

COMM 2310 Video and Film Editing I
In this course the student will learn the basics of non-linear editing using a variety of software.
Prerequisite or Co-requisite: COMM 1336 TV Production or with permission of instructor.
Prerequisites: Credit/registration in COMM 1336 or consent of instructor.
COMM 2331 Radio/Television Announcing
Study of voice, diction, pronunciation, phonetics, and delivery in various types of announcing.
COMM 2333 Small Group Communication
Instruction and practice in group theory and technique. Includes principles and methods of discussion, interpersonal relations in groups, problem-solving and decision-making processes, conflict management in groups, sources and philosophies of group leadership, quality circles, preparation of agendas, rules of order, and committee procedures and regulations.

COMM 2335 Argumentation and Debate
Instruction and practice in the principles of argumentation and debate. Includes philosophies and concepts, forms of argument, analysis by issues and logical form, evidence and reasoning, positions of advocacy, refutation and rebuttal, cross-examination, ethics of argument and persuasion, and communication strategies in contemporary society.

COMM 3303 Writing for Mass Media
This course will focus on the various writing techniques required for different media. Student must pass skill test of grammar, spelling, and punctuation.

COMM 3304 Advertising: Theory and Practice
Principles of advertising as they are applied and used in radio, television, film, print media, and theatre. Practice in writing advertising copy, layout, and design.

COMM 3305 Copy Editing
This course focuses on copy editing and headline writing using the Associated Press Style Manual as a guide. Prerequisite: COMM 3303 or consent of instructor. Prerequisites: COMM 3303.

COMM 3306 Feature Writing
Interpreting trends in reader appeal; analyzing feature story structure; finding ideas for gathering materials; and writing and selling feature articles. Prerequisite: COMM 3327 or consent of instructor. Prerequisites: COMM 3327.

COMM 3312 Difficult Dialogues for Valuing Diversity
This seminar-type course examines diversity issues affecting marginalized groups including social justice issues and civil rights. Students will put on a public event to hold difficult dialogues to engage the community in valuing diversity. Prerequisites: Completion of 60 hours.

COMM 3313 Business and Technical Communication
An introduction to communication in the workplace. Topics include listening skills, interpersonal communication, organizational culture, and diversity, interviewing skills, communication in groups, teams and meetings, and developing and delivering effective business presentations. This course is designed for students who are in business, computer science, engineering, and other fields. Communication majors may take the course only with the consent of the instructor.

COMM 3315 New Topics in Communication Studies
Application of the communication perspective as a dynamic process of human interaction. Significant issues and topics in interpersonal relationships, such as social conflict and crisis communication, and supervisory communication among others. May be repeated twice for credit.

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.

COMM 3317 Communication for Classroom Teacher
This course emphasizes methods for establishing a positive communication climate in the classroom and for enhancing instruction through effective communication. Topics will include active listening, critical listening, storytelling, and assessment of oral communication competencies.

COMM 3321 Public Relations: Theory and Practice
Planning and preparation of publicity materials for media, application for public relations techniques, and clinical study of current public relations campaigns. Some laboratory work in the Department of Communication.

COMM 3326 Photojournalism
Principles and practices of photojournalism. Topics include news photography and interrelationship with text. Participation in campus publications is encouraged. Student must an appropriate digital camera.

COMM 3327 Reporting I
An introduction to reporting focusing on writing articles in journalism style for print media, the course examines information gathering, interviewing techniques, and reporting skills. Classes are conducted in computer lab rooms when available. Prerequisite: COMM 3303 Writing for Mass Media or consent of instructor.

COMM 3329 Reporting II
This course focuses on analytical and investigative reporting. It outlines the quantitative and qualitative techniques required to produce accurate and comprehensive assessments of social, political, and scientific issues. Prerequisites: COMM 3327.

COMM 3330 Mass Communication in Society
A study of current topics and how the mediated messages for the masses exert a powerful effect on those attending to current and established issues. Prerequisites: COMM 1307, COMM 1311, or consent of Instructor.

COMM 3331 Interviewing: Theory and Practice
Theory, application and selected practice of the interview process in a variety of situations. Students have the opportunity to develop basic skills in selection, appraisal, counseling, discipline, exit, persuasive and focus interviews; interviews in mass media contexts, in data analysis and in other important techniques. Ethical guidelines stressed throughout.

COMM 3332 Organizational Communication
The study of the role of communication in organizational contexts.
COMM 3333 Theories of Communication
Comprehensive overview and analysis of the various significant theories of communication with an historical grounding, but emphasizing modern themes and perspectives.

COMM 3334 Great American Oratory
This course covers the most significant speeches in American history. The course examines three genres: political oratory, legal oratory, and religious oratory. The course identifies rhetorical commonalities in great speeches.

COMM 3335 Advanced Public Speaking
Theory and intensive application of various public speaking situations - informative, persuasive, and special occasion speeches. Critical thinking, analysis, reasoning, support for assertions, humor, and clear organization are stressed. Ethical communication and an audience-centered approach are central issues. Prerequisites: COMM 1315 or COMM 1311.

COMM 3336 Media, Race, and Ethnicity
Explores the historical and philosophical roots of the concepts of race and ethnicity, and their relation both to migration/immigration and personal/collective identity construction. It also examines the impact of mass media on racial and ethnic identity, using mass communication theory to understand the political and social dimensions on the concepts in question. Particular attention is given to racial and ethnic identity on the U.S.-Mexican border and the media's influence on conceptions and perceptions.

COMM 3337 Global Communication
This course looks at important issues in global communication through mass communication and media products (movies, books, advertising, music, and more). Students will learn how the mass media functions in other societies, the changing relationships between developing and developed countries, and examine how cultural identity, nationalism, and globalization are communicated through the mass media. They will also learn the skills they need to work in/with global mass communications.

COMM 3338 University Radio/Television
A production course that incorporates a student production team who produce radio and television programming for a semester. Students, in real time, plan, write, and produce both radio and television shows that are presented over the station's website and local specials on the local cable system. Basic broadcast writing principles in audio, video, and online formats will be used.

COMM 3339 Broadcast Audio Production
This is an introductory course in audio production for broadcast, field production, and non-broadcast applications. This course provides an overview of digital non-linear editing and radio station operations. The theories, tools, techniques, and regulatory controls of audio production are studied. Students are required to complete laboratory exercises for this course.

COMM 3345 Gender and Communication
This course is designed to provide students with an understanding of and an appreciation for the communicative and cultural differences between the sexes. Students will develop an understanding of the characteristics related to gender communication, become familiar with crucial issues and problems facing individuals of differing gender, and gain practice in applying this acquired knowledge and appreciation to improve trans-gender communication.

COMM 3346 Health Communication
This course offers a broad overview of both theoretical and applied approaches to health communication. Students will be exposed to a variety of health communication topics including issues in provider-recipient communication, decision making, social identity, family dynamics, the role of culture in health and disease, health care delivery, and health information campaigns. Specific attention will be paid to the process of creating and organizing health interventions tailored to a particular health threat and target audience.

COMM 3347 Family Communication
This course explores a variety of theoretical and applied family communication topics. Specifically, students will be exposed to multiple family interaction patterns between parents and children, romantic partners, marital partners, siblings, and extended family members. Students will also focus on several family communication constructs including secrets, narratives, traditions, and cultural expectations.

COMM 3348 Copy Writing
An exploration of the writer's craft. Using a variety of literary genres, students will understand the power of words and how this applies to strategic advertising copywriting.

COMM 3349 Multi-Media Storytelling
Gives students hands-on experiences in reporting, producing, and presenting stories for the twentyfirst century media environment. Focus is on creative and technical challenges involved in multimedia storytelling. Instruction in audio, video, reporting/interviewing, software, editing, and photography skills necessary to produce compelling multi-media projects.

COMM 3350 Research in Communication
Major methods of research used in the concentration areas of communication: speech communication and journalism/mass media. Each student is responsible for the successful completion of a research project. Required of all communication majors.

COMM 3351 Broadcast News Writing
Development of skills and practice in the art of writing news for radio and television. Scripts will be written and evaluated as related to audience, medium, and structure. Prerequisite(s): COMM 1336 Television Production and COMM 2310 Video \& Film Editing I or with permission of instructor. Prerequisites: COMM 1336 and COMM 2310.

COMM 3352 Television News Production and Reporting
Methods of gathering facts, words and images, then developing them into professional video newscasts, including audio and video recording, editing, production, delivery, and transmission, within the scope of standard electronic journalistic ethics and practices. Prerequisite(s): COMM 1336 Television Production and COMM 2310 Video \& Film Editing I or with permission of instructor. Prerequisites: COMM 1336 and COMM 2310.

COMM 3353 Broadcast Advertising Production
Application of principles of advertising to production of all types of broadcasting commercials. Prerequisites: COMM 1336.

COMM 4103 Practicum: Communication
Participation in the service learning in Communication. One hour of credit requires a minimum of 60 hours of satisfactory participation, plus any additional requirements set by the instructor. May be repeated for credit a maximum of four times.

COMM 4303 Special Topics
The class is designed to give students an opportunity to study a special advanced topic not required in the undergraduate curriculum. For the advanced undergraduate, this course may be taken more than once if the topic changes.

COMM 4306 Advanced Interpersonal Communication
Examines various theoretical approaches for understanding human interaction in person-to-person settings. In addition, the following topics are covered: strategies, interaction, influence and language in conflict management approaches, and stages in the development of interpersonal communication.

COMM 4309 Nonverbal Communication
This course offers an examination of the effects of human nonverbal behavior on human communication. Emphasis on specific nonverbal behaviors including touch, time, environmental contexts, physical appearance cues, and social communication cues.

COMM 4310 Media Planning
This course covers the strategic selection of media use and placement of advertising messages in the media. Includes the study of media characteristics, market research, media strategies, media analysis, media-market measurements, and the development of media plans. Emphasis is on the analysis of major mass media strategies, tactics, and planning.

COMM 4312 Video and Film Editing II
From news stories to feature films, the video film editing step is the last rewrite of the material before it is shown or broadcast. The student will learn professional software and acquire both the arts and crafts of assembling sound and visual into a finished viewable product including sound effects, music, dialogue replacement, and titles as well as exporting in a variety of mediums. Prerequisite or Corequisite: COMM 2310 or permission of instructor. Prerequisites: COMM 2310.

COMM 4313 Communication Law and Ethics
This course will cover freedom of the press, libel, invasion of privacy, and the conflict between free press and fair trial. Media cases will also be examined as they relate to questions of ethics.

COMM 4314 Advanced Television/Film Production
Advanced-level course stressing the application of basic arts and media developed in COMM 1336 and making use of advanced students in directing, technical crafts, performance, and scriptwriting. May be repeated for credit once with a new production. Prerequisites: COMM 1336 and COMM 2310.

COMM 4315 Persuasive Communication
Persuasive techniques and rhetorical principles as they apply to verbal and nonverbal communication where the goal is social influence. In-class speeches and projects stress practical application of persuasive strategies. Persuasive characteristics of contemporary culture, structure, and content of persuasive messages, source credibility, propaganda, ethics, and role of attitudes, belief systems, and values in persuasive communication.

COMM 4322 Public Relations Writing
This is an intensive writing course. Student will be given the opportunity to research and write for a variety of formats such as news releases, backgrounds, and pitch letters. Prerequisites: COMM 3303 and COMM 3321.

COMM 4330 Communication Training
Methods, techniques, and practice in communication training programs and human resource development workshops will be addressed.

COMM 4332 Visual Communication
Computer production of a variety of print media publishing, including layout, design, and writing.
COMM 4334 Communication Campaigns
This course will cover the development of communication campaigns from the initiation of a situation analysis, research to final execution. Students will also be given the opportunity to evaluate the effectiveness of campaigns. Prerequisites: COMM 3304 or COMM 3321, COMM 3350, COMM 4335, or consent of instructor.

COMM 4335 Creative and Media Strategies
This course will focus on the development of effective creative strategies based on solid research and clear objectives. Media planning, buying, and placing will also be covered. Prerequisites: COMM 3350 and either COMM 3304 or COMM 3321, or consent of instructor.

COMM 4336 Applied Leadership Communication
In this course theoretical models used to identify different leadership styles employed in organizations are studied. The various leadership styles and their associated communicative behaviors are closely examined.

COMM 4337 Communication Internship (3 credits)
A planned program of work (10 hours per week), for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report. Advisor approval required to enroll. May be repeated for credit up to three times when the program varies. Prerequisites: Senior standing or consent of instructor.

COMM 4345 Conflict Management
An examination of the communication theories and processes involved with interpersonal conflict. Students develop critical thinking skills that help them frame and analyze conflict situations enhancing their ability to apply the concepts and techniques learned in class to conflict situations that occur in personal and professional contexts.

COMM 4360 Senior Capstone Experience in Communication
Designed to examine the role appropriate communication skills play in improving student's ability to address management and leadership duties. Emphasis is placed on organizational processes, leadership styles, and interpersonal, presentational, and group communication skills that are useful in business, governmental, and professional settings. Relationships between cultural diversity, leadership, and communication are explored. Prerequisites: Senior standing or consent of instructor.

COMM 4624 Communication Internship (6 credit)
A planned program of half-time ( 20 hours per week) work, for a minimum of one semester or two continuous summer sessions, related to the field. Enrollment must be completed prior to the work period. Students should be classified as seniors. Credit will be determined on the basis of satisfactory employer's evaluation and the student's written report. Advisor approval required to enroll. Course may be repeated for credit once when the program varies. Prerequisites: Senior standing or consent of instructor.

## Criminal Justice

CRIJ 1301 Introduction to the Criminal Justice System
This course provides a historical and philosophical overview of the American criminal justice system, including the nature, extent, and impact of crime; criminal law; and justice agencies and processes. Prerequisites: Must Be College Ready.

CRIJ 1306 Court Systems and Practices
The study of the structures, procedures, practices, and sources of law in American courts. Prerequisites: Must Be College Ready.

CRIJ 1307 Crime in America
Examination of American crime problems in historical perspective. Topics may include social and public policy factors affecting crime, crime impact and trends, and the prevention of crime. Prerequisites: Must Be College Ready.

CRIJ 1313 Juvenile Justice System
An overview of the nature of juvenile delinquency; the theory and practice of juvenile courts; juvenile case law; juvenile crime prevention; treatment of juvenile offenders; juvenile justice system. Prerequisites: Must Be College Ready.

CRIJ 2313 Correctional Systems and Practices
This course is a survey of institutional and non-institutional corrections. Emphasis will be placed on the organization and operation of correctional systems; treatment and rehabilitation; populations served; Constitutional issues; and current and future issues. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better.

CRIJ 2328 Police Systems and Practices
This course examines the establishment, role and function of police in a democratic society. It will focus on types of police agencies and their organizational structure, police-community interaction, police ethics, and use of authority. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better.

CRIJ 3303 Criminology
Examination of criminology surveying historical, philosophical, and theoretical ideas pertaining to crime causation, justice, and or social control. Topics may also include victimology and criminal typologies. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3304 Criminal Justice Research Methods
Examination of quantitative and qualitative research design. The course covers the steps in the research process, from data collection to analysis. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3305 Statistical Applications in Criminal Justice
Examination of the use and application of statistics in Criminal Justice. Topics may include descriptive and inferential statistics, measures of central tendency, probability theory, and tests for statistical significance. Prerequisites: Advanced sophomore standing and grade of 'C' or better in ENGL 1301 (or ENGL 1387), ENGL 1302 (or ENGL 1388), and any MATH course in the General Education Core (Students are discouraged from taking MATH 1332).

CRIJ 3310 The Constitution and Criminal Law
Examination of the U.S. and Texas constitutions as they pertain to criminal law. Topics may include constitutional foundations of criminal law; substantive and procedural rights, search and seizure, due process, incriminating evidence, the exclusionary rule, and rights at trial. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3315 Forensic Investigation I
A course in criminal investigation processes, methods, tools, and techniques, forensic applications, investigative case management, role of the crime lab, and case documentation. Students engage in semester-long simulation in preparation of comprehensive, legally sufficient investigative felony case folders from crime scene response to the eventual prosecutor's presentation to a grand jury. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better.

CRIJ 3316 Criminal Evidence and Proof
Examination of constitutional and legal issues pertinent to the acquisition of evidence and presentation of evidence in court. Topics may include forensic evidence, rules for evidence admissibility, and the exclusionary rule. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3320 Evidence for Forensic Investigation
This is a course in gathering evidence, fashioning evidentiary arguments and preparing evidence for trial, with emphasis on the practical applications of the rules of evidence with specific forensic science cases and situations presented. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better.

CRIJ 3322 Juvenile Delinquency and Justice
Examination of causes of delinquency and the juvenile justice system. Topics may include patterns in delinquency; individual and collective forms of delinquency; and the history, development, and philosophy of the juvenile justice system. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3325 Violent Crime and Offenders
Examination of the genesis of violence and its expression in criminal and noncriminal forms. Topics may include theories of violence; victim-offender interactions; types of violent crimes domestic violence; and the control of violent crime. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' C ' or better and advanced sophomore standing.

CRIJ 3331 Legal Aspects of Corrections
Examination of the legal problems and principles from conviction through release. Topics may include sentencing and sentencing guidelines, probation, incarceration, conditional release, post-conviction remedies, and prisoners' and probationers' rights. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' C ' or better and advanced sophomore standing.

CRIJ 3341 Probation and Parole
Examination of the philosophy, history, principles, and practices of probation, parole and other community-based treatment programs. Topics may include trends, research on probation and parole; types of probation, alternative sentencing, and pre-sentence investigation. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3344 Gender, Crime, and Criminal Justice
Examination of issues of gender as it relates to criminality, victimization, punishment, and justice. Social ideologies about race, class, and gender may be examined as to their relevance in shaping and defining crime, criminology, and the socio-legal treatment of offenders, victims, and professionals. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 3416 Forensic Investigation II
A course involving the field collection of evidence and the preservation of crime scene evidence, with emphasis on fingerprints, photography, and other skills and competencies expected on an apprentice identification officer and crime scene investigator. Course competencies and tasks correspond to the IAI body of knowledge for the certified crime scene investigator. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better.

CRIJ 4230 Seminar: Forensics Investigation
This course is a general survey of forensic science careers, specializations, qualifications, professional literature, ethics, certifications, with a special emphasis on legal and procedural aspects of preparation for and actual testimony in court. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better; and also CRIJ 3315, CRIJ 3416, BIOL 1406, and CHEM 1311/1111.

CRIJ 4312 Principles of Law Enforcements and Supervision
Examination of the administration and supervision of law enforcement. Topics may include principles of leadership, morale, discipline, grievances, and budgeting. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' $C$ ' or better and advanced junior standing.

CRIJ 4313 Seminar: Issues in Law Enforcement
Examination of contemporary issues in law enforcement, with a focus on the integration of established scientific knowledge with practical police experiences in various law enforcement issues. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced junior standing.

CRIJ 4314 Private Security and Loss Prevention
Examination of issues in the administration and supervision of corporate in-house and private security organizations, with an emphasis on preventing retail theft and/or loss prevention. Topics may include legal and ethical issues in surveillance, detecting employee malfeasance, cost-benefit analysis, inventory control, audit systems, and crime prevention technologies. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced junior standing.

CRIJ 4316 Environmental Crime and Justice
Examination of environmental crimes and justice. Topics may include bodily and property harms; local, regional, and global environmental crimes; point source and non-point source pollution; environmental victimology; and governmental and non-governmental responses; environmental laws and regulations. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced junior standing.

CRIJ 4320 Criminal Justice Organization and Management
Examination of concepts of management, organization, and administration as applicable to corrections and law enforcement, including societal trends that impact criminal justice administration. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' $C$ ' or better and advanced junior standing.

CRIJ 4321 White-Collar and Organized Crime
Examination of white-collar and organized crime. Topics may include the nature and types of elite deviance such as corporate deviance, political corruption, crimes of the government, and human rights' violations. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' C ' or better and advanced sophomore standing.

CRIJ 4322 Terrorism
Examination of the causes and forms of terrorism at the domestic and international levels. Topics may include political, economic, religious, social, and national differences among people and their implications for terrorism; major terrorist incidents and groups; and counterterrorism. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced junior standing.

CRIJ 4325 Medical-Legal Forensics Investigation
An interdisciplinary course in concepts in forensic investigation/ evidentiary aspects of traumatic wounds and injuries, death, sexual assault, intimate partner violence, child abuse, and elder abuse, this course is of utility to law enforcement, protective services, and health care professionals. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better.

CRIJ 4335 Restorative and Community Justice
Examination of principles and ideas of restorative and community justice. Topics may include rebuilding communities and creating community sentiments in favor of doing justice in the community; and peace-making, restorative, and community justice efforts to reduce crime. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced junior standing.

CRIJ 4341 Correctional Casework and Counseling
Examination of the role and techniques of casework and counseling in corrections and rehabilitation with an emphasis on integrating responsibilities and procedures of both. Topics may include therapy techniques and processes in correctional settings and service delivery programs tailored to the needs of correctional clientele. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' C ' or better and advanced sophomore standing.

CRIJ 4343 Current Issues in Corrections
Examination of contemporary issues in corrections, with a focus on the integration of established scientific knowledge with practical corrections experiences in various corrections issues.
Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 4350 Peace, Nonviolence, and Justice
Examination of theories and conceptions of peace, nonviolence, and justice; peace among offenders, victims, and society; and achieving peace without the violence found in crimes, revolts, revolutions, terrorism, and punishments. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of ' C ' or better and advanced sophomore standing.

CRIJ 4355 Current Issues in the Courts
Examination of contemporary issues in the federal and state courts. Topics may include service delivery to victims, defendants and the community; the changing role of courts in society; specialized courts such as drug courts and juvenile courts and prosecution. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 4356 Law and Society
Examination of the interrelationships between and among legal, social, and ethical issues. Topics may include the legal system, justice, human rights, jurisprudence, and perspectives from the social sciences and the humanities. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 4357 Crime Prevention Techniques
Examination of the theories and techniques of crime prevention. Topics may include physical planning of the built environment; principles of community psychology and environmental criminology. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 4361 Comparative Criminal Justice Systems
This is an advanced course elective. The course's primary goal is to introduce students to the idea of a world criminal justice system. Several countries will be selected each semester. A survey of the criminal justice systems (government, police, judiciary, laws, corrections, and juvenile justice) will be conducted of each of the countries. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 4362 Special Topics in Criminal Justice
Designed to give advanced undergraduate students the opportunity to study contemporary issues in crime and criminal justice. Topics will vary. May be taken only twice and only on different topics. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced sophomore standing.

CRIJ 4364 Field Internship
Placement in a criminal justice agency or related experience for a minimum of 120 hours of practical experience. Course requires an agency critique, daily logs and meetings with the intern coordinator, plus an exit exam covering criminology, policing, courts and law, and corrections. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and Criminal Justice Major with 90 completed hours (including 36 completed hours of Criminal Justice).

CRIJ 4365 Independent Studies in Criminal Justice
Designed for advanced students who are capable of independent study and research to examine an issue or project of specific interest. Registration upon approval of the Chair of the Department of Criminal Justice and the professor directing the course. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and Criminal Justice Major with 90 completed hours (including 36 completed hours of Criminal Justice).

CRIJ 4370 Senior Seminar: Policy Issues
This course is designed for students nearing completion of their baccalaureate degree. Examination of current and topical criminal justice policy issues and the intended and unintended consequences of criminal justice policies throughout the system and society. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and advanced junior standing.

CRIJ 4399 Criminal Justice System Capstone
Examination of all facets of the criminal justice system in the United States including philosophy, history, functions, and development of criminal justice institutions; current issues and future trends. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) with a grade of 'C' or better and Criminal Justice Major with 90 completed hours (including 36 completed hours of Criminal Justice).

## English

ENGL 101 Introduction to College Reading and Writing
Designed to help entering college students in a variety of college contexts that require reading, writing, and inquiry. Also designed to dovetail with student reading and writing responsibilities in their other college courses. Students who missed reading and/or writing placement test cut scores by a small percentage will work with developmental faculty and STUDIO interns to do the following: (1) study their diagnostic and testing information (when available), (2) create reading-response and writing samples, (3) identify strengths and weaknesses in their reading and writing samples, and (4) receive targeted feedback on how to revise their work to demonstrate college readiness in reading and writing.

ENGL 102 College Read and Write Extension
Students will work with developmental faculty and STUDIO interns to identify strengths and weaknesses in their reading/writing portfolios, and receive targeted feedback on how to revise their work to demonstrate college readiness in reading and writing.

ENGL 1301 Rhetoric and Composition I
English 1301 is designed to help students become more effective and confident writers as well as more active and engaged readers of complex texts. To do this, students will engage in a variety of writing projects which will help them become more reflective writers who are better able to revise their work to meet the needs of a given writing situation. (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.) Prerequisites: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301.

ENGL 1302 Rhetoric And Composition II
English 1302 is designed to teach students how to initiate inquiry, engage in meaningful research, and produce effective researched arguments. To do this, students will get experience with primary and secondary research methods, engage in a variety of writing projects, and create at least one major research project. (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.) Prerequisites: A grade of 'C' or better in ENGL 1301 or ENGL 1387.

ENGL 1387 Rhetoric and Composition I (Honors)
English 1387 is designed to help students become more effective and confident writers as well as more active and engaged readers of complex texts. To do this, students will engage in a variety of writing projects which will help them become more reflective writers who are better able to revise their work to meet the needs of a given writing situation. The course will include a strong experiential learning component and require students to submit a final portfolio of their writing (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.) Prerequisites: Satisfactory scores on English portion of ACT test and TSI examination or ENGL 0301. Admission to the Honors Program, by invitation, or with instructor approval.

ENGL 1388 Rhetoric And Composition II (Honors)
English 1388 is designed to teach students how to initiate inquiry, engage in meaningful research, and produce effective researched arguments. To do this, students will get experience with primary and secondary research methods, engage in a variety of writing projects, and create at least one major research project. The course will include a strong experiential learning component and require students to submit a final portfolio of their writing (Credit for this course may be obtained by qualified students through advanced placement or advanced standing examinations.) Prerequisites: Admission to Honors Program, by invitation, or with instructor approval. A grade of ' C ' or better in ENG 1301 or ENGL 1387.

ENGL 2308 Readings in Special Topics in Literature
A study of the literature associated with a special group, area, movement, or technique. The topic to vary with each section. (Special topics to be announced in the schedule of classes. May be taken only once to satisfy general education requirements, but may be repeated for elective credit when the topic varies.)

ENGL 2313 Readings in Dramatic Literature
Critical review and analysis of selected classic plays from Greek antiquity to the present time. Designed to clarify the nature and major achievements of western dramatic art. Crosslisted as THTF 2313.

ENGL 2314 Appreciation and Analysis of Literature
A study and exploration of the creative process that shapes literature and the human imagination. Students will learn to appreciate and analyze literature of different genres such as poetry, short stories, film, novels, myths, and plays. Topics will vary by instructor.

ENGL 2315 Humans and Language
This course provides an introduction to human linguistic behavior and language as a species-wide phenomenon. It includes an overview of the historical trajectories of human migration patterns and the geo-political movements resulting in different languages and sociolinguistic groups.

ENGL 2321 Introduction to British Literature
A study of several masterpieces of English Literature, with emphasis on carefully reading and on writing critical essays about individual works.

ENGL 2326 Introduction to American Literature
A study of several masterpieces of American Literature, with emphasis on careful reading and on writing critical essays about individual works.

ENGL 2331 Introduction to World Literature
A study of several masterpieces of world literature in translation, with emphasis on writing critical essays about individual works.

ENGL 2341 Introduction to Literature
An introduction to literary genres, with special emphasis on the short story, novel or novella, drama and poetry. Requires careful reading and the writing of critical essays about individual works.

ENGL 2351 Introduction to Mexican American Literature
An introduction to the literature by and about Mexican Americans, including the study of literary genres, with special emphasis on the short story, novel or novella, drama, and poetry.
ENGL 2387 Readings in World Literature I (Honors)
A study of selected works from the literature of Greece, Rome, and Medieval Europe. Prerequisites: Admission to Honors Program or by invitation.

ENGL 2388 Readings In World Literature II (Honors)
A study of selected works of western literature from Renaissance through modern writers. Prerequisites: Admission to Honors Program or by invitation.

ENGL 301 Reading/Writing Studio
English 0301 is designed as a supplement to English 1301 Rhetoric and Composition I for students who did not pass state required readiness tests for college level reading and writing. The class supports English 1301 goals with added time and attention to student development of effective strategies in reading, rhetoric, and composition related to critical thinking, communication, teamwork, and personal responsibility. Does not count toward hours for graduation or in the computation of hours attempted or earned. A course grade will be recorded as Pass (PR) or No Pass (NPR). English 0301 is a non-credit course. Prerequisites: Registration in matching section of ENGL 1301.

ENGL 3300 Introduction to English Studies
This course introduces students to the English major focusing on critical reading of texts, appropriate critical thinking patterns for research and writing within the disciplines covered within the English major--literature and cultural studies, rhetoric and composition, linguistics, English education, and creative writing. Prerequisites: 6 hours of English; Must be taken within the first 12 hours of the English Major.

ENGL 3301 Survey of British Literature I
A chronological study of the principal authors, works, and trends in English literature from the AngloSaxon period to the beginning of the Romantic movement. Area(s): Survey. Prerequisites: 6 hours of English.

ENGL 3302 Survey of British Literature II
A chronological study of the principal authors, works, and trends in English literature from preRomantic poetry to the Twentieth Century. Area(s): Survey. Prerequisites: 6 hours of English.

ENGL 3303 Survey of American Literature I
A chronological study of the principal authors, works, and trends in American literature from the Colonial period to the Civil War. Area(s): Survey. Prerequisites: 6 hours of English.

ENGL 3304 Survey of American Literature II
A chronological study of the principal authors, works, and trends in American literature from the Civil War to the Twentieth Century. Area(s): Survey. Prerequisites: 6 hours of English.

ENGL 3305 Survey of World Literature
A focused study of the principle authors, works, and trends in World Literature from the ancient world to the contemporary period. With specific focus on period, genre, or theme to be determined by the individual instructor. Area(s): Survey. Prerequisites: 6 hours of English.

ENGL 3306 Survey of Literary Theory
Introduces students to the general principles of literary theory and provides opportunities for practical application of theoretical models to literary texts. Area(s): Theory. Prerequisites: 6 hours of English.

ENGL 3307 Introduction to Film Studies
An introduction to the study of film as a particular literary genre with special emphasis on fictional film, technical film analysis, and cinematic interpretation. Crosslisted as FILM 3307. Area(s): Genre.

ENGL 3308 Literature and Film Adaptation
A study of film adaptation of literary works with a special focus on the different types of adaptations, the level of fidelity, and the historical and technical differences between the two artistic mediums. Crosslisted as FILM 3308. Area(s): Genre.

ENGL 3309 Introduction to Cultural Studies
Historical and textual study of the discipline of Cultural Studies, with emphasis on major figures and schools in Cultural Studies and their relation to textual analysis. Area(s): Theme. Prerequisites: 6 hours of English.

ENGL 3310 Medieval Literature
A study of various types of medieval literature, including the epic, the romance, and the allegory, with special attention to Middle English writers. Area(s): Period \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 3311 English Renaissance Literature
Covers the prose, poetry, and drama of the Renaissance period in England (1485-1660). Area(s): Period \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 3312 The Eighteenth Century
A study of the major works of English writers of the Neo-classical period, including Dryden, Congreve, Pope, Swift, Sterne, and Samuel Johnson. Area(s): Period \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 3313 The Romantic Period
A study of the development of romanticism in France, Germany, and England, with the main emphasis on English writers. Area(s): Period \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 3314 The Victorian Period
A study of the literature of Victorian England, from 1832 to the end of the Nineteenth Century. Area(s): Period Prerequisites: 6 hours of English.

ENGL 3315 The English Novel to 1850
A study of the origins and development of the English novel with emphasis on major novelists.
Area(s): Genre. Prerequisites: 6 hours of English.
ENGL 3316 The English Novel from 1850 to Present
A study of the continuing development and technique of the English novel with emphasis on the major novelists. Area(s): Genre. Prerequisites: 6 hours of English.

ENGL 3320 Development of the American Novel
A study of the American novel from its beginnings to the present, with emphasis on the major novelists. Area(s): Genre \& American. Prerequisites: 6 hours of English.

ENGL 3321 19th-Century American Literature
Nineteenth-Century American Literature will cover the poetry, novels, short stories, and culture of the long nineteenth century (1789 1914). Area(s): Period \& American. Prerequisites: 6 hours of English.

ENGL 3322 Hemingway
A study of Hemingway's short stories and novels, with emphasis on those about Spain and Cuba. Area(s): Single Author \& American. Prerequisites: 6 hours of English.

ENGL 3323 Contemporary American Fiction
Contemporary American Fiction is a study of short fiction and novels by contemporary American authors in the context of American literary history with an emphasis on critical analysis. Area(s): Genre \& American. Prerequisites: 6 hours of English.

ENGL 3324 Poetry
An in-depth study of the art and nature of poetry, with emphasis on sounds, forms, language, and modes of poetry. Area(s): Genre. Prerequisites: 6 hours of English.

ENGL 3325 Literature of the Americas
A comparative study of literary works from North, South, and Central America and/or the Caribbean. Emphasis will be placed on the cultural, historical, and linguistic diversity of the region and on issues of gender, race, identity, colonialism, and trans/nationalism. Area(s): World. Prerequisites: 6 hours of English.

ENGL 3326 Modern Poetry
A study of modern poetry, with emphasis on the works and influences of the major British and American poets of the twentieth century. Area(s): Period. Prerequisites: 6 hours of English.

ENGL 3327 Contemporary Drama
A study of trends and movements in 20th century American, British, and European drama, with emphasis on works of major playwrights. Crosslisted as THTF 3311. Area(s): Genre. Prerequisites: 6 hours of English.

ENGL 3328 The Short Story and the Novella
A study of the development and technique of the short story and novella with emphasis on literary appreciation. Area(s): Genre. Prerequisites: 6 hours of English.

ENGL 3329 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. Area(s): Genre. Prerequisites: 6 hours of English.

ENGL 3330 Dystopian Literature
A critical examination of several key ideas which began to emerge in the nineteenth century and which continue to shape the modern consciousness through what has come to be known as dystopian literature. Area(s): Theme. Prerequisites: 6 hours of English.

ENGL 3332 World Drama
A study of trends and movements in dramatic literature from Ancient Greece through World War I. Emphasis on the works of major playwrights. Crosslisted as THTF 3312. Area(s): World. Prerequisites: 6 hours of English.

ENGL 3333 Multi-Cultural Autobiography
This course will pursue an exploration of the multi-cultural autobiographical subject. Focusing on a variety of autobiographical contexts, this course will consider the question of identity and its representation in personal essays, memoir, and other forms. Area(s): Multicultural. Prerequisites: 6 hours of English.

ENGL 3334 Ethnic Women Writers
This course provides a focus on women's writing from a multicultural perspective. Centered on the study of literary works and literary theory either by or about women, this course offers a global perspective and purposes insights about various approaches to the question of ethnic women and their representation. Area(s): Multicultural. Prerequisites: 6 hours of English.

ENGL 3335 Women's Literature
This course provides a focus on literature by women and the contributions that such literature has made to a variety of cultural and social contexts. The focus will be on feminist perspectives and theories in critical analysis. Area(s): Theme. Prerequisites: 6 hours of English.

ENGL 3336 Latin American Women Writers
Both feminism and women's writing in Latin America has grown out of unique histories, social conditions, and geographical diversity constituting a thinking rooted in Marxism, socialism, and grass roots movements. This course will discuss a number of literary texts by Latin American women as well as some films and historical and theoretical essays. The course is designed to explore how Latin American women's literature and feminism (generally marginalized by Women's Studies courses in the US) challenges the tradition of women's literature and Feminisms in the West and makes us rethink the approaches to gender prioritized in the US. Area(s): World. Prerequisites: 6 hours of English.

ENGL 3337 Children's and Adolescent Literature
Course focuses on children's and young adolescent literatures with various texts aimed at the younger audience. Prerequisites: 6 hours of English.

ENGL 3338 Teaching Literature to Secondary English Language Learners
Introduces the English as a Second Language teacher to theory and methods for teaching literature to English Language Learners and provides the opportunity to practice skills teaching literature to English Language Learners. Prerequisites: 6 hours of English.

ENGL 3340 Survey Rhetorical Theory
This course surveys important rhetorical movements from classical to contemporary theories in order to demonstrate the significant influence theories of rhetoric have and continue to have in the social and political functions of discourse. Prerequisites: 6 hours of English.

ENGL 3341 Alternative Rhetorics
Course considers important contributions to rhetorical and discourse theories that have been overlooked or have been traditionally marginalized in dominant studies of discourse theory. Topic varies, determined by instructor. Prerequisites: 6 hours of English.

ENGL 3342 Technical Communication
Training in writing and presentation of special types of reports often used in engineering and science. Prerequisites: 6 hours of English.

ENGL 3343 Business Communication
This course provides an introduction to the fundamentals of business writing, including memos, reports, and proposals. Prerequisites: 6 hours of English.

ENGL 3344 Advanced Composition
Course offers students the opportunity to develop a sustained writing project to completion. Course covers methods of defining the parameters of a project, analyzing audience and publications, and designing and publishing the project. Prerequisites: 6 hours of English.

ENGL 3345 Studies in Literacy
Course examines the history and theories of literacy, including the critical ways literacy is connected to personal, political, and social forces and ramifications. Prerequisites: 6 hours of English.

ENGL 3346 Writing and Culture
Course provides students the opportunity to analyze and explore the complex ways in which culture shapes and is shaped by writing and other forms of textual representation. Prerequisites: 6 hours of English.

ENGL 3347 Women's Rhetoric and Language
This course provides a focus on rhetoric and language in women's experiences. Related topics will include the contribution women have made to the western rhetorical tradition as well as the consideration of the differences in actual language uses and conventions by and about women. Prerequisites: 6 hours of English.

ENGL 3350 Gallery
A hands-on course on the process of selecting material, editing, and publishing a student literary arts journal. Includes fundamentals of publicity; manuscript processing, selection, and editing; page decision; cover art; printing requirements. Prerequisites: 6 hours of English.

ENGL 3351 Creative Writing I
A introductory study of literary form and techniques, with practice in writing poetry and prose. Prerequisites: 6 hours of English.

ENGL 3352 Creative Non-Fiction
Explores creative nonfiction as a historical genre and offers students the opportunity to create and workshop their own essays. Prerequisites: 6 hours of English.

ENGL 3353 Creative Writing: Cross-Genre Writing
A course exploring the intersections between poetry and prose writing. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 3360 Introduction to Language Studies
Provides an overview of the cross disciplinary nature of language issues from the theoretical contexts of linguistics to political interactions among languages in contact, to applications of language study for various disciplines including education, psychology, sociology, acquisition, learning, literacy, law, medicine, computer technology, etc. Prerequisites: 6 hours of English.

ENGL 3361 Introduction to Descriptive Linguistics
An introduction to the methods of linguistic science with emphasis on problem-solving techniques and the application to specific problems. Prerequisites: 6 hours of English.

ENGL 3362 English Grammar
A study of grammatical concepts with concentration on basic sentence structure, principles of punctuation, and functional grammar. Course designed for, but not limited to, prospective teachers. Prerequisites: 6 hours of English.

ENGL 3370 Language and Culture
Systematic exploration of social aspects of language and language use, including language attitudes, sociolinguistic dynamics of language contact situations, language learning, and the social and linguistic nature of dialects, language variation, and language change. Prerequisites: 6 hours of English.

ENGL 3375 Introduction to English as a Second Language
A study of the process of learning English as a second language. Special attention given to theories, variables, and second language acquisition. Prerequisites: 6 hours of English.

ENGL 3377 Methods and Assessments for English Language Learners
This introductory course focuses on instructional methods and classroom assessments for English Language Learners. The main topics included are instructional development, teaching methods, crosscurricular English, assessment of social and academic language proficiency, content assessment of ELLs, and standards-referencing assessments. Topics will be discussed in the context of state standards of English proficiency Prerequisites: 9 hours of English.

ENGL 4300 Advanced Topics in Literature and Cultural Studies
A course adapted to the study of advanced special topics in literature and/or cultural studies. Course may be offered for open enrollment when topic is selected by the instructor. May be repeated up to three times for credit when topics vary. Area(s): Theme. Prerequisites: 6 hours of English.

ENGL 4301 Topics in Literary Theory
Practical application of theoretical models to literary texts. Particular focus on major figures, schools, and movements in contemporary Literary Theory. Area(s): Theme. Prerequisites: ENGL 3306.

ENGL 4302 Postcolonial Literature and Theory
A critical introduction to the postcolonial literatures of Africa, South Asia, Pacific Oceana, and the Caribbean. The course will analyze how colonialism, indigenous responses to imperialism, and decolonization shape conceptions of the self, the nation, and the world. Emphasis will be placed on issues of identity, race, gender, trans/nationalism, diaspora and globalization in the 20th and 21st centuries. Area(s): World. Prerequisites: 6 hours of English.

ENGL 4307 Topics in Film Theory
A study of film critics' and theorists' responses to film and the various theories that have been developed, including formalism, realism, auteurism, ideology critique, feminism, psychoanalysis, and cultural studies. Crosslisted as ENG 4307.

ENGL 4308 Topics in International Film
Investigates the cultural, political, aesthetic, ideological, historical and theoretical issues of international cinema. May be repeated once when the topic varies. Crosslisted as FILM 4308. Area(s): Theme.

ENGL 4309 Special Topics in Film
Advanced study of the film associated with a particular movement, genre, director, theme, or stylistic technique. May be repeated once when the topic varies. Crosslisted as FILM 4309. Area(s): Theme.

ENGL 4310 Chaucer
A study of selected works of the Fourteenth Century English poet. Area(s): Single Author \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 4311 Shakespeare
A study of representative comedies, histories, and tragedies. Area(s): Single Author \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 4312 Milton
A study of the major poems and selected prose and minor poetry. Area(s): Single Author \& Pre-1800. Prerequisites: 6 hours of English.

ENGL 4313 Topics in Single Author
A study of the works of a single author. Area(s): Single Author \& TBD. Prerequisites: 6 hours of English.

ENGL 4314 Advanced Topics in Contemporary Poetry
Advanced Topics in Contemporary American Poetry is a thematic study of poetry by contemporary American authors with an emphasis on critical analysis. Area(s): Theme \& American. Prerequisites: 6 hours of English.

ENGL 4315 Advanced Topics in World Literature
An intensive exploration of a literary movement, regional tradition, or theme in world literature.
Topics will vary by semester (examples include African literature, the Russian novel, and magical realism). Students will produce an in-depth literary research paper on the course topic. Area(s): Theme \& World. Prerequisites: 6 hours of English.

ENGL 4316 Beat Generation
A survey of American "Beat Generation" writers of the 1950's and 1960's focusing on the works of William S. Burroughs, Jack Kerouac, and Allen Ginsberg, among others. Area(s): Theme \& American. Prerequisites: 6 hours of English.

ENGL 4317 Mexican American Literature
A study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflections in this literature. Area(s): Multicultural. Prerequisites: 6 hours of English.

ENGL 4318 South Texas Literature
A survey of the literary history of South Texas. This course will emphasize, but is not limited to, history, culture, borderlands aesthetics, and canon formation. Area(s): Theme \& American. Prerequisites: 6 hours of English.

ENGL 4319 American Literature of the South
A study of the works of representative writers of the South. Area(s): Theme \& American. Prerequisites: 6 hours of English.

ENGL 4320 Literature and Psychoanalysis
This course pursues an investigation of literary topics from the perspective of psychology and psychic formations with special focus on a variety of issues relating to madness, identity, and culture. Area(s): Theme. Prerequisites: 6 hours of English.

ENGL 4338 Teaching Secondary School Literature
A study of the characteristics of poetry, drama, and fiction, and of the major approaches to these genres with some attention to works encountered in secondary schools. Prerequisites: 6 hours of English.

ENGL 4340 Advanced Specialization Rcls
This course is designed for advanced study of practices, theories, and pedagogies in the disciplines of rhetoric, composition, and/or literacy studies. Examples of topics include but are not limited to digital rhetoric and technology, writing in the professions, rhetorical criticism, cultural anthropology, and language diversity. Class can be repeated for credit when topic changes. Prerequisites: 6 hours of English.

ENGL 4341 Applied Discourse Studies
Offers students experience in the practice and methods of rhetorical and discourse analysis applied to specific topics by instructor. Prerequisites: 6 hours of English.

ENGL 4342 Assessing and Responding to Writing
Study of writing assessment theory and practice with a focus on how to respond to and evaluate student writing and design meaningful assessment strategies for the classroom. Prerequisites: 6 hours of English.

ENGL 4343 Composition Theory and Pedagogy
A study of advanced composition techniques, theories, and methods of teaching. Prerequisites: 6 hours of English.

ENGL 4344 Writing for Lawyers
This course is designed as a practical introduction to the types of writing students will encounter in law school and the legal profession. Students will learn about the various audiences that they will face in the legal profession: clients, opponents, other lawyers, law professors, judges, and the general public. Prerequisites: 6 hours of English.

ENGL 4350 Advanced Creative Writing: Poetry
A workshop course devoted to the craft of poetry. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4351 Advanced Creative Writing: Workshop in Playwriting
An undergraduate course in creative writing, specifically writing plays. Students may learn to write monologues, scenes, 10-minute plays, and one act plays, critique each other's work, read 10-minute plays written by professional playwrights, and produce their own plays on campus. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4352 Advanced Creative Writing: Workshop in Fiction
A workshop course devoted to the craft of fiction writing. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4353 Forms and Techniques in Creative Writing
Studies and practice in poetics, figurative language, metrics, narrative arc, symbol and other formal aspects of poetry and prose. Prerequisites: 6 hours of English.

ENGL 4354 Advanced Creative Writing: Graphic Literature
A workshop devoted to the art of writing graphic literature. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4355 Advanced Creative Writing: Screenwriting
A workshop devoted to the art of writing screenplays. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4356 Advanced Creative Writing: Children's Literature
A workshop devoted to the art of writing children's literature. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4357 Advanced Creative Writing: Creative Writing and Social Action
A course that explores local, border, national, and global issues in various genres of creative writing. Instructors can decide to add Service Learning, MAS, Gender, and Women Studies components. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4358 Advanced Creative Writing: Writing for Performance
A course in writing poetry, testimonio, and dramatic monologue for performance. Prerequisites: ENGL 3351 or permission of instructor.

ENGL 4359 Special Topics in Creative Writing
Offers students the opportunity to explore and practice various genres and subgenres of creative writing as specified by the instructor. Prerequisites: 6 hours of English.

ENGL 4360 Fundamentals of Language Development
A linguistic study of how children develop language skills from age five through adolescence. Covers all systems of language from basic sounds through competence in oral and written communication. Prerequisites: 6 hours of English.

ENGL 4361 Modern English Syntax
Studies in modern English syntax with attention given to investigative methods and findings of contemporary linguistic analysis. Prerequisites: 6 hours of English.

ENGL 4362 Contrastive Grammar
A comparison of English and Spanish grammatical systems with emphasis on substantive and descriptive problems arising from the differences in the systems. Prerequisites: 6 hours of English.

ENGL 4365 History of the English Language
A history of the English language from the Anglo-Saxon period to the present. Prerequisites: 6 hours of English.

ENGL 4370 Introduction to Border Language
This course provides an introduction to language use along the US-Mexico border with special attention given to Texas and Valley speech. Topics to be discussed include bilingualism; English and Spanish varieties of speech; language and literacy acquisition education; social, cultural, and historical influences on border and Valley speech; language attitudes; maintenance/shift; and language planning (policy). Prerequisites: 6 hours of English.

ENGL 4375 Language Acquisition
An analysis of the process of language learning (including first, second, and bilingual), the normal development of speech and language, and the relationship of language to cognitive and social development. Prerequisites: 6 hours of English.

ENGL 4377 Practical Experience in Secondary ESL
Students will apply their knowledge learned through coursework in language concepts, L2 foundations and advocacy, acquisition, methods, culture, and assessment to specific student groups to ensure prospective teacher candidate's skills in using these concepts applied to the ESL classroom. Experiential project is required. Prerequisite: ENGL 3361 and 3375. Prerequisites: ENGL 3361 and ENGL 3375 or permission of instructor.

ENGL 4385 Topics in Border Studies
Intensive exploration of selected literary, theoretical, and rhetorical topics in Border Studies. Particular focus on issues relevant to the intercultural interactions endemic to border sites and transnational borders. Prerequisites: 6 hours of English.

ENGL 4390 Senior English Capstone
A capstone course for senior English majors aimed at integrating students' knowledge of language, literature and cultural studies, rhetoric/composition, creative writing. This course includes a semester long critical inquiry and intensive writing project/paper. The course also provides guidance in assembling the portfolio, professional preparation for work in the field, and/or certification preparation. Prerequisites: 24 hours of advanced English.

ENGL 4395 Advanced Topics in English
A course adapted to the study of advanced special topics in any discipline within the English department. Course may be offered for open enrollment when topic is selected by the instructor. May be repeated up to three times for credit when topics vary. Prerequisites: 6 hours of English.
ENGL 4399 Independent Study
Course is conducted as independent/conference study when topic is selected by student and approved by the instructor. Prerequisites: 6 hours of English and consent of instructor and department chair permission.

## Environmental Studies

ENST 1301 Introduction to Environmental Studies
An introduction to environment-human interactions based on an integrated overview of various perspectives mainly from the social sciences and humanities. This trans disciplinary course for students in any major covers knowledge and concepts about environmental topics, challenges, and solutions.

ENST 4380 Environmental Studies Directed Research
Designed to give students experience in research or in-depth theoretical/empirical readings in a substantive area in Environmental Studies not normally covered within standard courses. Research projects or advanced readings will vary according to student interest and faculty availability.

ENST 4390 Environmental Studies Internship
Extensive practical application of environmental studies knowledge and skills in the larger community. Each student will work closely with one or more professionals working on a project or in a topical area involving one or more environmental or sustainability issues. This will enable students to learn indepth about the specific issue(s) and gain research experience and/or professional skills.

## Film Studies

FILM 3307 Introduction to Film Studies
An introduction to the study of film as a particular literary genre with special emphasis on fictional film, technical film analysis, and cinematic interpretation. Crosslisted as ENG 3307.

FILM 3308 Literature and Film Adaptation
A study of film adaptation of literary works with a special focus on the different types of adaptations, the level of fidelity, and the historical and technical differences between the two artistic mediums. Crosslisted as ENG 3308.

FILM 3325 History and Significance of Motion Picture
Historical survey of motion pictures from 1890s to the present. Students will view, study and review major motion pictures from various periods, noting important periods, styles, genres and movements in the dramatic film (including foreign films and TV).

FILM 3326 American Film Genre
This course will offer an overview of the fourteen basic American film genres. Students will study their evolution from the silent days to the present and examine how commercial considerations have influence their development in both positive and negative terms. Crosslisted as THTF 3316 and ENGL 3326.

FILM 3331 Philosophy and Film
This course examines philosophical issues through the lens of film. Possible topics include image and reality, representation and culture, beauty, politics, morality, and aesthetic theory. Enrollment cap: 25 students.

FILM 3395 Movies and Politics
This course analyzes the way movies have examined the political and social impacts of various issues. The course includes such topics as the relationship between politics, corruption and power; the bases of discrimination; the idea of community; and the tension between institutional authority and individual autonomy. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

FILM 4307 Topics in Film Theory
A study of film critics' and theorists' responses to film and the various theories that have been developed, including formalism, realism, auteurism, ideology critique, feminism, psychoanalysis, and cultural studies. Crosslisted as ENG 4307.

FILM 4308 Topics in International Film
Investigates the cultural, political, aesthetic, ideological, historical and theoretical issues of international cinema. May be repeated once when the topic varies. Crosslisted as ENG 4308.

FILM 4309 Special Topics in Film
Advanced study of the film associated with a particular movement, genre, director, theme, or stylistic technique. May be repeated once when the topic varies. Crosslisted as ENG 4309.

FILM 4363 History of Mexican Cinema
This course examines the cultural and commercial development of the Mexican film industry. Both texts as well as films are used to understand this art and the extent to which it reflects values and issues of importance to Mexicans. May be counted as History or Film Studies course in satisfying degree requirements. Prerequisites: HIST 3300.

## Foreign Language

FORL 1391 Elementary Studies in Foreign Languages I
A beginning study of foreign languages of importance to the region.
FORL 1392 Elementary Studies in Foreign Languages II
A continuation of study of foreign languages of importance to the region. Prerequisites: FORL 1391.

French

> FREN 1311 Beginning French I
> A study of the essentials of French grammar, pronunciation, elementary conversation and prose reading.
> FREN 1312 Beginning French II
> A continuation of FREN 1311 . Prerequisites: FREN 1311.
> FREN 1313 Beginning French I and Business
> An introduction to the business environment in France and Francophone countries, focusing on relevant business topics, as well as complex issues in regard to conducting business in France and Western Europe. Students will develop basic language skills In French necessary for elementary communication in the workplace, by acquiring both accurate vocabulary and grammar mastery.

FREN 1315 Beginning French I and French Music
A course designed for students studying music. The curriculum consists of basic language skills in French in light of the rich musical traditions from France and Francophone countries in folk, opera, and classical music, among others. Mastery of French pronunciation is stressed as well as basic French vocabulary pertaining to music.

FREN 2311 Intermediate French I
Grammar review, conversation and writing practice based on selected literary and cultural readings. An emphasis on usage of different modes and tenses, as well as complex syntax. Prerequisites: FREN 1312.

FREN 2312 Intermediate French II
Grammar review, conversation and writing practice based on selected literary and cultural readings. An emphasis on usage of different modes and tenses, as well as complex syntax. Prerequisites: FREN 2311.

FREN 2323 Introduction to French Cinema in English
This course (taught in English) focuses on the technological and artistic roots of cinema and traces the evolution of the art from silent and surrealist movies to the New Wave and the Post-New Wave. The course also revolves around the fundamental question of what renders French films different from Hollywood film. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

FREN 2353 Introduction to French Culture and Civilization This course (taught in English) traces the history of Western thinking from the Romans to the present, by focusing on cultural icons in Paris, such as the Notre Dame, the Eiffel Tower, and Versailles, among others and by exploring the philosophical, artistic, and historical content they contain and convey. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

FREN 2391 Introduction to French Literature and Philosophy
This course (taught in English) introduces students to major philosophical trends in French literature since the French Enlightenment to the present. Literary works from Voltaire, Rousseau, Zola, Gide, Camus, Sartre and Le ClOzio will be studied, while philosophical issues of morality, human action, and ethical responsibility will be explored. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

FREN 3321 Advanced French Grammar I
Practice in writing expository, narrative and descriptive prose. Prerequisites: FREN 2312.

FREN 3322 Advanced French Grammar II
Practice in writing critical appreciations of selected literary works. Prerequisites: FREN 3321.
FREN 3323 Business French
French for international business majors. A French practice in all areas: procedures, job and business cultures from French and Francophone countries. Prerequisites: FREN 3321.

FREN 3330 French-English Translation
This course is a basic orientation in the theory and practice of translating a text from French into English (direct translation), including consideration of both cultural and morpho-syntactical problems. Prerequisites: FREN 3321.

FREN 4120 French Culture on Location
Special programs designed by UTRGV French faculty and taught in France or French-speaking countries. The course will familiarize students with specific aspects of the host country's culture. Students will be immersed in a French-speaking environment and will partake in numerous activities such as lectures, visits to museums and monuments, etc., to strengthen their language skills and develop their knowledge of Francophone culture. The course may be repeated if the location and topic changes. Prerequisites: FREN 1311.

FREN 4321 French/Francophone Literature
This course introduces literature through literary genres (drama, poetry, novels or essays). Students will have the opportunity to study in depth the evolution of a genre as well as the literary devices used by writers in the production of that genre. This course can be repeated according to the genre for study. Course taught in French. Prerequisites: FREN 3321 or equivalent ( 3000 level).

FREN 4322 Survey of French Literature I
This course covers a survey of French literature from the medieval period until the Enlightenment. It introduces students to the foundations of French and European thought and literatures. Course taught in French. Cannot be repeated. Prerequisites: FREN 3321 or equivalent ( 3000 level).

## FREN 4323 French for Medical \& Legal Professions

This course introduces French practice through different professions, such as law and medical. Students will have the opportunity to practice in depth the language specialized as well as the procedures used by different institutions in their areas. Course taught in French. Prerequisites: FREN 3321 or equivalent ( 3000 level).

FREN 4324 Introduction to French Culture and Civilization I in French
A study of French Culture and Civilization from the Roman conquest of Gaul by Julius Caesar to the French Revolution of 1789. Prerequisites: FREN 3321.

FREN 4325 Introduction to French Culture and Civilization II in French
A study of French Culture and Civilization from the French Revolution of 1789 to the present.
Prerequisites: FREN 3321.
FREN 4326 Survey of French Literature II
This course offers an overview of French Literature. It introduces students to masterpieces of the 19th, 20th and 21st centuries. Course taught in French. Cannot be repeated. Prerequisites: FREN 3321.

FREN 4330 English-French Translation
This course is a basic orientation in the theory and practice of translating a text from English into French (inverse translation), including consideration of both cultural and morph-syntactical problems, as well as a review of advanced grammar issues and composition in French. Prerequisites: FREN 3330, FREN 3321, ENGL 1301 (or ENGL 1387).

FREN 4331 Theater Practice in French
This course will cover a brief history of French and European theater from its classical origins to today's international trends. Students will read several excerpts of French theater and discuss different possibilities of interpretations and performance techniques (phonetics, tongue twisters, breathing techniques, etc.). This course familiarizes students with an important cultural component of French and European theater traditions and increases students' listening and speaking skills to a nearer-native speaking fluency. Students will also stage, perform, and present their work. Prerequisites: FREN 3321.

FREN 4339 Special Topics in French
This course can cover a wide range of topics associated with French and Francophone Cultures. May be repeated up to three times. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388); FREN 1311 and FREN 1312.

FREN 4360 Seminar in French and Francophone Studies
Seminar in French and Francophone Studies-Topics vary, but allow for detailed study of subjects in French and Francophone literature (including World Literatures) and culture. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388) or consent of instructor; FREN 1311 and 1312.

## German

GERM 1311 Beginning German I
A study of the essentials of German grammar, pronunciation, elementary conversation, and prose editing.

GERM 1312 Beginning German II
A continuation of GERM 1311, focusing on German grammar, pronunciation, elementary conversation, and prose editing. Prerequisites: GERM 1311 with a grade of 'C' or better.

GERM 2311 Intermediate German I
A study of more complex patterns of German grammar and prose reading to facilitate oral and written communication. Prerequisites: GERM 1312 with a grade of 'C' or better.

GERM 2312 Intermediate German II
A study of more complex patterns of German grammar and prose reading to facilitate oral and written communication. Prerequisites: GERM 2311 with a grade of ' $C$ ' or better.

## Global Security Studies

GSST 4300 Global Security
As a comprehensive introduction of the politics of global security, this course explores the evolution of security concepts worldwide, addresses a wide range of major international Issues with global implications, as well as identifies and debates about possible measures to address and prevent these problems.

GSST 4305 Open Source Research
Students learn advanced Internet research strategies, methods, and approaches for using foreign source research.

GSST 4310 Interdisciplinary Research and Analysis
This course provides basic knowledge and skills needed to undertake research-based problem solving. It is an introduction to empirical research and analysis as used in behavioral, intelligence, and security settings.

GSST 4315 Special Topics
From time to time new issues appear in the field of Global Security students require additional courses to complete their curriculum, or other circumstances warrant a full course on a specific topic.

GSST 4320 Practicum in Global Security
This course integrates the broad and specialty knowledge covered in the interdisciplinary courses and the preceding core courses by working in teams to an applied case problem involving a current security issues.

## History

HIST 1301 U.S. History I
An integration of social, political, and economic history of the United States with attention directed to geography and its influences. The approach is by problems that move chronologically from the earliest colonial period through the Civil War. Open to freshmen who enter with a credit in American history from high school.

HIST 1302 U.S. History II
An integration of social, economic, and political history of the United States with attention to geographical influences. The approach is by problems that move chronologically from Reconstruction to the present. Open to freshmen who enter with a credit in American history from high school.

HIST 1387 U.S. History I (Honors)
An integration of social, political, and economic history of the United States with attention directed to geography and its influences. The approach is by problems which move chronologically from the earliest colonial period through the Civil War. Prerequisites: Admission to Honors program.

HIST 1388 U.S. History II (Honors)
An integration of social, economic, and political history of the United States with attention to the geographical influences. The approach is by problems that move chronologically from Reconstruction to the present. Prerequisites: Admission to Honors program.

HIST 2300 The Historian's Craft
This course introduces history majors to the ideas and methods that historians use in their research, writing, and teaching.

HIST 2321 World History I
To better understand and live in a global environment, this survey of world history traces the increasingly complex development and interaction of human societies from the hunter-gatherers of the Paleolithic Age to the first globalization in the 16th century. Readings, discussion, lectures, and visual material will emphasize the human experience in a comparative analysis of economic, social, political, and cultural systems around the globe.

HIST 2322 World History II
To better understand and live in a global environment, this survey of world history investigates the development and interaction of human societies from c. 1500 to the present. The course emphasizes a comparative analysis of how different societies developed political, social, economic, and cultural systems around the globe and how those societies have influenced each other and become interconnected.

HIST 3300 Historiography and Methods
This course will acquaint students with the various schools of history, famous scholars and common debates in the field of history. The class will also provide instruction in the various tools and research methods that are utilized by historians. Reconstruction, and the further extension of industrialization.

HIST 3301 World History Studies
A comprehensive survey of social, economic, political, cultural and geographical factors influencing the course of world history. Emphasis will be on thematic and content material. Prerequisites: HIST 3300.

HIST 3302 Geography and Environment in History
This class examines the effects of the environment and geography on history. The course will focus on how humanity has reacted to the environment and influenced ecosystems, and how different cultures have interacted with similar environments. The course will also examine trade routes, the effects of disease, the connections between resources, and the rise of civilizations and empires. Prerequisites: HIST 3300.

HIST 3303 Classical and Post-Classical World, 500 BCE to 1450
This course examines the political, economic, social, and cultural developments that define the classical and post-classical era. Prerequisites: HIST 3300.

HIST 3304 First Globalization, 1450-1750
The course examines the significant impact of territorial expansions by European and Asian powers through the exchanges and interconnection of people, ideas, diseases, and cultures. Prerequisites: HIST 3300.

HIST 3305 The Modern World, 1750-present
This course examines the technological political and social advances that accelerated and increased the exchange and interconnection of people, ideas, goods, diseases, and cultures. Prerequisites: HIST 3300.

HIST 3306 Great Discoveries in Archaeology and History
This course examines many of the most famous archaeological discoveries of the past century that have shed light on humans and their culture, human origins, world history, and the development of human behavior. Popular assumptions about these finds will be evaluated in light of current anthropological theories and within the historical, context of the era in which they were found in order to discern a more accurate knowledge of the past. Prerequisites: HIST 3300.

HIST 3307 Women in History
This course will introduce students to the growing and diverse field of women's and gender history. It will examine the experiences, roles, and contributions of women in politics, economics, labor, and culture. The time period, the focus and the geographical area will change according to the instructor. Suggested topics include Mexican-American/Chicana history and Latina history. Prerequisites: HIST 3300.

HIST 3320 Colonial America to 1763
This course is a study of American colonial history from the founding of the first colony through the French and Indian War. Prerequisites: HIST 3300.

HIST 3321 The United States, Revolution, and the New Nation, 1763-1814
A study of the development of the American nation from the French and Indian War through the War of 1812. Prerequisites: HIST 3300.

HIST 3322 Rise of the American Nation, 1814-1848
A study of the American nation from the War of 1812 through the transformation of American society by the Jacksonian Era, westward expansion, and Mexican War. Prerequisites: HIST 3300.

HIST 3323 Era of Sectional Conflict, 1848-1877
A study of United States history from 1848 to 1877 with emphasis on westward expansionism, sectionalism, the breakdown of American political parties, Civil War, and Reconstruction. Prerequisites: HIST 3300.

HIST 3324 The Emergence of Modern America, 1877-1929
A detailed study of the process and effects of industrialization, immigration, and social reforms during the Progressive Era. The course will highlight government policy toward business and society during this pivotal period in American history, ending with the advent of mass consumerism in the 1920s. Prerequisites: HIST 3300.

HIST 3325 Twentieth Century America
A study of the history of the United States from World War I to the present with emphasis on domestic and foreign affairs and in their relationship to and effect on each other. Prerequisites: HIST 3300.

HIST 3326 Indians of North America
To explore the diverse nature of Native American cultures at the time of European contact. In this class students will see how ethnographers, ethno historians, and historians have recorded the lifeways of contemporary aboriginal societies and have reconstructed their prehistoric past. Consideration will be given to the impact of European contact and how that has altered Western images of the North American Indian. Women and men will be equally considered in order to give a balanced view of the richness of these cultures. Prerequisites: HIST 3300.

HIST 3327 The American Military Experience
The American military experience will be examined from the colonial period to the present. The course will examine not only the operational history of the American military but also the causes and consequences of war and the role of the military in American society. Prerequisites: HIST 3300.

HIST 3328 History of the American Presidency
This course will examine the evolution of the presidency and executive power from Washington's inauguration until the present. In addition to surveying the evolution of presidential authority, it will also examine how certain figures have reshaped executive power; how the media has transformed the role of the presidency and presidential accountability; and how information technology has altered the relationship between the president and her/his constituents. Individual instructors may choose to focus a portion of the course on one or more individual presidents while retaining an overall comparative, analytical element. Prerequisites: HIST 3300.

Relation of law to main currents in political, social, and economic thought in the United States from the establishment of colonial legislatures to the present; appraisal of the social function of constitution-making processes, the legislature, the courts, the bar, and the executive branch in U.S. society; and exploration of the interactions between common and statute law and exceptional constitutional issues like those relating to Native Americans. Prerequisites: HIST 3300.

HIST 3330 The U.S. as a World Power
This course is designed for students seeking a certification in teaching. It focuses on the diplomatic history of the United States from the rise of imperialism through two World wars and the Cold War. America's role in international conflicts and the relationship between individuals and specific events and will be a major focus of the class. The history of trade and cultural exchanges during this period will also receive attention. Prerequisites: HIST 3300.
HIST 3331 History of American Religious Traditions
This course traces the diversity of religious traditions in North America from the colonial era to the present. Specific topics will include Native American religious, immigrant religious traditions, new and syncretic traditions in the United States, American secularization, and political and constitutional issues relating to religions. Emphasis will be on the history of religious development and not on specific theologies. Prerequisites: HIST 3300.

HIST 3332 Mexican-American History
An interpretation of the historical heritage of the Mexican-American in the United States. Prerequisites: HIST 3300.

HIST 3333 Texas History
A survey of the history of Texas from indigenous period to present. Prerequisites: HIST 3300.
HIST 3334 History of the American West
This course is an interdisciplinary survey of racial, ethnic, class and gender relations in American Western history. Questions examined include: How have different groups shaped the historical development of the West? What role has nations of race, ethnicity, class, and gender played in this development? How does contemporary scholarship challenge idealized perceptions of the West? What has been the role of the media journalism, booster sheets, literature, art, and film-in shaping past, and present views of the West? Prerequisites: HIST 3300.

HIST 3335 American Environmental History
American Environmental History examines the relationship between human beings and the natural environment from first contact through the 21st century. Specific topics in this class include environmental change and degradation, concepts of the environment, resource conservation and extraction, and the history of environmental policies and activism. Prerequisites: HIST 3300.

HIST 3340 Medieval Europe
This course will introduce students to the major developments in European History from the late antique period of Rome until 1300 . Emphasis is placed on key political, social, economic, and cultural events of medieval Europe such as the rise of the Carolingian Empire, external attacks, feudalism and manorialism, the Crusades, and the rise of European states. The class will also cover the importance of contacts with the non-European world through trade, migration, and diffusion. Prerequisites: HIST 3300.

HIST 3341 Early Modern Europe
A lecture course on early modern Europe. Basic themes concerning the history of early modern Europe starting with the Black Death of the late Middle Ages and ending with the close of the Napoleonic age will be covered. Historical themes for this course include the Renaissance, Reformation, Wars of Religion, Scientific Revolution, Enlightenment, French Revolution, and Napoleonic era. Prerequisites: HIST 3300.

HIST 3342 Revolutionary Europe, 1789-1850
A study of Europe of this period with emphasis on the growth of democratic institutions from the beginning of the French Revolution through the Revolution of 1848. Prerequisites: HIST 3300.

HIST 3343 Europe's Age of Imperialism, 1850-1919
A study of European history through the period of growing nationalism and imperialism leading to World War I. Prerequisites: HIST 3300.

HIST 3344 Contemporary Europe, 1919 to the Present
A study of the causes of World War II, its resulting problems and current trends. Prerequisites: HIST 3300.

HIST 3345 History of England to 1686
English history from earliest times through the period of the Stuart kings. Emphasis will be given to the factors that have influenced the development of British and American institutions. Prerequisites: HIST 3300.

HIST 3346 History of England after 1686
The period of the Glorious Revolution to the British Empire and commonwealth of nations. Prerequisites: HIST 3300.

HIST 3347 History of Spain
The historical development of the Spanish nation from earliest times to the present. Emphasis will be given to the evolution of the political, economic, and social institutions that are important to the conquest and colonization of the Americas. Prerequisites: HIST 3300.
HIST 3360 Pre-Conquest Mexico and Central America
In this course, students will study the environmental, political, social, religious, and cultural history of the indigenous peoples of Mexican and Central America from the emergence of urban civilization at San Lorenzo to the moment when the first Europeans arrive on the mainland. Prerequisites: HIST 3300.

HIST 3361 Colonial Latin America
A study of the establishment of Spanish dominion; geography and natural resources; institutional and social development; cultural aspects and contribution. Prerequisites: HIST 3300.

HIST 3362 Modern Latin America
This course is a study of the political and cultural trends of the Latin American nations since independence. Prerequisites: HIST 3300.

HIST 3363 Mexico from Pre-Conquest to the Present
This course examines the broad themes and major events of Mexican history from the first settled communities of the indigenous peoples to the present. Four areas will be studied: pre-conquest, colonial, national, and modern. Primary emphasis will be placed on the modern period. Prerequisites: HIST 3300.

HIST 3364 Mexico through Independence
This course surveys Mexican history with emphasis on pre-Colombian cultures, the Conquest, Spanish colonial institutions, and independence. Prerequisites: HIST 3300.

HIST $\mathbf{3 3 6 5}$ Mexico since Independence
This course surveys the major developments in nineteenth and twentieth century Mexico with emphasis on the early national period, the Reform, the Porfiriato, and the Revolution. Prerequisites: HIST 3300.

HIST 3366 Latin American Women in the Modern Era
In this course, students will examine the changes that have taken place in the conceptualization, gendered roles, and overall status of women in Latin American societies from 1910 to the present. Major focuses will include the heritage of gender within both Hispanic and Indigenous cultural milieus, the factors contributing to changes in traditional roles during the early and middle twentieth century, and the changes still in progress. In addition to traditional texts, the course would include work by major women authors such as Isabel Allende and Elena Poniatowska. Prerequisites: HIST 3300.

HIST 3367 Women in Colonial Latin America
This course will introduce key texts in the history of women in Latin America from pre-conquest times to the independence period. The aim of this course is to study the presence and participation of women in history and to provide the tolls for analyzing primary sources, posing important questions in the field, and critically thinking about historiographical issues. The focus and geographical area will change according to the specialty of the instructor. Prerequisites: HIST 3300.

HIST 3370 Early Middle East History
This course concentrates on the history of the Middle East from the 7th century to 1798. Topics covered include the basic tenets of Islam and its spread up to the 19th century including the Muslim kingdoms of Spain and Africa and the Umayyad, Abbasid, and Ottoman Empires. Islamic approaches to modern concept such as human rights, nationalism, and democracy will also be covered. Prerequisites: HIST 3300.

HIST 3371 Modern Middle Eastern History
This course concentrates on the history of the Middle East from 1798 to present. The course focuses on the historical origins of modern socio-political issues in the Middle East such as the Arab-Israeli Conflict, the Kurdish Problem, oil and water issues, nationalism, the rise of political Islam, and other regional issues. Prerequisites: HIST 3300.

HIST 3372 Introduction to East Asian History I
A survey of the political and cultural history of East Asia through 1600. We will examine the historical development of the states and cultures of the modern nations of China, Korea and Japan, as well as the interactions between these cultures from the emergence of agricultural societies through the 17th century and the first contacts with Western European societies. Prerequisites: HIST 3300.

HIST 3373 Introduction to East Asian History II
A thorough survey of the modern history of China, Korea and Japan beginning from roughly 1600 and focusing on the 19th and 20th centuries. We will analyze the tensions between East and West and tradition and modernity that have driven the history of East Asian societies. Topics covered include: the transformation and legacy of traditional Asian cultures, Imperialism in Asia, modernization and revolution, the history of Communism, WWII and the Pacific War, decolonization and the Cold War in Asia, the East Asian economic miracle, and the Rise of China. Prerequisites: HIST 3300.

HIST 3374 History of the Ottoman Empire
The course will focus on the history, civilization, and historiography of the Ottoman Empire. Along with its key economic, political and social developments, the course will cover the structure of this multi-ethnic and multi-religious empire, its various systems over the centuries, and the Ottoman cultural and political influence on Europe. Prerequisites: HIST 3300.

HIST 3375 History of Modern Japan
A political, economic and cultural history of Japan from the early modern period to the present. Topics of emphasis include the modern legacy of Japanese cultural traditions, the creation of the modern Japanese state, the history of Japanese imperialism, and Japan's relations with the rest of Asia, and the post-WWII relationship with the United States. Prerequisites: HIST 3300.

HIST 3376 History of Modern China
A political, economic and cultural history of China from the late imperial period to the present. Topics of emphasis include the Opium War and the impact of Western Imperialism, the history of the Chinese revolution, the People's Republic of China in the Cold War, Chinese economic reform, and the contemporary Rise of China. Prerequisites: HIST 3300.

HIST 4300 The Atlantic World
This course situates British colonization in a circum-Atlantic context that allows for comparison and contrast with Spanish, French, Dutch, and Portuguese colonies. Key topics covered will include the European background to colonization, motives for Atlantic exploration and development, relations with non-European peoples, the rise of slavery and the plantation complex, Atlantic trading networks, and conflict and warfare in an Atlantic context. The course end with the Seven Years War and its consequences for Atlantic America. Prerequisites: HIST 3300.

HIST 4301 Maritime Archaeology and History
Maritime archaeology is a profession combining traditional fields and extensive practical experience. Anthropology, history, archaeology, geography, and related sciences provide the theoretical and practical methodology with which maritime sites are found, tested, and interpreted. This course is designed to provide students with the field's background, range, and relevant examples involving both history and archaeology. Prerequisites: HIST 3300.

HIST 4302 Comparative Colonialism
This course covers Spanish and Native American interactions in what is today the Southeastern United States, Texas, and California. Emphasis will be placed on how the social and natural environment was changed in these areas. Examination of these changes will be done through the documentary and archaeological records. Prerequisites: HIST 3300.

HIST 4303 Public Health in the Americas
This course increases students' understanding of health and society within the Americas. The course examines the social, cultural, and institutional history of the construction of disease, medical practice, public health, and policy in the Americas in a comparative framework with the United States. As an advanced history class, students will gain and practice skills in writing, reading, and critical thinking. Prerequisites: HIST 3300.

HIST 4304 US-Latin American Relations
The development of a distinctive system of international relations between the nations of Latin America and the United States. Prerequisites: HIST 3300.

HIST 4305 History of World Wars I and II
A history of the causes, course, and outcomes of the two World Wars. Prerequisites: HIST 3300.

HIST 4306 History of the Cold War
This course will focus on the global struggle between super powers and nations drawn into the conflict from 1945-1991. Ideological differences, proxy wars, economic relations, and attempts to negotiate a peaceful resolutions to conflicts will all be addressed in the class. Students will be exposed to these issues from a multicultural and multinational perspective. Prerequisites: HIST 3300.

HIST 4320 Atlantic America
The course deals with relations between the British New World colonies and then the United States and the Atlantic trading world from the Treaty of Paris in 1763 through the Treaty of Ghent in 1814 and its direct aftermath. A key focus will be on the development of the Independence movement in the British mainland colonies, the War for Independence, and then the formation of the United States as an independent nation. Prerequisites: HIST 3300.

HIST 4321 The Spanish Southwest to 1821
A study of the northward colonization of Mexico with emphasis on institutions and the settlement of the interior provinces of Texas, New Mexico, Arizona, and California. Prerequisites: HIST 3300.

HIST 4322 The American Southwest after 1821
The American penetration of Texas and the war with Mexico; subjugation of the Indians; extension of mining, railroad, cattle industry, and farming across the Southwest; and the transition from raw frontier to modern states of the Southwest. Prerequisites: HIST 3300.

HIST 4323 History of the Old South
This course covers the history of the American South from the period prior to European exploration/colonization through the Secession Crisis and the beginning of the Civil War. Themes include the interaction of Native American and European societies; competition between European empires for territory; the introduction of unfree labor; the development of African American slavery; the role of women in southern society; the economics of staple-crop agriculture; and the participation of southerners in politics. Prerequisites: HIST 3300.

HIST 4324 History of the New South since 1877
This course investigates the competing and contradictory meanings of the New South, a concept coined by southern boosters in the 1800s to describe efforts to develop an industrial economy, and one subsequently applied to successive periods of southern history. Students will grapple with the major ideas, leaders, events, and social movements which shaped this period. Specifically, they will familiarize themselves with such issues as sharecropping industrialization, class conflict, racial violence, political movements, Jim Crow, reform, urbanization, and rural-urban conflict. Prerequisites: HIST 3300.

HIST 4325 The United States, War, Prosperity, and Depression, 1917-1945
This course is a study of the United States with emphasis on World War I, the 1920s, 1930s, and World War II, with emphasis on domestic and foreign affairs in their relationship to and effect on each other. Prerequisites: HIST 3300.

HIST 4326 The United States since 1945
This course surveys domestic, global, social, and racial issues in United States history from World War II through present day. Prerequisites: HIST 3300.

HIST 4327 History of the American Family and Childhood
A synthesis of American history focusing on the changing role of family and the transitional stages of childhood. This class will discuss immigration, family economy and consumption, and the dynamic forms of social welfare that grew in response to family and childhood need. Additionally students will participate in learning about personal family history and how their own family may confirm or diverge from trends. Material culture, race, and gender are vital aspects of this course. Major events in American history and in the life cycle of families, such as but not limited to birth, death, marriage, and divorce will all be discussed in their historical contexts. Prerequisites: HIST 3300.

HIST 4328 Gender in the American West
This course is an interdisciplinary survey of women and gender relations in American Western history. The course focuses on the experiences of both women and men in the American West from the initial contact of Europeans with Native Americans to the twentieth century. We will read primary and secondary materials related to the subject of gender construction in this highly contested region. A number of key themes will be explored including gender ideologies, race, class, multi-cultural interaction, ethnicities, work roles and community building, politics, moral reform, and oral history. Prerequisites: HIST 3300.

HIST 4329 Black History and Thought
This course focuses on black history and thought from Emancipation through the conservative backflash of the 1970s. It addresses issues such as suffrage, racist and sexual violence, Jim Crow, black images, science and medicine, resistance, class division, and cultural expression. Although focusing on social history, the course interweaves the intellectual thought of black thinkers from the nineteenth and twentieth century. Finally, it stresses geography, comparing black experiences in rural and urban areas, and throughout the country. Prerequisites: HIST 3300.

HIST 4330 Race and Ethnicity in America
This course examines racial and ethnic formation and competition in the U.S. from the midnineteenth century until the 1960s, focusing on overlapping Asian American, black, white, Hispanic, and Native histories. The course addresses issues such as scientific racism, ethnic cooperation and conflict, inter-racial sexuality, labor competition, immigration policies, popular images and representations, and grassroots and organized resistance. In addition, it focuses on geography, examining distinctions between urban and rural contexts and across regions. Prerequisites: HIST 3300.

HIST 4331 Mexican-American Civil Rights
This course will examine the history of Mexican-American civil rights from the Wagner Act (1935) to the Civil Rights Act (1964). Students will evaluate the institutions, organizations, and people who fought for the equality and integration of Mexican Americans in the American Southwest. We will assess the different roles that these historical actors played in the struggle for citizenship rights against the larger backdrop of the Great Depression, World War II and Cold War eras. Prerequisites: HIST 3300.

HIST 4332 Chicano Movement
This course will trace the history of Chicano student activism from the 1960s antiwar movement to the 1970s and 1980s movements to create Chicano studies majors and departments in universities and colleges. Students will examine the ideas and strategies adopted by grass-roots activists and bureaucratic leaders in their struggles to integrate the Chicano community into American society and politics. Prerequisites: HIST 3300.

## HIST 4340 Ancient Greek History

This course will explore the major political, social, economic, and cultural developments of Ancient Greece up to its absorption into the Roman Empire. Emphasis will be placed on the differences and similarities between the Archaic, Classical and Hellenistic Ages. Using primary documents, the class will develop reasonable criteria for the acceptability of this evidence and explore alternative theories used to explain this period. Prerequisites: HIST 3300.

HIST 4341 Ancient Roman History
This course will explore the major political, social, economic, and cultural developments of Republican and Imperial Rome. Using primary documents, the class will develop reasonable criteria for the acceptability of this evidence and explore alternative theories used to explain the history of this empire. Emphasis will be placed on the reinterpretations of the Fall of Rome. Prerequisites: HIST 3300.

HIST 4342 The Renaissance and Reformation, 1300-1650
A study of the political, social, and cultural developments of Western Europe from the decline of the medieval system, through the age of the new monarchies, with emphasis on France, Germany, and Italy. Prerequisites: HIST 3300.

HIST 4343 Russia since 1905
Russia from the precursors of the Revolution through the Revolutions of 1905 and 1917 and the development of the Soviet regime to current trends. Prerequisites: HIST 3300.

HIST 4344 Absolutism and Enlightenment in Europe, 1650-1789
Traces the development of the absolutist state, benevolent despotism, and the intellectual and scientific trends of the Enlightenment. Prerequisites: HIST 3300.

HIST 4360 Mexico's First Century as an Independent Republic
A study of the political, social, and economic development of Mexico from the independence movement to the Revolution of 1910. A study of the problems of Mexico and the various distinct eras of its first century as a republic. Prerequisites: HIST 3300.

HIST 4361 Contemporary Mexico
A study of the nature and impact of the social, political, and economic transformations since the revolutionary epoch of 1910-1917; greatest emphasis on the contemporary factors that have made Mexico's experience unique. Prerequisites: HIST 3300.

HIST 4362 History of Mexican Culture
A study of the Mexican people, including development of their social institutions, thinking, concepts, attitudes, values, reactions, and sensitivities. Prerequisites: HIST 3300.

HIST 4363 History of Mexican Cinema
This course examines the cultural and commercial development of the Mexican film industry. Both texts as well as films are used to understand this art and the extent to which it reflects values and issues of importance to Mexicans. May be counted as History or Film Studies course in satisfying degree requirements. Prerequisites: HIST 3300.

HIST 4364 Brazil after Independence
A study of Brazil as an empire and a republic with emphasis on the social, geographic, and political factors that make it a unique nation in the Western hemisphere. Prerequisites: HIST 3300.

HIST 4365 Spanish South America since Independence
The historical development of the major Hispanic South American republics; general trends in their social, economic, and political growth. Prerequisites: HIST 3300.

HIST 4366 The Caribbean and Central America
A study of the 19th century efforts of these nations to emerge as separate entities and an evaluation of their 20th century experiences. Prerequisites: HIST 3300.

HIST 4390 Special Topics in World History
A study of selected topics in history, including comparative history, philosophies of history, and regions outside of Europe and the Americas. Topics are varied according to availability of faculty and student interest. Prerequisites: HIST 3300.

HIST 4391 Special Topics in European History
A study of selected topics in European history. Topics are varied according to availability of faculty and student interest. Prerequisites: HIST 3300.

HIST 4392 Special Topics in US History
A study of selected topics in the history of the United States. Topics are varied according to availability of faculty and student interest. Course can be repeated once for credit as topics change. Prerequisites: HIST 3300.

HIST 4393 Special Topics in Latin American History
A study of selected topics in Latin American history. Topics are varied according to availability of faculty and student interest. Course can be repeated once for credit as topics change. Prerequisites: HIST 3300.

HIST 4394 Special Topics in Asian and Middle Eastern History
A study of selected topics in Asian and Middle Eastern history. Topics are varied according to availability of faculty and student interest. Course can be repeated once for credit as topics change. Prerequisites: HIST 3300.

HIST 4399 Senior Research Seminar
This capstone reinforces all previously acquired historical skills and culminates in a research project in the area of expertise of the instructor. Prerequisites: HIST 3300 and 15 advanced hours in History.

## Interdisciplinary Studies

INDS 2371 Cross-Cultural Mediation
This course will address such topics as: language and verbal communication across cultures; nonverbal communication; cultural influences on the expression and perception of emotions; identity and intergroup communication; communication in intercultural relationships; and adapting to an unfamiliar culture. The objective of this course is to integrate theory and practice; the classroom experience will combine lectures, discussions, small group activities, written assignments, public speeches, and out-of-class observations. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

INDS 2381 World Literature and Global Health
This course introduces students to contemporary authors from throughout the world who explore in their short stories issues such as chronic pain, terminal illnesses, aging, substance abuse, and mental illnesses. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

INDS 2382 Narratives of Illness
This course examines fictional and factual narratives of illness from both the perspective of health care providers and patients and in light of theories of illness. Prerequisites: ENGL 1301 (or ENGL 1387) and ENGL 1302 (or ENGL 1388).

## Interdisciplinary Studies

INTS 4315 Discovering the Rio Grande Valley
This course will be taught by a team of faculty in Anthropology, History, Geology, and Biology who will cover in-depth content of the Rio Grande Valley from various disciplinary points of view. This class is part of the CHAPS (Community Historic Archeology Project with the Schools) program that focuses on primary field research. Students will examine land titles/abstracts, study the geology of the region, conduct oral histories, and research the flora and fauna of this area. The course can be repeated once for credit.

## Italian

ITAL 1311 Beginning Italian I
A course designed to develop fundamental skills in listening comprehension, speaking, reading, and writing, emphasizing conversation, vocabulary acquisition, reading, composition, and culture.

ITAL 1312 Beginning Italian II
A continuation of Italian 1311. Prerequisites: ITAL 1311 with a grade of ' C ' or better or consent of instructor.

## Japanese

JAPN 1311 Beginning Japanese I
This course covers the fundamental skills in listening comprehension, speaking, reading, and writing of the Japanese language, including basic vocabulary, grammatical structures and culture.

JAPN 1312 Beginning Japanese II
This course covers the fundamental skills in listening comprehension, speaking, reading, and writing of the Japanese language, including basic vocabulary, grammatical structures and culture, as a continuation of JAPN 1311. Prerequisites: JAPN 1311 with a grade of 'C' or better.

## Latin American Studies

LAMS 2301 Introduction to Inter-American Studies
Introduction to major themes in Latin America and Border Studies through history, literature, music, and other kinds of expressive culture.

LAMS 3377 Latin American Womanhood in the Modern Era
A study of the conceptualizations, roles, and status of women in Latin America since 1910.
Prerequisites: LAMS 2301.
LAMS 3378 Women in Colonial Latin America
Introduction to the key texts in the history of women in Latin America from pre-conquest times to independence period. Prerequisites: LAMS 2301.

LAMS 4301 Seminar on Latin American Studies
Interdisciplinary course that reviews and integrates majors themes and ideas that have guided Latin American Studies since the mid-20th century. Prerequisites: LAMS 2301.

LAMS 4391 Latin American Philosophy: Special Topics
A study of the different figures, themes, and issues in the field of Latin American Philosophy. Prerequisites: LAMS 2301.

## Mexican American Studies

MASC 1307 Mexican Folk Music
A historical survey of Mexican folk music from its origins in ancient Mexican cultures through modern times. Course content includes audio and video recordings as well as performances of live music.

MASC 2301 Introduction to Mexican American Studies
An introduction to the field of Mexican American/Chican@ Studies from its inception to the present. A transdisciplinary survey designed to introduce students to the cultural, economic, educational, historical, political, epistemological, and social aspects of the Chican@ experience. These experiences will be analyzed with particular focus on issues of gender, language, race, sexuality and social justice.

MASC 2302 Border Corrido
Border Corrido directly applies to the MAS program because it focuses on MAS content.
MASC 2303 Border Literature
Border Literature directly applies to the MAS program because it focuses on MAS content.
MASC 2351 Introduction to Mexican American Literature
An introduction to the literature by and about Mexican Americans, including the study of literary genres, with special emphasis on the short story, novel or novella, drama, and poetry.

MASC 3308 Introduction to Latina/o Literature
Survey of major writers, poets, and playwrites of Latina/o origin the United States. Special focus on historical conditions surrounding creative expression and its relationship to the use of language. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

MASC 3322 Foundations of Bilingual Education and ESL
The study of cultural, psychological, socioeconomic, linguistic, cognitive and curricular factors affecting the academic achievement of emergent bilingual students. This course also will investigate the philosophical, legal and sociological aspects of ESL and bilingual education. National, state and local guidelines designed to meet the needs of multilingual and multicultural student populations will be reviewed. Course is taught in Spanish. Field experience may be required. Prerequisites: EDSL 3310 or Department of Education approval.

MASC 3325 Latino Health
This course covers topics related to the health issues of the Latino population. Emphasis will be placed on application of knowledge and skills to personal and professional practice related to the demographic, socioeconomic, and behavioral-risk profiles of Latino populations. Prerequisites: Junior standing.

MASC 3332 Mexican American History
An interpretation of the historical heritage of the Mexican-American in the United States. Prerequisites: HIST 3300.

MASC 3346 Hispanics in Global Society
An exploration into the historical development of cultures that merged into contemporary Spanishspeaking peoples rooted in European, Native American, and African ancestries. The concept Hispanities, developed by Carlos Fuentes serves as a theoretical structure to understanding the modern societies of Spain, Latin America, and the growing Latino population of the United States Prerequisites: 3 hours of sociology.

MASC 3365 Chicana and Latin American Feminisms
This course is designed to explore Chicana and Latin American forms of feminism, including their philosophies, history, and social movements.

MASC 4300 Learning and Reflective Service
[0-0-3]
Through this service learning course, students will have the opportunity to engage with community based organizations and/or projects committed to social justice for the Mexican American/Chican@ and Latin@ communities. The students participation will be driven by the needs of the community. The course itself will be co-constructed by the students, the members of the community who are involved in the organization and/or project, and the instructor. Course may be taken multiple times for a maximum number of 6 hours.

MASC 4316 U.S. Latin@ Politics
A study of the U.S. Latin@ experience. Analyzes political socialization and culture, political participation and behavior, leadership, organizations and power in the U.S. political system. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

MASC 4317 Mexican-American Literature
A study of the literature by and about Mexican Americans, with emphasis on the literary techniques and the cultural reflections in this literature. Area(s): Multicultural. Prerequisites: 6 hours of English.

MASC 4323 The Mexican American Experience
Presents an examination of the Mexican American's economic status, cultural values, style of life, educational attainment, family status, and political participation as affected by current socioeconomic conditions and their historical antecedents. Prerequisites: 6 hours of sociology; OR SOCI 1301 with declared social work major.

MASC 4328 Psychological Issues in the Mexican-American Community
Mexican-American personality development and assessment, ethnic identity and acculturation are examined in the course, as are Chicano perceptions of abnormal conduct and the use of alternative therapists. Selected community issues, such as immigration and prosocial behavior, are also explored from a psychological perspective. Prerequisites: PSYC 2301.

MASC 4331 Mexican-American Civil Rights
This course will examine the history of Mexican-American civil rights from the Wagner Act (1935) to the Civil Rights Act (1964). Students will evaluate the institutions, organizations, and people who fought for the equality and integration of Mexican Americans in the American Southwest. We will assess the different roles that these historical actors played in the struggle for citizenship rights against the larger backdrop of the Great Depression, World War II and Cold War eras. Prerequisites: HIST 3300.

MASC 4332 Chicano Movement
This course will trace the history of Chicano student activism from the 1960s antiwar movement to the 1970s and 1980s movements to create Chicano studies majors and departments in universities and colleges. Students will examine the ideas and strategies adopted by grass-roots activists and bureaucratic leaders in their struggles to integrate the Chicano community into American society and politics. Prerequisites: HIST 3300.

MASC 4333 U.S. - Mexico Border Relations
An analysis of the politics at the U.S.-Mexican border. Focus on the political economy and the administration of the borderlands. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

MASC 4348 Sociolinguistics and Latino Health
This course is an overview of language barriers in healthcare and their effects on Spanish speaking populations in the U.S. Review of language in healthcare policy. Analysis of language access measures to eliminate language barriers including medical interpreting and language concordant providers. Prerequisites: SPAN 3348.

MASC 4354 Immigration, Race, and Citizenship
Analysis of the politics of immigration, migration and emigration. Study of the history, theories and policy alternatives concerning immigration. The administration process and the legal and law enforcement systems of immigration will be examined. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

MASC 4357 Latin@ Art History
The most notable artistic achievements and movements of the United States' peoples of Mexican,

Intensive exploration of selected literary, theoretical, and rhetorical topics in Border Studies. Particular focus on issues relevant to the intercultural interactions endemic to border sites and transnational borders. Prerequisites: 6 hours of English.

MASC 4392 Special Topics in Mexican American Studies
A seminar designed for focused study of a single topic of importance in the field of Mexican American/Chican@ Studies. (May be repeated three times for credit as topic varies)

## Modern and Classical Literature

MCLL 2301 Special Topics in Modern and Classical Literature
Special topics course that explores the literary manifestations of the classical and modern world to expand understanding of the human condition and human cultures.

## Medical Humanities

MEDH 4301 Critical Thinking and Medical Humanities
This course will expand on many of the courses and topics in the minor and will explicitly address critical thinking and problem solving in health professions on a case-study level. Topics addressed may include, but are not limited to: systematic approaches to solving ethical dilemmas that arise within health contexts; historical and cultural constructions of health and the body; varied conceptions of the individual; lenses for viewing medicine and healthcare, such as gender, ethnicity, and class; interprofessional communication in healthcare; death \& dying; and distinct models for healthcare such as the public health approach and holistic approaches. (Should be taken in the junior or senior year.) nd systematically representing arguments, recognizing formal and informal fallacies, and rationally evaluating what is heard and read. Enrollment cap: 35 students.

## Public Administration

PAFF 4300 Introduction to Public Administration
A survey of public administration in the United States, highlighting a wide variety of topics in the discipline, but with emphasis on the general machinery of the national bureaucracy and on the powers, problems and control of its agencies.

PAFF 4305 American State and Local Government
A study of the basic functions, structure, procedures and problems of American state and local government, with an emphasis upon intergovernmental relations.

PAFF 4309 Public Fiscal Administration
Survey and analysis of governmental budgeting and public finance, emphasizing theories, procedures and implementation.

PAFF 4310 Comparative Public Administration
This course is a comparative analysis of the administrative systems of different governments. Particular attention is focused on the relationship of administrative practices and decision-making processes in the various states.

PAFF 4311 American Public Policy
An analysis of rationales underlying selected governmental programs and assessments of the effectiveness of these programs.

PAFF 4324 Bureaucracy and Organizational Theory
An analysis of the various theories of public administration and government organization. The contribution of such theorists as Weber, Taylor, Mayo, McGregor, Maslow, Simon, and others will be studied. The development of public administration will be surveyed.

PAFF 4325 Public Personnel Administration
Fundamental concepts of public personnel management with analysis and evaluation of employeeemployer relations at the national, state, and local levels are examined. The course addresses topics such as environmental influences on the personnel function, career systems, human resources planning and management, performance evaluation, ethics, and collective bargaining in the public sector.

PAFF 4362 Independent Study
Requires the approval of the supervising faculty member. Allows student to work independently on a specialized area. The student will submit a written plan, with outcomes and time lines which must be approved by the supervising faculty.

PAFF 4363 Special Topics
Intensive study of a specialized area of public administration or a selected topic in contemporary public management.

PAFF 4365 American Administrative Process
An advance study is made of law and procedures of national, state, and local administrative agencies and their behavior, to include problems in administrative management, theory of complex organizations, and policy outcomes of the administrative process.

PAFF 4378 Management of Non-Profit Organizations
This course is a survey of the field of management practices in non-profit organizations (sometimes called Nongovernmental organizations (NGOs) or the third sector).

## Philosophy

PHIL 1300 Critical Thinking
This class will investigate what it is to think critically. Strong emphasis will be placed on the following: reading critically, analyzing texts, identifying and systematically representing arguments, recognizing formal and informal fallacies, and rationally evaluating what is heard and read. Enrollment cap: 35 students.

PHIL 1301 Introduction to Philosophy
An introduction to some of the major philosophical questions that have intrigued humankind over the centuries. This will be done through an examination of the thought of some of the most important figures in the history of philosophy from the early Greeks to modern times. Credit may be received in only one of PHIL 1301 or PHIL 1302. Enrollment cap: 35 students.

PHIL 1305 Introduction to Latin American Philosophy
An examination of some of the most important and influential contributions to Latin American thought. Material to be studied will be drawn from both past and contemporary sources. Topics may include Mayan and Aztec Philosophy, Iberian Scholasticism, Social and Political Philosophy, Latin American Positivism, Liberation Theology and/or Philosophy, Latin American Feminism, and Hispanic/Latino/a Identity. Enrollment cap: 35 students.

PHIL 1306 Introduction to Asian Philosophy
An analysis of the major movements in Eastern philosophy and religion and their relationship to basic philosophical developments in the West. This course will examine systems of thought and culture such as Buddhism, Hinduism, Confucianism, Taoism and Shinto. Enrollment cap: 35 students.

PHIL 1310 Ethics, Happiness, and the Good Life
This course will be concerned with human values: our own and those of other people. It will ask where these values come from, how we can know them, and how they relate to human happiness. It will also examine several related questions such as personal freedom and the meaningfulness of human life. Enrollment cap: 35 students.

PHIL 1312 Introduction to Social and Political Philosophy
A critical introduction to the current and historical relationships that define contemporary society and politics. Topics may include democracy, capitalism, communism, anarchism, political authority, norms, justices, pluralism, and rights. Enrollment cap: 35 students.

PHIL 1322 Philosophy, Technology, and the Internet
Technology and the Internet have come to shape human beings and their environment in unprecedented ways. This course considers the philosophical implications of technology and the Internet on issues related to who we are, how we live, and how we understand our environment. Possible topics may include the impact of technology and the internet on friendships, democracy, family, work, sports, love, and happiness.

PHIL 1326 Philosophy and Sports
In this course students will examine the nature and values of individual and team sports as well as human movement in general. Areas of emphasis include the nature of games, sport, and play, as well as the ethics of sport, the social and political significance of sport, the relationship between mind and body, and beauty.

PHIL 1330 Philosophy, Art, and Film
This course addresses philosophical issues in film and in art. Possible topics include questions of the meaning and the value of film, the nature and importance of beauty in art, the role of the artist's intention in evaluating a work of art, and the roles of the director and viewer in film. As part of the course, some films will be screened and students may be expected to attend artistic performances or visit local museums and galleries.

PHIL 1332 Philosophy and Literature
This course will use reading and creative writing as tools for exploring philosophical issues, such as the paradoxical nature of time, puzzles of causality, the problem of evil, moral dilemmas, the nature of patriarchy, and problems of ambiguity.

PHIL 1340 Introduction to Logic
This class is an introduction to the formal techniques available for evaluating the correctness or incorrectness of arguments. Techniques likely to be discussed include: symbolization in propositional logic, parsing trees, truth tables or truth trees, natural deduction in propositional logic, Venn diagrams, and the probability calculus. Enrollment cap: 35 students.

PHIL 1360 Understanding Society and Politics
This course covers political systems, government, society, and other relevant areas. In addition, it considers the role of science and other evaluative methods in the study of society and politics.

PHIL 1362 Race, Sexuality, and Class
This course will analyze the role that race, sexuality, and economic class play in constructing people's self-identity, interpersonal relationships, social roles, and political power. Emphasis will be given to traditionally marginalized perspectives. Topics may include whiteness, Hispanic/Latino identity, ethnicity, biological sex, gender identity, queerness, labor, capital, inequality, and their intersections.
PHIL 1364 Philosophy of the Social Sciences
Methodological and philosophical examination of issues in psychology, sociology, anthropology, and economics, such as the nature of mental representation, consciousness, rationality, freedom and determinism, nature and nurture, and the individual and society.

PHIL 1366 Philosophy and History of Science and Technology
This course is designed to use history and philosophy in the service of science and engineering education. It does this by examining a selection of notable episodes in the history of science and Techno-Science. Episodes examined may include the mathematical sciences in Antiquity, Archimedes' inventions and principle of hydrostatics, Roman techno-science, Medieval medicine, alchemy, Kepler's laws of planetary motion, Galileo's conflict with the Catholic Church, Isaac Newton's formulation of the laws of motion, Dalton's atomic theory, Louis Pasteur's public trial of the anthrax vaccine, Charles Darwin's proposal of the theory of evolution by natural selection, the development of the atomic bomb, and the discovery of the double helix structure of DNA.

PHIL 1387 Introduction to Philosophy (Honors)
An introduction to philosophical questions through an examination of major figures and themes in the history of philosophy from ancient to modern times. Credit may be received in only one of PHIL 1301 or PHIL 1302. Prerequisite: admission to Honors Studies Program or by permission of the program director. Enrollment cap: 35 students. Prerequisites: Admission to Honors Studies Program or by permission of the program director.

PHIL 1388 Introduction to Logic (Honors)
This class is an introduction to the formal techniques available for evaluating the correctness or incorrectness of arguments. Techniques likely to be discussed include: symbolization in propositional logic, parsing trees, truth tables or truth trees, natural deduction in propositional logic, Venn diagrams, and the probability calculus. Prerequisite: admission to Honors Studies Program or by permission of the program director. Enrollment cap: 35 students. Prerequisites: Admission to Honors Studies Program or by permission of the program director.

PHIL 2320 Professional Ethics
This course will employ the tools of ethical theory to examine moral issues and problems facing professionals in such fields as business, industry and technology, medicine, social work, criminal justice and law. The content of individual sections of this course may be derived from any of the fields listed above or from a combination of them, depending on student need. Enrollment cap: 35 students.

PHIL 2322 Professional Ethics: Biomedical
This course will address the application of moral theories, ethical principles, and professional codes to ethical dilemmas faced by professionals in healthcare or research. Topics covered may include, but are not limited to, euthanasia, conflicts of interest, physicians as researchers, distribution of scare resources, and the impact of theories like moral relativism and psychological egoism on the application of ethical theory. Enrollment cap: 35 students.

PHIL 2324 Professional Ethics: Business
This course will address the application of moral theories, ethical principles, and professional codes to ethical dilemmas faced by business professionals, employers, and employees. Topics covered may include, but are not limited to, conflicts of interest, globalization, duties to future generations, stakeholder theory, the value of labor, and the impact of theories like moral relativism and psychological egoism on the application of ethical theory. Enrollment cap: 35 students.

PHIL 2326 Professional Ethics: Engineering
This course will address the application of moral theories, ethical principles, and professional codes to ethical dilemmas faced by business professionals, employers, and employees. Topics covered may include, but are not limited to, whistleblowing, integrity, honesty, liability, and the impact of theories like moral relativism and psychological egoism on the application of ethical theory. Enrollment cap: 35 students.

PHIL 2328 Environmental Ethics
Application of moral theories and ethical principles to environmental issues. The nature and extent of human responsibility for the environment; the concepts of nature and natural, whether nature and the environment are intrinsically or merely instrumentally valuable; the nature and extent of our responsibilities to future generations, and whether entities other than humans have moral rights. Enrollment cap: 35 students.

PHIL 2330 Ethics and Leadership
This course identifies the ethical models necessary for effective leadership in business, education, professional life, and community activism within the diversity of contemporary culture. Readings will emphasize the importance of ethical awareness and deliberation in providing moral leadership for our communities, and will examine a range of ethical systems that promote strong and effective public values and virtues. Enrollment cap: 35 students.

PHIL 2351 Religious Diversity in the Global Community
The contemporary global community contains a wide array of religious beliefs, traditions, practices, and understanding these diverse religious dynamics is essential in building mutually supportive and peaceful relationships among such social groups. This course will examine the ways that religion shapes the self-understanding of different cultural traditions that students will encounter in their life work, and will focus on strategies for appreciating the worldviews, customs and intellectual convictions embodied by these religions. Enrollment cap: 35 students.

PHIL 3301 Ancient Philosophy
This course will discuss the development of Western philosophy (primarily in Ancient Greece) from the pre-Socratics through to Aristotle. Emphasis is likely to be placed on Plato and Aristotle. Enrollment cap: 25 students.

PHIL 3302 Medieval Philosophy
This course will survey the major figures and issues of medieval philosophy in their historical context. Philosophers from the Christian, Jewish, and Islamic traditions will be examined. Possible topics include: realism, nominalism, Augustinianism, and scholasticism. Enrollment cap: 25 students.

PHIL 3303 Modern Philosophy (1600-1800)
A study of the history of philosophy from the Renaissance through the 18th century, with particular emphasis on Descartes, Spinoza, Leibniz, Hobbes, Locke, Berkeley, Hume and Kant. Enrollment cap: 25 students.

PHIL 3304 19th Century Philosophy
This course will address major trends and figures in the development of philosophy in the Nineteenth century. Topics likely to be discussed are German Idealism, Romanticism, Dialectical Materialism, Existentialism, and Pragmatism as manifest in the thought of Kant, Hegel, Kierkegaard, Nietzsche, Marx, Peirce, and James. Enrollment cap: 25 students. Enrollment cap: 25 students.

PHIL 3310 Existentialism and Phenomenology
This course will address major figures and issues in existentialism and phenomenology. Potential topics to be covered are the historicity of values, the nature of the subject/object distinctions, life, death, meaning, and authenticity. Some possible figures for study are Husserl, Bataille, Nietzsche, Sartre, Heidegger, and Merleau-Ponty. Enrollment cap: 25 students.

PHIL 3312 Continental Philosophy
This course addresses topics in post-Heideggerian continental philosophy. Some potential movements and thinkers include deconstruction (Derrida), genealogy (Foucault), postmodernism (Lyotard, Agamben, RanciФre, Balibar), hermeneutics (Gadamer), and Critical Theory and contemporary Marxism (Benjamin, Adorno, Bourdieu, Hardt, Negri, Laclau, Mouffe). Enrollment cap: 25 students.

PHIL 3314 Analytic Philosophy
This class is a study of the development of analytic philosophy during the Twentieth century. Authors whose work might be discussed include: Frege, Russell, Carnap, Quine, Putnam, Davidson, Strawson, Grice, Dummett, Lewis, Kripke, Moore, Chisolm, Rawls, Williams, Austin, and Sellars. Enrollment cap: 25 students.

PHIL 3317 Perspectives on Science and Mathematics
This course examines a selection of notable episodes in the history of science and mathematics. Episodes examined may include mathematics and science in Antiquity, Medieval medicine, alchemy, Galileo's conflict with the Catholic Church, Isaac Newton's formulation of the laws of motion, Charles Darwin's proposal of the theory of evolution by natural selection, the development of the atomic bomb, the development of modern logic, the development of non-Euclidian geometry, and the discovery of the double helix structure of DNA. This is a required UTeach content course. Enrollment cap: 25 students. Prerequisites: UTCH 1101, UTCH 1102.

PHIL 3322 Research Ethics: Biology
A survey of ethical issues involving research methods for students in pre-Med, biomedical or bioengineering programs, or students who intend to pursue graduate study in these areas. The course will examine the professional practices of medicine and biomedical research, review the variety of ethical concerns that can arise in these practices, and offer ethically appropriate strategies for resolving those concerns. A research paper, analysis of relevant case studies, and classroom presentations form part of the expectations for students who take this course. Enrollment cap: 25 students.

PHIL 3330 Aesthetics/Philosophy of Art
This course will address classic issues in the philosophy of art and beauty and the philosophy of art and art criticism. These issues will be illustrated from the fine arts and contemporary media: literature, drama, music, painting, film, and television.

PHIL 3331 Philosophy and Film
This course examines philosophical issues through the lens of film. Possible topics include image and reality, representation and culture, beauty, politics, morality, and aesthetic theory. Enrollment cap: 25 students.

PHIL 3340 Intermediate Logic
A continuation of Philosophy 1340, Introduction to Logic, this course will cover the language of predicate logic, with excursions into metalogic. Enrollment cap: 25 students. Prerequisites: PHIL 1340.

PHIL 3350 Philosophy of Religion
A philosophic study of the nature and varieties of religious experience, the meaning and validation of religious belief, the act of faith, the nature and existence of God, the problem of evil, mysticism, immortality, religious belief and moral conduct, religion and myth, and religion and culture. Enrollment cap: 25 students.

PHIL 3352 Religion and the Environment
This course investigates the way religious traditions have conditioned our relationship to the environment, through a survey of both Western (Judeo-Christian-Islamic) and Eastern (Chinese, Japanese, and Indian) traditions. Goals are to identify and evaluate ecological attitudes, values and practices of diverse traditions, to identify common grounds for understanding environmental issues from a religious perspective, and to highlight the specific resources that comprise such ground within scripture, ritual, myth, symbol, sacrament, and the like. Enrollment cap: 25 students.

PHIL 3360 Feminist Theories
This course is designed to examine the variety of existing feminist theories and their roots in diverse modes of philosophical analysis. It will explore how various feminist theories are consonant with or diverge from their base theories and from each other and whether such theories are still cogent. Methodology will incorporate both feminist pedagogy and traditional philosophical analysis, including feminist critique of the tradition.

PHIL 3365 Chicana and Latin American Feminisms
This course is designed to explore Chicana and Latin American forms of feminism, including their philosophies, history, and social movements. Enrollment cap: 25 students.

PHIL 3370 Philosophy of Law
Examination of the institution of law, legal concepts, legal reasoning, and the legal process. Topics may include the nature of law; the moral limits of the criminal law; legal rights; liberty, justice, and equality; punishment; responsibility; the private law (property, contract, and tort); constitutional law; and feminist jurisprudence. Enrollment cap: 25 students.
PHIL 3380 Philosophy of Education
This course examines the nature and meaning of education as well as its role in shaping individuals and society. Topics considered may include the fundamental goals of education, the differences between teaching and indoctrination, and the economic, political, and cultural implications of various educational theories and practices. Enrollment cap: 25 students.

PHIL 4300 Special Topics
A study of selected issues or figures in philosophy; content will vary. May be repeated for up to 9 hours credit as content changes. Enrollment cap: 25 students.

PHIL 4302 Special Topics in Applied Ethics
This course will address the application of ethical theory to contemporary moral problems and the types of issues that arise in such applications. The particular field of applied ethics studied may vary between areas such as business ethics, biomedical ethics, environmental ethics, research ethics, etc. Topics covered may include end-of-life issues, conflicts of interest, physicians as researchers, globalization, duties to future generations, and the impact of theories like moral relativism and psychological egoism on the application of ethical theory. May be repeated once for credit as content changes. Enrollment cap: 25 students.

PHIL 4305 Special Topics in Latin American Philosophy
This course will study different issues, themes, or figures in the field of Latin American Philosophy. Content will vary according to instructor expertise and student interest. May be repeated for up to 9 hours credit as content changes. Enrollment cap: 25 students.

PHIL 4310 Epistemology
This class will consider questions about the nature, criteria and sources of (epistemic) justification and knowledge. For example, under what circumstances do perception, memory, consciousness, reason and testimony endow us with justified beliefs? How is context relevant to justification and knowledge? Is there such a thing as religious knowledge? Is skepticism about the external world a serious threat? Does knowledge have a foundation? Enrollment cap: 25 students.

PHIL 4312 Metaphysics
Metaphysics investigates the nature, constitution and structure of reality. In this class we shall discuss some of the major problems in metaphysics. Topics include existence, modalities and possible worlds, universals and particulars, the structure of concrete particulars, space and time, events, identity across time, and realism and anti-realism. Enrollment cap: 25 students.

PHIL 4314 Philosophy of Mind
A study of content and consciousness, addressing the nature of awareness and experience. Topics concerning the capacities and creative powers of mind will be examined in theories based on physical, functional and metaphysical arguments. Enrollment cap: 25 students.

PHIL 4316 Philosophy of Science
A philosophical examination of the assumptions and methodology of scientific inquiry, with examples drawn from a range of sciences. This course will consider the structure, meaning, confirmation and use of scientific theories, as well as the philosophical implications of current theories in science. Enrollment cap: 25 students.

PHIL 4320 Moral Theory
This course will consider questions about the foundations of moral justification, the nature of moral reasons, and whether a convincing case can be made for objectivity in moral judgments. A number of options in ethical theory might be discussed, including realism, metaethical relativism, noncognitivism, naturalism, sensibility theories, constructivism, and practical reasoning theories. Enrollment cap: 25 students.

PHIL 4322 Social and Political Philosophy
A critical examination of the current and historical relationships that define contemporary society and politics. Topics may include democracy, capitalism, communism, anarchism, political authority, rights, justice, power, pluralism, and tyranny. Enrollment cap: 25 students.

PHIL 4340 American Philosophy
This course will explore the diverse traditions, ideas, and thinkers that have shaped American culture in the past and today. Important works from Native American, African American, Latin American, and Puritan sources may be examined, as well as works from such intellectual movements as transcendentalism and pragmatism. Enrollment cap: 25 students.

PHIL 4350 Religion and Science
This course seeks to survey the main issues in the interaction between science and religion, beginning with a comparison of the tasks of scientific and theological investigation and discourse, and looking at models of the interaction between the two, with concrete historical examples of each. In addition, the course will explore in further detail some of the major points of intersection between religion and science, including: physics, metaphysics and cosmology; biological evolution and the assessment of its religious significance by different traditions; models of God popular among scientists and those living in a scientific age (theism, pantheism, panentheism); and ethical issues raised by developments in science and technology. Enrollment cap: 25 students.

PHIL 4380 Senior Seminar
This course will provide the opportunity for students to bring together the research methods, writing abilities, and sophisticated critical thinking skills developed throughout the course of their philosophical training. Enrollment cap: 25 students.

## Political Science

POLS 2301 U.S. \& Texas Government \& Politics I
The origins and development of the U.S. governmental system; U.S. and Texas constitutions; federal, state and interstate relations; the individual as a citizen, person and voter; political parties; civil rights and the judicial system. Fulfills three hours of the legislative requirements of six hours of U.S. and Texas government. Open to freshmen.

POLS 2302 U.S. \& Texas Government \& Politics II
A functional study of the U.S. and Texas constitutions and governments in relation to the legislative, executive and administrative processes; and a study of the policy process, including domestic and foreign policy areas. Fulfills three hours of the legislative requirements of six hours of U.S. and Texas government. Open to freshmen.

POLS 2340 Introduction to Political Theory
This course examines some of the core concepts in the field of political science including democracy, power, justice, freedom, order, ideology, equality, the state, violence, gender, race and others. Thinkers may include Plato, Aristotle, Machiavelli, Hobbes, Rousseau, Wollstonecraft, Tocqueville, Marx, Weber, Arendt, Rawls, Du Bois, and others. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 2350 Political Economy
This course examines various economic models including private enterprise, capitalism, state capitalism and socialism; the impact of monetary and fiscal policy on the economy; and alternative viewpoints as to the appropriate extent of government regulation of the economy. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 2370 Introductory Statistics for Political Science
Descriptive and inferential statistical methods as applied to the study of political issues and phenomena will be examined. Topics to be covered include data gathering, probability theory, hypothesis testing, and the linear regressional model, with an emphasis on both parametric and nonparametric statistical methods. At the conclusion of the course, students will be able to conduct a statistical analysis of a research question in Political Science. Prerequisites: POLS 2301 (or POLS 2387), POLS 2302 (or POLS 2388), and MATH 1314.

POLS 2387 U.S. and Texas Government I (Honors Plan)
The origins and development of the U.S. governmental system; U.S. and Texas constitutions; federalstate and interstate relations; the individual as a citizen, person and voter; political parties; civil rights and the judicial system. Fulfills three hours of the legislative requirements of six hours of U.S. and Texas government. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 2388 U.S. and Texas Government II (Honors Plan)
A functional study of the U.S. and Texas constitutions and governments in relation to the legislative, executive and administrative processes; and a study of the policy process, including domestic and foreign policy areas. Fulfills three hours of the legislative requirement of six hours of U.S. and Texas government. Prerequisites: Admission to Honors Studies or by invitation.

POLS 3190 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 must complete written assignments to be evaluated by the supervising teacher. The course may be repeated for credit with a maximum of four hours counted as an elective toward fulfillment of the requirements for a major in Political Science. Prerequisites: Must receive approval of Political Science Department Chair. POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3310 U.S. State and Local Government
A study of the basic functions, structure, procedures and problems of U.S. state and local government, with an emphasis upon intergovernmental relations. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3311 Contemporary Texas Politics
This course is a survey of contemporary political, public policy, and administrative issues confronting Texas. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3312 U.S. Political Parties
A study of the history, organization, 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 U.S. political process. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3313 U.S. Gender Politics
This course examines multidimensional aspects of gender and political life in the U.S. It analyzes the relationship between gender, culture, political behavior and public policy, and explores the historical evolution of the role of women in the United States political system. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3319 Archer Congress, Presidency, and Beyond
This course will enable students to understand power in our nation's capital, especially what lies beyond Congress and the White House. Students will study in Washington, D.C. provides unique opportunities, using locations such as the National Mall, Arlington Cemetery, and the National Archives as a textbook. Each week, students will visit different places to examine complex issues such as the relationship between democracy and war, or the future of the Internet. Class will be conducted as a graduate seminar, emphasizing discussion and other forms of participation. Work will relate to student's internships and to headline-making events. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388), and acceptance into the Archer Center program.

POLS 3320 Introduction to Comparative Government and Politics
This course is a study of similarities and differences between various political systems in the world. It aims to generate a better understanding of international relations and politics. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3321 Comparative Politics of Developing Nations
The fundamental questions and methods of inquiry in the field of comparative politics will be examined. Substantive discussions will center around three fundamental questions: What explains the construction and maintenance of political order? What explains the extent to which governments faithfully represent voter interests? What are the consequences of regime type and form of government for human welfare? Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3322 European Politics
This course examines the major democracies of Europe. It is a comparative study of peoples and their political, social and economic institutions. It generally includes, but is not limited to Great Britain, France, and Germany. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3323 Middle Eastern Politics
A comparative examination of the social, economic and theological components of Middle Eastern politics. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3324 Asian Politics
Study of the socio-economic setting, constitutional framework, political forces, authoritative decisionmaking agencies and certain major policy outputs of China, Japan and India. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3325 South American Politics
A survey of governmental structures and politics in South America. Examines competing ideologies, group developments, party interests, influence of revolution, relationship between political, social and economic structures and South America's role in the world political arena. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3330 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. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3331 Global Security
This course is designed to: 1) Explore the evolution of security concepts worldwide; 2) Address a wide range of major international issues with global implications such as conventional security, terrorism, gender and age, environmental problems, migrations, international law, intra-state conflicts, mass destruction weapons; and 3) Identify and debate possible measures to address and present these problems. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3332 Revolution and Reform in Developing Nations
This course will analyze the question of stability and instability of states with special emphasis on theories of revolution (including civil wars), and reform (including democratization), in a comparative perspective. Students will use case studies to examine and analyze theories of revolution and reform. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3333 Gender Theory in World Politics
This course analyzes women's social and political movements in a global context. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3340 Classical Political Theory
A study of classical political philosophy from Socrates to Machiavelli. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3341 Modern Political Theory
A study of political philosophy from Machiavelli to the end of the 19th century. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3342 Contemporary Political Theory
A study of 20th century political philosophy. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3350 Voting Behavior, Campaigns, and Elections
This course examines voting behavior and political campaigns in U.S. politics, including analysis of the effects of political parties, issues, interest groups, campaign finances, media and campaign strategies on election and policy outcomes. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3351 Interest Groups and Political Movements
This course analyzes the relationships between the role of collective action in the U.S. political system and its impact on the democratic process. Particular attention is paid to the role of organized interest groups and their influence on the political process. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3352 Media and Politics
This course examines the way mass media have altered the dynamics of politics in both democratic and non-democratic societies. An introduction of various theories related to the media and politics will be followed by several case studies of the United States and other countries; e.g., France, China, Egypt. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3353 Urban Politics
This course examines the politics of U.S. cities, focusing on the urban political process and institutions that will be considered in the light of changing social and economic conditions. Specifically, the course will examine the connections between increasing racial segregation, urban deindustrialization and urban inequality, along with the federal and state governments' role in precipitating and perpetuating urban decline. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).
POLS 3355 U.S. Public Policy
An analysis of rationales underlying selected governmental programs and assessments of the effectiveness of these programs. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3356 U.S. Fiscal Policy
This course examines the financial dimension of public policy and administration. The topics covered will include tax policy, revenue sources, expenditures, types of budgets, and debt administration. Examination of the budgetary process will include policies and procedures at the federal, state, and local levels of government. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3370 Scope and Methods
Analysis of the study of politics, models of inquiry, research methods and introduction to the use of computers in political science research. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3390 Independent Study
A professor will work with students on an individual basis to develop an independent study or research program on a critical issue on Political Science. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3391 Archer Internship
Students secure full time internships in Washington, D.C. with organizations ranging from the Supreme Court to the United Nations Information Center. Participation in the internship for at least 32 hours a week is required throughout the duration of the semester in Washington. Students will be evaluated regularly via supervisor surveys, and will be required to submit a final report on their experience. Additionally, students will be encouraged to bring their internship experiences into their other classes for discussion and contribution. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388) and acceptance into the Archer Center program.

POLS 3392 Archer Policy Process
This course provides an overview of how policy is made at the federal level. Through various readings you will become familiar with the process as it is designed. Through in-class discussions, on-the-job experiences and meeting Washington powerbrokers who help craft policy, you will see how the process actually works. The course will be interactive, with a strong focus on in-class discussion and guest speakers who will challenge your views and provide an insider's perspective on Washington. One policy area will be focused on per semester to provide a thought provoking issue to study, discuss, and analyze. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388) and acceptance into the Archer Center program.

POLS 3394 Special Topics in Politics
Significant issues and problems in politics and political systems. Course may be repeated for credit three times, only two of which may be used to satisfy Political Science degree requirements, provided different topics are the focus of each class. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 3395 Movies and Politics
This course analyzes the way movies have examined the political and social impacts of various issues. The course includes such topics as the relationship between politics, corruption and power; the bases of discrimination; the idea of community; and the tension between institutional authority and individual autonomy. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4310 U.S. Judicial Process
Advanced study of the structure, functions and procedures of the national, state and local judicial systems; the interrelationship between the U.S. judiciary and other components of the political system; the impact of judicial decision-making on public policy; jurisprudence. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4311 U.S. Constitutional Law Federalism
A study of national-state relations by use of court cases, with special emphasis on the impacts of the commerce and taxation clauses; a study of Congressional-presidential relationships by use of court cases. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4312 U.S. 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. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4313 U.S. 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. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4314 U.S. Executive Process
Advanced study of the development of the power and influence of the president and other U.S. executives; procedures and politics of the executive process; executive policy outputs; the relation of the executive to the other elements of the political system. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4315 U.S. Intelligence Agencies
This course examines the origins, structures, purposes, functions, and activities of intelligence agencies in the U.S. political system, and how intelligence agencies are used as instruments of both international and domestic government policy. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4316 U.S. Latin@ Politics
A study of the U.S. Latin@ experience. Analyzes political socialization and culture, political participation and behavior, leadership, organizations and power in the U.S. political system. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4320 Latin American Politics
This is a survey course on the governmental process in Mexico, the Caribbean, Central, and South America. It examines competing ideologies, group dynamics, relationships between political, economic, and social structures and Latin America's role in the international political system. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4321 Central American and Caribbean Politics
A survey of governmental structures and politics in Central America and the Caribbean. Examines competing ideologies, group developments, party interests, influence of revolution, relationships among political, social and economic structures and Latin America's role in the world political arena. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4322 Western European Politics
A study of the major democracies of Europe: Great Britain, France, Germany, Italy, low countries, Scandinavian countries, Switzerland and Austria. A comparative study of peoples and their institutions. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4323 Mexican Politics
A study of the politics and government of Mexico focusing on the political system in the context of history and culture. Study of Mexico's relations with the United States and other nations. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4324 Contemporary Chinese Politics
By focusing on Chinese politics in the reform era, this course examines a wide range of critical issues in contemporary Chinese politics. Topics will include various political, social and economic problems resulting from the country's unparalleled economic and political reform. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4330 Contemporary International Issues
This course is the study of important issues in international politics. It focuses on themes, issues, and players in world politics, regional and international conflicts, and the solutions to these conflicts. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4331 U.S. Foreign Policy
Study of the politics, formulation, conduct and consequences of U.S. foreign policy. The roles of the president, Congress, interest groups, political parties, the military and intelligence agencies and public opinion are examined. Specific cases of major foreign policy decisions to be examined. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4332 International Organizations
An analysis of the judicial-political foundations. Actual machinery and activities of the principal international organizations, particularly the United Nations and related bodies. An appreciation of their achievements toward international peace. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4333 U.S. Mexico Border Relations
An analysis of the politics at the U.S.-Mexican border. Focus on the political economy and the administration of the borderlands. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4340 Politics and Culture
This course examines how 1. Democracy is conceptualized and 2. Democratization processes develop from an historical and comparative perspective. Key questions center on implications, challenges and future prospects for democracy and democratization around the world. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4341 U.S. Political Theory
An analysis of U.S. political theory and values from the Colonial period to the present. The work of Jefferson, Jackson, Calhoun, Bellamy, Hoover and Galbraith are included. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4350 Political Socialization and Civic Engagement
This course analyzes the relationships between political culture, social characteristics and demography, and their impact on political values, attitudes and participation. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4351 Public Opinion and Political Behavior
An analysis of public opinion and political behavior, with emphasis on the nature, origins, distribution and measurement of public opinion, as well as its impact on citizen participation in the U.S. political system. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4352 U.S. Race and Ethnic Politics
This course analyzes the political experiences of racial and ethnic groups in U.S. politics. Both traditional (e.g., voting) and non-traditional (e.g., protest movements) strategies of political empowerment are explored. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4353 Race and Gender: The Politics of Intersectionality
This course will examine the politics of women of "color" in the United States. The two primary foci will be: 1. Theoretical issues related to feminism and how they relate to women of "color," 2. Public policy, organizations, and institutions that impact the lives of women of "color." Material is presented in a comparative focus to include examining similarities and differences between and among women, and variations among them. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4354 Immigration, Race, and Citizenship
Analysis of the politics of immigration, migration and emigration. Study of the history, theories and policy alternatives concerning immigration. The administration process and the legal and law enforcement systems of immigration will be examined. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4355 U.S. Labor Policy
Students will examine: (1) The importance of labor to political-economic philosophy; (2) The early and enduring tactics of labor to counter the power of capital; (3) The policy successes achieved by, and the new policy dilemmas facing, the U.S. labor movement from the 1920s to the 1980s; and (4) The labor-movement crisis under neoliberalism. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4356 U.S. Environmental Policy
An examination of the public debate over environmental issues will be coupled with an exploration of the development and formation of environmental policy. Additionally, specific environmental policies will be examined to include the politics and processes of regulatory decision making and their consequences for the environment. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4390 Legal Research and Writing I
An introduction to the techniques and skills involved in conducting legal research. Special attention is given to translating research into different forms of legal writing (i.e., memorandums and briefs). Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

POLS 4391 Legal Research and Writing II
Continued development of legal research and writing skills, with special attention paid to reading comprehension and logical reasoning relating to legal issues. Prerequisites: POLS 2301 (or POLS 2387) and POLS 2302 (or POLS 2388).

## Portuguese

PORT 1311 Beginning Portuguese I
A study of the essentials of Portuguese grammar, pronunciation, elementary conversation, and prose editing.

PORT 1312 Beginning Portuguese II
A continuation of PORT 1311, focusing on Portuguese grammar, pronunciation, elementary conversation, and prose editing. Prerequisites: PORT 1311 with a grade of ' C ' or better.

PORT 3301 Portuguese for Spanish Speakers
Intensive and accelerated study of Portuguese language with emphases on differences between Spanish and Portuguese languages. Prerequisites: SPAN 2315.

## Psychology

PSYC 2102 Orientation for Psychology Majors
This course prepares students for success and services within the psychology major. Topics include: research, ethics, APA style, critical thinking, study skills, civic engagement and professional development. This course is required of all majors. Prerequisites: PSYC 2301.

PSYC 2301 General Psychology
An introduction to the discipline of psychology as a natural science and as an applied social science. This course includes topics such as the biological bases of behavior, sensation and perception, learning and memory, emotions, personality, abnormal psychology, therapy, developmental and social psychology.
PSYC 2401 Basic Statistics for Psychologists
A practical study of the procedures used in handling psychological data including descriptive statistics, central tendency, variation, correlation and inference. Equivalent Course: May be counted as ANTH 2401; a student may receive credit in only one course. Prerequisites: MATH 1314 or higher (except MATH 1350) and 3 hours of the following: PSYC 2301, ANTH 2351, ANTH 1324 or ANTH 2302.

PSYC 3302 Adolescent Psychology
This course investigates the physical, behavioral, mental, emotional and social changes that accompany growth and development in adolescence. Prerequisites: PSYC 2301.
PSYC 3324 Social Psychology
An overview of how groups and society influence behavior and thinking. The main topics include conformity, obedience, prosocial behavior (cooperation and helping others), the behavior of groups, attitudes and prejudice, as well as research on interpersonal attraction, including physical attractiveness and romantic love. The course also examines how everyday people are implicit psychologists, trying to explain and understand the behavior of others as well as their own. Prerequisites: 3 hours of social science.
PSYC 3325 Research Methods in Psychology
This course provides a lecture-laboratory approach to learning the scientific methodology of empirical psychological research. Basic principles and methods of research design, hypothesis testing, data collection and analysis and result interpretation are covered in this course. Prerequisites: PSYC 2301 and PSYC 2401.

PSYC 3332 Developmental Psychology: Infancy Through Adolescence
An overview of human development from conception to adolescence. Topics include biological foundations, physical growth, language and cognition, social and personality development. Traditional and recent theoretical perspectives are reviewed. Prerequisites: PSYC 2301.

PSYC 3333 Psychology of Adulthood: Maturity and Old Age
A study of such aspects of adulthood as job selection, marriage, child rearing and old age.
Prerequisites: 6 hours of psychology.

PSYC 3337 Developmental Psychology: Lifespan
The field of developmental psychology is an overview of the physical, cognitive, social, emotional and personality domains of the changes that occur over time. The course focuses on normal development from conception through death. Traditional and theoretical perspectives are reviewed. Prerequisites: PSYC 2301 and junior standing.

PSYC 3338 Psychology of Gender
This course is designed to provide students with knowledge about gender development from infancy through adulthood, including the many similarities and differences among physical, educational/employment, and interpersonal experiences of men and women during each developmental stage of life. Prerequisites: PSYC 2301.

PSYC 3340 Stress Management
This course introduces the student to a wide variety of stress reduction techniques and their implications for health. Practical experiences as well as research in such areas as biofeedback, relaxation training and meditation are provided. Prerequisites: PSYC 2301.

PSYC 3343 Tests and Measurements in Psychology
Concentrates on the theoretical aspects of test construction and on extensive survey of the major types of standardized tests used in industry, schools and mental health settings. Prerequisites: PSYC 2301 and PSYC 2401.

PSYC 3345 Psychology of Learning
An introduction to the methods, results and interpretations of experimental studies of learning, including both animal conditioning and human memory. Emphasis will be placed on classical and instrumental conditioning procedures.

PSYC 3353 Physiological Psychology
An analysis of the basic physiological mechanisms underlying behavior with emphasis on the role of the central nervous system in sensation, emotion, motivation, learning and memory. A knowledge of biology is helpful but not necessary. Prerequisites: PSYC 2301.

PSYC 3373 Sensation and Perception
A study of the basic mechanisms underlying sensation and perception. Experimental methods, research findings and theory are emphasized. Prerequisites: PSYC 2301.

PSYC 3383 Animal Behavior
An introduction to the methods, results and interpretation of studies of animal behavior from the perspectives of comparative psychology and ethology. An emphasis will be placed on social and communicative behavior. Prerequisites: PSYC 2301.

PSYC 3405 Behavior Modification
An overview of principles of social learning, operant conditioning and the application of these principles to personal development, relationships and problem behavior. Prerequisites: PSYC 2301.

PSYC 4182 Directed Readings
Students will complete individually assigned readings on a selected topic under the supervision of a faculty member with whom specific arrangements have been made. May be repeated for up to two hours credit. Prerequisites: 9 hours of psychology and consent of instructor.

PSYC 4302 Primate Behavior
A review of the behavior of selected representatives of the order primates, based upon research conducted in both laboratory and field. In addition, students will collect data on a representative primate group at the Gladys Porter Zoo. Equivalent Course: May be counted as ANTH 4302; a student may receive credit in only one course. Previous course number: PSY 3384; a student may receive credit in only one course. Prerequisites: PSYC 2301 and PSYC 3383, or ANTH 1324, or consent of instructor.

PSYC 4303 Advanced Statistics for Psychology
This course reviews and expands on basic principle 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. Prerequisites: PSYC 2317 or SOCI 4301.

PSYC 4312 Female and Male
An examination of the physiological and psychological influences of sex role development, including such topics as human liberation, sexual behavior, child rearing practices and career opportunities. Prerequisites: 9 hours of psychology and consent of instructor.

PSYC 4313 Abnormal Psychology
A comprehensive analysis of various emotional disorders, neuroses and psychoses, their symptoms, etiologies and treatment and approaches. Prerequisites: PSYC 2301.

PSYC 4318 Theories of Learning
A historical review of major theoretical positions in the field of animal and human learning. Prerequisites: PSYC 2301 or consent of instructor.

PSYC 4319 Cognitive Psychology
The study of intellectual activities. Topics include attention, perception, pattern recognition, memory, concept formation, language processing, reasoning, judgment, decision making, problem solving, and creativity. Prerequisites: PSYC 2301.

PSYC 4320 Memory
The study of the acquisition, storage, retrieval and forgetting of information. Emphasis is on basic research and theory about adult memory processes, but some consideration is also given to applications and developmental aspects of memory such as memory in childhood and memory and aging. Prerequisites: PSYC 2301.

PSYC 4326 Cross-Cultural Psychology
The course examines how culture shapes our cognition and behavior. In addition to exploring intercultural contact and cross-cultural research methods, the following areas in psychology are analyzed from a cross-national perspective: perception, cognition, human development, attitudes and interpersonal relations. Prerequisites: PSYC 2301.

PSYC 4327 Personal Relationships
Theories and research findings on a variety of close relationships are explored, including friendships and romantic love. Although the course focuses on everyday dynamics, clinical issues such as shyness, loneliness and jealousy are also covered. In addition to analyzing how personal relationships are developed and maintained, the course also examines the process of breakup and dissolution. Prerequisites: 9 hours of psychology.

PSYC 4328 Psychological Issues in the Mexican-American Community
Mexican-American personality development and assessment, ethnic identity and acculturation are examined in the course, as are Chicano perceptions of abnormal conduct and the use of alternative therapists. Selected community issues, such as immigration and prosocial behavior, are also explored from a psychological perspective. Prerequisites: PSYC 2301.

PSYC 4333 Theories of Personality
Emphasis is placed on the major theories of personality that attempt to explain the psychological nature and behavior of people. Some consideration is given to the process involved in developing a theory of personality. Prerequisites: PSYC 2301.

PSYC 4342 Psychology and Law
This course is designed to give students an appreciation of behavioral phenomena as they apply to our legal system. A general survey of related topics such as the trial process, the psychology of evidence and the psychology of juries will be covered. Prerequisites: PSYC 2301.

PSYC 4343 Human Factors
Human factors is concerned with the optimal interaction between humans and their working environments, including machines, instruments, computers, and physical environments. The course draws from several areas of psychology, including sensation, perception, memory, cognition, physiology, learning, and motivation. The goal is to optimize the design of operation systems by considering human capabilities and limitations. Prerequisites: PSYC 2301 and a course in perception or memory.

PSYC 4356 Mind Body Interactions
This course is designed to demonstrate the inseparability of mind and body. Although our Western approach to medicine still focuses on illness and treatment as biologically based, there is increasing evidence that psychological and social factors play a part in the healing process. The course is divided into three areas of content: examination of how alterations of the body can affect the mind, examination of how the mind can affect the body, especially as a result of stress and, lastly, an evaluation of complementary/alternative medicine. Prerequisites: PSYC 2301.

PSYC 4357 Industrial and Organizational Psychology
This course explores psychological and behavioral factors involved with organizational design and effectiveness leadership, personnel selection, placement, training, promotion retention morale, job satisfaction and productivity. Prerequisites: PSYC 3325.

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. Prerequisites: PSYC 3325 and PSYC 3313.

PSYC 4363 Systems and Theories in Psychology
A history of the development of psychology and a study of theories in contemporary psychology. Prerequisites: Capstone course; 24 hours of psychology including PSYC 2301, 2401 and 3325.

PSYC 4380 Directed Research
Students will have the opportunity to conduct faculty-supervised research in an area of mutual interest resulting in oral and written presentations of their work to other students and faculty. The course will provide an opportunity to obtain hands-on research experience for undergraduate students who intend to pursue graduate degrees. May be repeated for up to six hours credit. Prerequisites: PSYC 2401 and PSYC 3325, and consent of instructor.

PSYC 4381 Psychology Internship
An extensive application of psychological concepts and skills within a community organization, government agency, mental health setting or business enterprise related to the student's career goals. Specific assignments will vary by instructor and internship site. Prerequisites: 9 hours of psychology and consent of instructor.

PSYC 4382 Directed Readings
Students will complete individually assigned readings on a selected topic under the supervision of a faculty member with whom specific arrangements have been made. Prerequisites: 9 hours of psychology and consent of instructor.

PSYC 4383 Special Problems
Selected topics assigned according to the interest of the class and/or student. Sequential registration for up to nine hours is permitted as topics vary. Prerequisites: 9 hours of psychology and consent of instructor.

Religious Studies
RELS 1304 Introduction to World Religions
Religion is intimately involved in the ways that people come to know themselves, each other, and the world around them. World Religions examines topics such as: how sacred stories provide people with a worldview; how religious claims and values shape and legitimize social structures and behavior; how various types of rituals function; and how, ultimately, religion serves as a reality-defining institution. These topics are studied in light of religions such as Judaism, Christianity, Islam, Hinduism, Buddhism, and the traditional religions of Africa and North America. Enrollment cap: 35 students.

RELS 1306 Introduction to Asian Philosophy
An analysis of the major movements in Eastern philosophy and religion and their relationship to basic philosophical developments in the West. This course will examine systems of thought and culture such as Buddhism, Hinduism, Confucianism, Taoism and Shinto. Enrollment cap: 35 students.

RELS 2350 Introduction to Religious Literature
This course is a survey of literary and historical narrative texts from the Hebrew and Christian scriptures, the Koran, Hindu Vedas, mystical and devotional literature, the Book of Mormon and other sacred writings. An emphasis will be placed on discussions of the art of religious narrative, the major themes of sacred stories, and the historical setting of the various texts. This will include analysis of cultural frameworks within which such religious literature emerged, and the way religious texts have influenced cultural practices and beliefs.

RELS 2351 Religious Diversity in the Global Community
The contemporary global community contains a wide array of religious beliefs, traditions, practices, and understanding these diverse religious dynamics is essential in building mutually supportive and peaceful relationships among such social groups. This course will examine the ways that religion shapes the self-understanding of different cultural traditions that students will encounter in their life work, and will focus on strategies for appreciating the worldviews, customs and intellectual convictions embodied by these religions. Enrollment cap: 35 students.

RELS 2352 Introduction to Christianity
Through primary source readings, discussion, and films, this course will explore questions related to Christianity's leading ideas, what has shaped its history, and what are the continuing controversies in which it is involved. The evolution of doctrine, worship and social thought will be examined in a variety of traditions--Roman Catholic, Orthodox, and Protestant--and in a variety of historical contexts, ranging from the world of the earliest followers of Jesus to contemporary theological trends. Enrollment cap: 35 students.

RELS 2354 Introduction to Islam
This course will examine the religion of Islam: from its faith, practices, and sectarian splintering, through its expansion outside its original home to a status as a world religion, and consideration of its contemporary institutions and position in world societies throughout Asia, Europe, and the Americas.

RELS 2356 Introduction to Judaism
This introductory course covers some basics of religious practice within both ancient and modern Judaism (prayer, Torah study, observing the Sabbath and holy days, keeping kosher, etc.), while considering issues about Jewish identity in changing contexts.

RELS 2357 Development of Christian Thought
A study of the emergence and development of several major Christian theological concepts including Christology, pneumatology, soteriology, sacraments, ecclesiology, revelation, and eschatology from an academic point of view. Also included is a brief introduction to the Christian Church's most influential thinkers and literature as well as to contemporary doctrinal currents and issues.

RELS 3305 Religion in Latin America
This course addresses the major religious themes and patterns in Latin America from pre-Colombian Christianity and Judaism, mysticism and the spirituality of nature, and the impact of New Religions on this region are topics to be covered.

RELS 3307 Traditional Religions
This course examines indigenous and non-institutional religions as they appeared in ancient cultures around the world. Particular attention will be paid to traditional religions in North and South America, with a focus on the complex relationship between nature, medicine and religion.

RELS 3352 Religion and the Environment
Through primary source readings, discussion, and films, this course will explore questions related to Christianity's leading ideas, what has shaped its history, and what are the continuing controversies in which it is involved. The evolution of doctrine, worship and social thought will be examined in a variety of traditions--Roman Catholic, Orthodox, and Protestant--and in a variety of historical contexts, ranging from the world of the earliest followers of Jesus to contemporary theological trends. Enrollment cap: 35 students.

RELS 3363 Sociology of Religion
A sociological analysis of religious beliefs, practices, and organizations in the United States and in other societies. This course examines the reciprocal influence between religion and society.

RELS 4304 Special Topics in Religion
A study of selected themes, issues or figures in religion. Topics are varied according to availability of faculty and student interest. May be repeated once for credit as topics change. Enrollment cap: 25 students.

RELS 4391 Special Topics in European History
A study of selected topics in European history. Topics are varied according to availability of faculty and student interest.

## Military Science

ROTC 1201 Introduction to the Army and Critical Thinking
Introduces you to the personal challenges and competencies that are critical for effective leadership and communication.

ROTC 1202 Introduction to the Profession of Arms
This course continues to work on personal challenges that are critical for leaders.
ROTC 2201 Foundations of Leadership
This course explore the dimensions of creative and innovated tactical leadership strategies and styles.
ROTC 2202 Foundations of Tactical Leadership
This course explores the challenges of leading teams in different operational environments. The course highlights dimensions of terrain analysis, patrolling, and operations orders. Further study of the theoretical basis of the Army Leadership Requirements Model explores the dynamics of adaptive leadership in the context of military operations.

ROTC 2604 Internship in Military Science Leadership
This course is an intensive four week (7 days a week), practicum in leadership at Fort Knox, Kentucky, where a student is given opportunity to learn and enhance self-confidence skills thorough active participation in adventure training. Student who complete this course will be eligible to enter the Advanced ROTC Program.

ROTC 3201 Basic Army Physical Development
This course is a study of the Army's physical fitness program. The course includes outdoor physical conditioning and a leadership laboratory.

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 to a program that best suits the individual. The course include outdoor physical conditioning and a leadership laboratory.

ROTC 3401 Adaptive Team Leadership
This course challenges students to study, practice, and evaluate adaptive leadership skills as they are presented with scenarios related to squad tactical operations. Students receive systematic and specific feedback on their leadership attributes and actions. Prerequisites: Advanced ROTC standing.

ROTC 3402 Applied Team Leadership
This course uses increasingly intense situational leadership challenges to build cadet awareness and skills in leading small units. Skill sin decision-making, persuading and motivating team members are evaluated. Prerequisites: Advanced ROTC standing.

ROTC 3604 Internship in Military Science
Leadership Development \& Assessment Course (LDAC) will train leadership and evaluate officer potential. Technical and tactical proficiency and leadership skills will be tested in a carefully planned and stressful training sequence and environment. The internship is a four-week, ( 7 days a week), long course at Fort Knox, KY. Prerequisites: ROTC 3402.

ROTC 4401 Mission Command and the Army Profession
Mission Command and the Army Profession explore the dynamics of leading in the complex situations of current military operations. Prerequisites: Advanced ROTC standing, ROTC 3401, and ROTC 3402.

ROTC 4403 Mission Command and the Company Grade Officer
MC \& the Company Grade Officer Explore the dynamics of leading in complex situations. Prerequisites: Advanced ROTC standing, ROTC 3401 and ROTC 3402.

## Sign Language

SGNL 1301 Beginning American Sign Language I
This course is an introduction to the basic skills needed in the production and comprehension of America Sign Language (ASL), focusing on the manual alphabet, numbers, conversational skills, culturally appropriate behaviors, and ASL grammar.

SGNL 1302 Beginning American Sign Language II
A continuation of SGNL 1301. Prerequisites: SGNL 1301 with a grade of ' $C$ ' or better.
Sociology
SOCI 1301 Introduction to Sociology
The study of human society and the relationship of culture, social interaction, and group life to personality and human behavior.

SOCI 1323 Social Problems
This course helps students understand contemporary social problems facing United States society.
SOCI 2305 Introduction to Social Research
This course introduces students to the theoretical foundations of research methods in sociology and familiarizes students with the basic qualitative and quantitative skills necessary to conduct sociological research.

SOCI 3301 Statistics for the Behavioral Sciences
Measures of central tendency and variability; statistical inference; correlation and regression.
Prerequisites: 3 hours of sociology.
SOCI 3310 Sports and Society
This course investigates the relationship between sports and society by examining the role and impact of agents of socialization such as family, the peer group and the mass media on athletes and their personalities. This course also explores the issues of racism, sexism and violence in various sports. Prerequisites: 3 hours of sociology.

SOCI 3312 Environmental Sociology
Throughout the course students will be challenged to think about how the structural, hierarchical, and cultural elements of society shape environmental change. The overall goal of the course is to foster an understanding and appreciation of the influence of our collective lives on the natural world. Prerequisites: 3 hours of sociology.

SOCI 3313 Criminology
An introduction to Criminology. Emphasis on diverse theoretical approaches to the study of crime, its causes, consequences, reactions to, and social treatment. Prerequisites: 3 hours of sociology.

SOCI 3324 Sociology of Health
Analysis of basic problems in the classification, maintenance, and preservation of mental and physical health and delivery of health care services. Topics may include social construction of disease, environmental sources of disease, patterns of disease distribution, differential experiences of illness by race, gender, class, and other sociodemographic factors, family cohesion, strain, and resources as affected by illness and bioethics. Prerequisites: 3 hours of sociology.

SOCI 3325 Social Psychology
An introduction to social psychology as practiced within the field of sociology. Emphasis on diverse theoretical approaches and substantive areas, such as socialization, self-development and presentation, social influence, interpersonal attraction, groups, intergroup relations, and the linkages between self and social structure. Prerequisites: 3 hours of sociology.
SOCI 3333 Urban Sociology
The culture, history and growth patterns of cities; demographic, ecological patterns, and trends. Problems of housing and community organization. Prerequisites: 3 hours of sociology.

SOCI 3344 World Religion in a Comparative Perspective
This course is designed to familiarize students with different religions from around the world using a sociological perspective. Prerequisites: 3 hours of sociology.

SOCI 3345 Sociology of Mass Communication
The course examines the reciprocal relationship between mass communication and modern culture. Students will become familiar with select political, economic. and cultural analyses of the mass media. Prerequisites: 3 hours of sociology.

SOCI 3346 Hispanics in Global Society
An exploration into the historical development of cultures that merged into contemporary Spanishspeaking peoples rooted in European, Native American, and African ancestries. The concept Hispanities, developed by Carlos Fuentes serves as a theoretical structure to understanding the modern societies of Spain, Latin America, and the growing Latino population of the United States Prerequisites: 3 hours of sociology.

SOCI 3347 Sociology of Immigration
The course examines and analyzes selected social issues related to immigration and other forms of population movement. Prerequisites: 3 hours of sociology.

SOCI 3348 Disaster and Society
The course examines the relationship between disasters and society from a sociological perspective. Key themes involve preparedness, warning response, mitigation, social vulnerability, long- and shortterm recovery, and international hazard management. Prerequisites: 3 hours of sociology.

A sociological analysis of religious beliefs, practices, and organizations in the United States and in other societies. This course examines the reciprocal influence between religion and society. Prerequisites: 3 hours of sociology.

SOCI 3380 Religion, Race, and Ethnicity
A sociological analysis of the intersection of religion and race/ethnicity in the United States. Topics may include religion and new immigrants, non-Christian religions, racial segregation, the Black Church, and the influence of religion on racial attitudes and intergroup relations. Prerequisites: 3 hours of sociology.

SOCI 3393 Sociology of Aging
An analysis of aging within a social context. This course examines societal level issues of age across time and across cultures as well as the process of aging for individuals with an emphasis on health, social statuses, social engagement, and interpersonal relationships. Prerequisites: 3 hours of sociology.

SOCI 4301 Research Methods
A survey of the research methods used in social science research including varieties of participantobservation, archival analysis, the survey method, and experiment/quasi-experimental design. Emphasis is placed on hypothesis formulation and the linkage between sociological theory and research methods. Prerequisites: 6 hours of sociology.

SOCI 4310 Sociology of Gender
This course discusses and explores a wide range of gender-related issues in a global perspective, some of which are controversial. The course covers theories, practices, and issues related to the social construction of gender and the institutional basis of gender inequality that affects our lives as women and men in the United States and other societies. This course encourages students to rethink and reevaluate much of what we have experienced and learned, to gain major vocabulary and analytic skills, to challenge what has been taken for granted, and to formulate a vision for the future.

SOCI 4313 Race and Ethnic Relations
A sociological analysis of relations between racial and ethnic groups in the United States. This course examines the nature of prejudice and discrimination both historically and in contemporary society, as well as racial and ethnic disparities in the economy, education, housing, and politics. Prerequisites: 6 hours of sociology; OR SOCI 1301 with declared social work major.

SOCI 4314 Sociology of Deviance
The nature and extent of deviancy examined through a review of theory and research on deviant behavior. Selective examination of particular types of individual and subcultural deviance. Prerequisites: 6 hours of sociology; OR SOCI 1301 with declared social work major.

SOCI 4320 The Sociology of the Family
An examination of the family from a comparative historical approach. This course provides an analysis of the changes in the structure and purpose of family across time, variations in family across cultures, and the reciprocal influence between family and other social institutions. It also offers an analysis of the interpersonal aspects of family relationships and variations in these patterns by gender, socioeconomic status, and race and ethnicity. Prerequisites: 6 hours of sociology.

SOCI 4323 The Mexican American Experience
Presents an examination of the Mexican American's economic status, cultural values, style of life, educational attainment, family status, and political participation as affected by current socioeconomic conditions and their historical antecedents. Prerequisites: 6 hours of sociology; OR SOCI 1301 with declared social work major.

SOCI 4325 Sociology of Culture
This course introduces students to the sociological study of culture, including how culture relates to inequality and social organization. Students will become familiar with empirical work on the production and implications of cultural goods, as well as classic and contemporary theoretical accounts of the role of culture in social life. Prerequisites: 6 hours of sociology.

SOCI 4326 Population and Society
This course is an introduction to the concepts and methods of demographic analysis. The course covers major demographic theories and basic measures of mortality, fertility, and migration. It is intended to provide students with a general understanding of global population trends and the processes that shape population size, structure, and dynamics locally, nationally, and in the world. Prerequisites: SOCI 1301 and SOCI 4320.

SOCI 4331 Social Theory for Non-Majors
The course introduces selected classical and contemporary social theories to non-sociology majors. Emphasis is placed on general sociological discourse and themes applicable to related social sciences. Prerequisites: 6 hours of sociology.

SOCI 4333 Social Theory for Sociology Students
The nature and function of social theory and its development from the enlightenment to the postmodern trends. Emphasis on the cumulative insights and ideas which have contributed to sociology and on the role of social theory in understanding modern society. Prerequisites: 6 hours of sociology; Must be Sociology Major or Minor.

SOCI 4343 Sociology of Globalization
The course examines selected readings on the political, economic, and cultural dimensions of globalization. Prerequisites: 6 hours of sociology.

SOCI 4352 Social Stratification
Students will examine the distribution of wealth, status, political power, and other valued resources by class, race/ethnicity, gender, and other axes of stratification in the United States. Prerequisites: 6 hours of sociology; OR SOCI 1301 with declared social work major.

SOCI 4360 Sociology of Education
Social and institutional organization of education and the profession of teaching. Class, ethnic and social factors affecting the educational process and the effect of educational institutions and practices on the community and society. Prerequisites: 6 hours of sociology.

SOCI 4365 Sexuality and Society
The course examines the socially constructed nature of human sexualities in the Unites States and cross-culturally. Prerequisites: 6 hours of sociology.

The aim of this course is to present a general perspective of social change in Latin America and how the United States is being affected by this change. Gender and ethnic issues, industrialization, democratization, the illicit drug trade, economic and political integration, and the growing northbound tide of Latin American unskilled migrant workers will be examined. Prerequisites: 6 hours of sociology.

SOCI 4380 Social Protest and Social Movements
This course introduces students to the field of social movement theory and research. Through case studies, students will become familiar with diverse approaches to the study of protest and movement organizations (e.g., resource mobilization, cultural framing, political process models, etc.).
Prerequisites: 6 hours of sociology.
SOCI 4383 Independent Studies
Designed to give students 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 9 hours is permitted as topics vary. Prerequisites: 9 hours of sociology and consent of the instructor.

SOCI 4385 Special Topics in Sociology
Selected topics in sociology. Prerequisites: 6 hours of sociology.
SOCI 4391 Senior Seminar in Research (Capstone)
The course is designed to review, enhance, and assess the knowledge that seniors in sociology have received from their previous coursework. During the course, students will read, evaluate, and discuss exemplary work, both theoretical and empirical, from primary sources in core areas of sociology. Additionally, students will go through the process of conducting their own independent research project including original data analysis and presentation of their research. Prerequisites: Sociology majors with senior standing.

## Spanish

SPAN 1311 Spanish for Non-Native Speakers I
A course designed to develop the ability to understand, speak, read and write the Spanish language. Open only to persons who are monolingual.

SPAN 1312 Spanish for Non-Native Speakers II
A continuation of SPAN 1311. Prerequisites: SPAN 1311.
SPAN 1387 Beginning Spanish I for Honors Students
A beginning Spanish course designed to meet the needs of honors students interested in learning to read and speak Spanish at an accelerated pace. Prerequisites: Admission to honors program or instructor consent.

SPAN 1388 Beginning Spanish II for Honors Students
A continuation of Spanish 1387 for honors students. Prerequisites: SPAN 1387 or instructor consent.
SPAN 2311 Intermediate Spanish I for Non-Native Speakers
A continuation of SPAN 1312 that develops students' ability to understand, speak, read, and write Spanish. Prerequisites: SPAN 1312.

SPAN 2312 Intermediate Spanish II for Non-Native Speakers
A continuation of Spanish 2311 Prerequisites: SPAN 2311.
SPAN 2313 Spanish for Native/Heritage Speakers I
This course is designed for Native Speakers of Spanish and other students from a Spanish-speaking background. The main goals of this course are to develop basic skills in: reading and writing in Spanish, and advance knowledge of Spanish grammar and vocabulary including orthography and the use of written accents while promoting a greater familiarity with Hispanic cultures. Prerequisites: Native or Near-Native Proficiency in Spanish.

SPAN 2314 Oral Expression and Communication in Spanish
A course designed to develop oral skills in Spanish with an emphasis on pronunciation, group discussion and debates, interviews, conversations on current events, and public speaking. This course is recommended for students in the education field who are required to take the OPI exam.

SPAN 2315 Spanish for Native/Heritage Speakers II
This course is designed for Native Speakers of Spanish and other students from a Spanish-speaking background. The main goals of this course are to develop basic skills in: reading and writing in Spanish, and advance knowledge of Spanish grammar and vocabulary including orthography and the use of written accents while promoting a greater familiarity with Hispanic cultures. Prerequisites: SPAN 2313.

SPAN 2316 Comparative Grammar on English and Spanish
A comprehensive comparison of the formal morphological and syntactical differences between Spanish and English. The goal of this class is to sharpen students' communication skills in both the written and oral form in attempt to prepare them to perform bilingually in professional fields such as law and medicine.

SPAN 2317 Spanish for Healthcare Professionals I
This course will provide an introduction to medical terminology in Spanish, Spanish writing skills, and Spanish to English consecutive interpreting and sight translation.

SPAN 2318 Spanish for Healthcare Professionals II
This course offers an continued development of medical terminology in Spanish, interpreting from English to Spanish in clinical contexts and development of patient interviewing skills in Spanish. Prerequisites: TRSP/SPAN 2317.

SPAN 2320 Latina/o Culture and Civilization in Spanish
An introduction to the cultural history of Hispanics in the United States, analyzing with special focus on key cultural, social, literary, and political issues.

SPAN 2340 Fundamentals of Hispanic Culture
This course explores the history and cultural richness of Hispanic civilizations and cultures, with a special focus on factors that are substantive to cross-cultural communication and international contact. Taught in Spanish.

SPAN 2342 Spanish for Legal Environments and Public Administration
This course offers an introduction to legal language in English and Spanish and to 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. Taught in Spanish.

SPAN 2344 Spanish for Business Administration
This is course provides students with practical knowledge for the use or the Spanish language professionally in business environments, with a special focus on international business contact and commerce terminology.

SPAN 2387 Introduction to World Literature I in Spanish
This course is an introduction to World Literature from its origins to the Renaissance. A canon of world literature translated in Spanish as well as how literary forms or ideas move from one culture to another will be examined.

SPAN 2388 Introduction to World Literature II in Spanish
This course is an introduction to World Literature from the Renaissance to the present. A canon of world literature translated in Spanish as well as how literary forms or ideas move from one culture to another will be examined.

SPAN 2389 Academic Cooperative- English to Spanish Translation
This course is an introduction for bilingual students to the fundamental nature of translation, the formal and morpho-syntactical differences between English and Spanish and practical translation procedure. Close attention is paid to Spanish spelling norms as well as language interference. Prerequisites: SPAN 2313 or departmental approval.

SPAN 3300 Advanced Spanish Grammar \& Composition I
This course is an advanced study of grammatical concepts combined with intensive training in Spanish composition. Taught in Spanish. Prerequisites: SPAN 2313 and SPAN 2315.

SPAN 3301 Advanced Spanish Grammar \& Composition II
This course is the continuation of SPAN-3300. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN-3300 with 'C' or better grade.

SPAN 3302 Creative Writing in Spanish
An introduction to the study of literary forms and techniques poetics, figurative language, metrics, narrative arc and other formal aspects of the literary craft, with practice in writing poetry and prose in Spanish. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3304 Advanced Spanish for Bilingual Teachers
This course is designed to prepare the bilingual educator to derive essential information, interpret meaning, and evaluate oral and written discourse relevant to the bilingual education curriculum and classroom. The course will also provide intensive practice on the use of spoken and written language with a variety of audiences in culturally appropriate ways in order to satisfy the requirements of routine educational and professional situations relevant to the bilingual classroom. Taught in Spanish. Prerequisites: Admission into the Bilingual Education EC-6 Program.

SPAN 3305 Techniques of Literary Analysis
A study and practical application of the fundamentals of literary criticism. Several different approaches to literary analysis will be presented in order to construct a solid basis for the interpretation of literature. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3306 Introduction to Spanish Literature
An introduction to the major literary movements and figures of Spain from medieval times to the present. Highlights major works that have influenced world literature. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3307 Introduction to Latin American Literature
An introduction to the major literary movements and figures of Latin America from pre-Columbian times to the present. Focuses on the roles of race, class, gender and ethnicity of literary canons in Latin America. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3308 Introduction to Latina/o Literature
Survey of major writers, poets, and playwrites of Latina/o origin the United States. Special focus on historical conditions surrounding creative expression and its relationship to the use of language. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3310 Introduction to Hispanic Linguistics
An overview of the scientific study of the Spanish language. A general introduction to linguistic theories followed by application to the phonology, morphology, syntax and language variation and change in Spanish. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.
SPAN 3311 Spanish Phonology \& Phonetics
This course analyzes the phonetic and phonological systems of the Spanish language. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315, SPAN 3300 and [SPAN 3301 or SPAN 3302].

SPAN 3320 Spanish Literature 1100-1750
A survey of the literature of Spain from the beginning to 1750. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3321 Spanish Literature 1750-Present
A survey of the literature of Spain from the mid-18th century to present. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 or SPAN 3300.

SPAN 3322 Masterpieces of Spanish American Literature I
An investigation of the literary works of the principal narrators, poets and dramatists of Spanish America from the beginning of Spanish Colonialism to Modernism. Analysis of form and content and study of the historical background and literary currents in each work. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3323 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. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3330 CW in Spanish: Narrative
An undergraduate course on the writing of narrative fiction. Students will have the opportunity to study the genre and develop their own narrative pieces. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315, SPAN 3300 and SPAN 3302.

SPAN 3331 CW in Spanish: Poetry and Prose Poetry
An undergraduate course on the writing of poetry and prose poetry. Students will have the opportunity to study the tools necessary for this genre and will develop their own creative work. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315, SPAN 3300 and SPAN 3302.

SPAN 3332 CW in Spanish: Playwriting
An undergraduate course on the writing of plays. Students will have the opportunity to write and stage monologues and short plays of their own. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315, SPAN 3300 and SPAN 3302.

SPAN 3333 CW in Spanish: Special Topics
Study on different topics related to creative writing in Spanish. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315, SPAN 3300 and SPAN 3302.

SPAN 3338 The Hispanic World
This course introduces students to the diverse cultures of the Hispanic world. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 3341 Spanish to English Translation
This course is an introduction for bilingual students to the fundamental nature of translation, the formal and morpho-syntactical differences between English and Spanish, and practical translation procedure. Close attention is paid to language interference. Taught in Spanish. Prerequisites: SPAN 2313 or departmental approval.

SPAN 3342 Advanced Spanish to English Translation
This course is an orientation in the theory and professional practice of translating a text from Spanish to English, including consideration of both cultural and morpho-syntactical problems. Taught in Spanish. Prerequisites: TRSP/SPAN 3341 or departmental approval.

SPAN 3343 Advanced English to Spanish Translation
This course is an orientation in the theory and professional practice of translating a text from English to Spanish, including consideration of cultural and morpho-syntactical problems. Taught in Spanish. Prerequisites: SPAN 2389 or departmental approval.

SPAN 3344 Advanced Spanish for Healthcare Professionals I
This course will provide students with advanced knowledge of medical terminology in Spanish, Spanish writing skills, and Spanish to English consecutive interpreting and sight translation. Prerequisites: Native or near native command of Spanish.

SPAN 3346 Business Spanish
This course is an introduction to Spanish business correspondence and the translation of commercial documents from English to Spanish. Taught in Spanish. Prerequisites: SPAN 2313 or departmental approval.

SPAN 3348 Advanced Spanish for Healthcare Professionals II
This course offers a continued development of advanced medical terminology in Spanish, interpreting from English to Spanish in clinical contexts and development of patient interviewing skills in Spanish. Prerequisites: Native or near native command of Spanish.

SPAN 4119 Spanish Internship
Practicum in a community-based organization or agency to develop advanced use of Spanish language skills. Prerequisites: TRSP/SPAN 3348.

SPAN 4310 Spanish Applied Linguistics
An overview of the study of the Spanish language in its social context. Topics include language variation, language maintenance and shift, language mixing, and language policy. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4311 Spanish in Social Context
This course analyzes the language variation in the Spanish-speaking world. Taught in Spanish. Prerequisites: SPAN 2313, 2315 and 3300.

SPAN 4312 History of the Spanish Language
A detailed study of the Spanish language from the beginning to the contemporary period. Historical aspects of each period will be discussed to relate the contributions of different people whose language contributed to the development of the Spanish language. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4313 Problems and Issues Related to Language
Concentrated study of language theory, language acquisition, functions and role of language in society, and current trends and problems related to the topic. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4314 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. Taught in Spanish.

SPAN 4315 Acquisition of the Spanish Language
This course provides an introduction to the theory and research in the acquisition of the Spanish language. It provides students with an introduction to Spanish first and second language acquisition and the issues that arise as a result of multilingualism such as attrition, or the loss/erosion/modification of a previously acquired language when others are acquired, incomplete acquisition of the language. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4316 Sociolinguistics and Latino Health
An overview of the study of the Spanish language in its social context. Topics include language variation, language maintenance and shift, language mixing, and language policy. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4317 Special Topics in Hispanic Linguistics
Special topics from the field of Hispanic Linguistics. Course may be taken three times as the topic varies. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4318 Spanish Language Media Studies
Introduction to the methods and styles of coverage of new trends and events in Spanish focusing on both writing and diction. Practice in writing newspaper articles and newscast scripts for radio and television. Practice in English and Spanish translation for the media. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4320 The Mexican Novel
The study of the major novels of Mexico from beginning to the present. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4321 Mexican Literature
A study of the principal works of Mexican literature beginning with the period of the Spanish conquest until 1850. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4322 Cervantes
A study of the principal works of Miguel de Cervantes with emphasis on Don Quijote. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4323 Spanish American Novel
Begins with a study of literary and historical influence in the 19th century Spanish-American Gaucho and Costumbrista novels and those showing European influence: Guiraldes, Blest Gana, Gamboa. Examination of recent literary trends: Mallea, Sabato, Roa Bastos, Vargas Llosa. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4324 Medieval Spanish Literature
A study of the principal literary works of Spain from El Cid to Romancero. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4325 Contemporary Spanish Literature
This course is a study of the principal literary works of the Spanish culture from the generation of 1898 to the present. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4326 Chicano Narrative
A general introduction to short stories and novels written in Spanish by U.S. citizens of Mexican descent. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4327 Caribbean Literature
A critical review and analysis of Caribbean literature with emphasis on the literary techniques and the cultural reflection in the literature. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4328 Mexico's Contemporary Literature
An investigation of Mexico's latest literature taking into account the psychological effects stemming from the industrial surge, the problems of the migration of the poor, the rebirth of the malinchista spirit, the new identity and the erosion of old traditions in the last two decades. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4329 Eighteenth Century Spanish Literature
A survey of the literature of Spain covering the neoclassic from Feijoo to Ferna?ndez de Morati?n. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4330 Nineteenth Century Spanish Literature
A survey of the literature of Spain covering the two main literary movements: Romanticism and Realism. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4331 The Spanish American Short Story
A study of the evolution of this genre in Spanish-American literature themes, techniques and literary movements will be investigated. The writers studied in this course will include: Echeverrфa, Palma, GuitOrrez, Nßjera, Quiroga, Borges, Garcфa Mßrquez, Fuentes and others. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4332 The Spanish American Essay
A study of this genre in Spanish-American literature. Themes, content, style and literary movements will be studied. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4333 Golden Age Prose
A critical study of the most representative works of Golden Age Spain. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4334 Theater and Poetry of the Golden Age
Study of the principal dramatists and poers of te Golden Age such as Lope de Vega, Tirso de Molina, Juan Ruфz Alarćn, Garcilaso de la Vega, Fernando de Herrera, Luis de G<ngora and others. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4335 Special Topics in Hispanic Literatures
Special topics from the field of Hispanic Literature. Course may be taken three times as the topic varies. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4336 Literature and Journalism in the Spanish Speaking World
This is a Spanish undergraduate advanced course for communications and Spanish majors, but specially geared toward those students minoring in Hispanic media. Its contents pertain to the rich interaction between literature and journalism in the Spanish speaking world for the last three centuries. Students will analyze and work with journalistic pieces by well-known Spanish speaking authors from both sides of the Atlantic. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4337 Spanish Lyric Poetry
A survey of lyric poetry from the beginning to the present. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4338 Children's Literature in Spanish
This course explores the analysis of children's literature and the teaching of children's literature as the foundation of Spanish literacy. Topics include fiction, non-fiction, literature selection, pedagogy, and the assessment of children's reading. Taught in Spanish. Prerequisites: For Education Majors: SPAN 3304, For Spanish Majors: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4341 Advanced Spanish Composition for the Health Professions
This course explores writing for health promotion and health education in Spanish, writing for audiences with varying degrees of Spanish literacy. It also covers theory and practice of translation of health related texts in Spanish. Prerequisites: TRSP/SPAN 3348.

SPAN 4342 Interpreting
This course is a basic orientation in the theory and practice of interpreting English to Spanish and Spanish to English. Sight translation and short consecutive interpreting, and also preparation for simultaneous interpreting. Prerequisites: TRSP/SPAN 3342 \& 3343.

SPAN 4344 Legal Translation
This course offers an in-depth analysis of legal language in English and Spanish, through 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. Taught in Spanish. Prerequisites: TRSP/SPAN 3342 or 3343.

SPAN 4345 Topics in Translation
This course studies topics in the theory and practice of Spanish and English Translation in areas other than business and legal texts, including but not limited to the following: education, medical, specialties, and technology. It may be repeated for a total of 9 credit hours as the topics change. Prerequisites: TRSP/SPAN 3342 or 3343.

SPAN 4346 Commercial Translation
This is course offers and in-depth analysis and intensive practice of translation from English to Spanish and Spanish to English of commercial, financial, and marketing texts, as well as shipping, insurance, and customs house documents. Taught in Spanish. Prerequisites: TRSP/SPAN 3342 or 3343.

SPAN 4347 Translation Technologies
This course is an overview of practical software and computational methodologies for the professional practice of translation, including advanced word-processing, terminological database management and translation memory use. Taught in Spanish. Prerequisites: SPAN 2389 or TRSP/SPAN 3341.

SPAN 4348 Sociolinguistics and Latino Health
This course is an overview of language barriers in healthcare and their effects on Spanish speaking populations in the U.S. Review of language in healthcare policy. Analysis of language access measures to eliminate language barriers including medical interpreting and language concordant providers. Prerequisites: SPAN 3348.

SPAN 4349 Capstone Project / Minithesis
This course directs students into research or into translation projects and project management. Prerequisites: Senior standing in BA Translation Major.

SPAN 4350 Spanish Civilization
A survey course covering the entire range of Iberian history outlining the major differences between Spanish culture and the cultures of other Weser nations. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4351 Hispanic Civilization
A panoramic view of the political, literary, and cultural history of Spain and the Spanish-speaking countries of America. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4352 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 the creative process that brought them to life on the stage. Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.

SPAN 4360 Topics Studies in Hispanic Culture
Topics in Hispanic culture, civilization, languages, or literature in areas not generally available as part of regular course offerings. May be repeated three times for a total of 9 hours, as topics change.
Taught in Spanish. Prerequisites: SPAN 2313, SPAN 2315 and SPAN 3300.
SPAN 4370 Teaching Spanish as a Heritage Language
This course is an introduction to the field of heritage language education with a focus on teaching Spanish to heritag.e language learners (HLL). It offers an overview of the fundamental issues that are related to this field, such as heritage language maintenance and development, socio-cultural issues, language variation in the Spanish-speaking world as well as characteristics of English/Spanish bilingualism in the United States. Taught in Spanish. Prerequisites: SPAN 2313 and SPAN 2315, 3300. 3301, 4310, 4315.

SPAN 4380 Senior Seminar
Portfolio preparation and evaluation the planning, preparation and writing of a Senior Mini-thesis and a Capstone Examination. Taught in Spanish. Prerequisites: 18 hours in advanced Spanish including SPAN 2313, SPAN 2315, SPAN 3300, SPAN 3306, SPAN 3307, and SPAN 3308.

## Translational Spanish

TRSP 2342 Spanish for Legal Environments and Public Administration
This course offers an introduction to legal language in English and Spanish and to 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. Taught in Spanish.

TRSP 2344 Spanish for Business Administration
This is course provides students with practical knowledge for the use or the Spanish language professionally in business environments, with a special focus on international business contact and commerce terminology.

TRSP 3341 Spanish to English Translation
This course is an introduction for bilingual students to the fundamental nature of translation, the formal and morpho-syntactical differences between English and Spanish, and practical translation procedure. Close attention is paid to language interference. Taught in Spanish. Prerequisites: SPAN 2313 or departmental approval.

TRSP 3342 Advanced Spanish to English Translation
This course is an orientation in the theory and professional practice of translating a text from Spanish to English, including consideration of both cultural and morpho-syntactical problems. Taught in Spanish Prerequisites: TRSP/SPAN 3341 or departmental approval.

TRSP 3343 Advanced English to Spanish Translation
This course is an orientation in the theory and professional practice of translating a text from English to Spanish, including consideration of cultural and morpho-syntactical problems. Taught in Spanish. Prerequisites: SPAN 2389 or departmental approval.

TRSP 3344 Advanced Spanish for Healthcare Professionals I
This course will provide students with advanced knowledge of medical terminology in Spanish, Spanish writing skills, and Spanish to English consecutive interpreting and sight translation. Prerequisites: Native or near native command of Spanish.

TRSP 3346 Business Spanish
This course is an introduction to Spanish business correspondence and the translation of commercial documents from English to Spanish. Taught in Spanish. Prerequisites: SPAN 2313 or departmental approval.

TRSP 3348 Advanced Spanish for Healthcare Professionals II
This course offers a continued development of advanced medical terminology in Spanish, interpreting from English to Spanish in clinical contexts and development of patient interviewing skills in Spanish. Prerequisites: Native or near native command of Spanish.

TRSP 4119 Spanish Internship
Practicum in a community-based organization or agency to develop advanced use of Spanish language skills. Prerequisites: TRSP/SPAN 3348.

TRSP 4341 Advanced Spanish Composition for the Health Professions
This course explores writing for health promotion and health education in Spanish, writing for audiences with varying degrees of Spanish literacy. It also covers theory and practice of translation of health related texts in Spanish. Prerequisites: TRSP/SPAN 3348.

TRSP 4342 Interpreting
This course is a basic orientation in the theory and practice of interpreting English to Spanish and Spanish to English. Sight translation and short consecutive interpreting, and also preparation for simultaneous interpreting. Prerequisites: TRSP/SPAN 3342 \& 3343.

TRSP 4344 Legal Translation
This course offers an in-depth analysis of legal language in English and Spanish, through 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. Taught in Spanish. Prerequisites: TRSP/SPAN 3342 or 3343.

TRSP 4345 Topics in Translation
This course studies topics in the theory and practice of Spanish and English Translation in areas other than business and legal texts, including but not limited to the following: education, medical, specialties, and technology. It may be repeated for a total of 9 credit hours as the topics change. Prerequisites: TRSP/SPAN 3342 or 3343.

TRSP 4346 Commercial Translation
This is course offers and in-depth analysis and intensive practice of translation from English to Spanish and Spanish to English of commercial, financial, and marketing texts, as well as shipping, insurance, and customs house documents. Taught in Spanish. Prerequisites: TRSP/SPAN 3342 or 3343.

TRSP 4347 Translation Technologies
This course is an overview of practical software and computational methodologies for the professional practice of translation, including advanced word-processing, terminological database management and translation memory use. Taught in Spanish. Prerequisites: SPAN 2389 or TRSP/SPAN 3341.

TRSP 4348 Sociolinguistics and Latino Health
This course is an overview of language barriers in healthcare and their effects on Spanish speaking populations in the U.S. Review of language in healthcare policy. Analysis of language access measures to eliminate language barriers including medical interpreting and language concordant providers. Prerequisites: SPAN 3348.

TRSP 4349 Capstone Project / Minithesis
This course directs students into research or into translation projects and project management. Prerequisites: Senior standing in BA Translation Major.

# COLLEGE OF SCIENCES (COS) 

# Department of Biology 

Dr. Frederic Zaidan<br>Chair, Department of Biology<br>Location: SCNE 2.360 (UTRGV Edinburg Campus)<br>Phone: 956-665-3251<br>Fax: 956-665-3657<br>Email: frederic.zaidan@utrgv.edu

## BACHELOR OF SCIENCE (BS)

## WITH A MAJOR IN

BIOLOGY
(FOCUS IN BIOLOGICAL SCIENCE)

The Department of Biology is committed to excellence in instruction, scholarly accomplishment, research, professional service, and student success. The Department provides a broad-based undergraduate education in Biology so as to give students the opportunity to pursue a career best-suited to their interests and abilities. Graduates are prepared to enter the workforce or continue their education in graduate or professional school. The Department provides rigorous pre-professional preparation for students seeking careers in biological sciences and health professions.

## STUDENT LEARNING OUTCOMES:

1. Role of the Cell: The Biology graduate knows the role of the cell in life and living systems, and understands the interrelationships among subcellular structures that contribute to its functioning as a unit
2. Role of Genetics: The Biology graduate understands the role of genetics in inheritance and can explain how environmental conditions influence natural selection processes and contribute to adaptation.
3. Diversity of Life: The Biology graduate is aware of the diversity of life and interrelationships between an organism and its environment.
4. Structure and Function: The biology graduate understands how the organization of a specific structure within an organism is related to a specific function, understands interrelationships among organs and organ systems within an organism, and how interaction between structure and function contribute to the survival of the organism.
5. Scientific Method: The biology graduate understands the Scientific Method, is able to analyze and interpret data, and communicate research findings in both oral and written form.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
Choose one:
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors) MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
Life and Physical Sciences - 6 hours
CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II
Language, Philosophy and Culture - $\mathbf{3}$ hours
Choose from:
PHIL 1301 Introduction to Philosophy (or PHIL 1387 Honors) PHIL 1366 Philosophy and History of Science and Technology
Integrative and Experiential Learning - $\mathbf{2}$ hours
CHEM 1111 General Chemistry I Lab CHEM 1112 General Chemistry II Lab

B - MAJOR REQUIREMENTS - 58 HOURS (24 advanced minimum)
1 - Biology Core - 42 hours (18 advanced)
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 3301 Biological Evolution
BIOL 3409 Ecology

2 - Biology Electives - 16 hours ( 6 advanced minimum)
a - Cell/Molecular Course
Choose at least one:
BIOL 3401 General Microbiology
BIOL 3403 Medical Microbiology and Immunology
BIOL 3412 Cell Biology
BIOL 3415 Molecular Biology
BIOL 4313 Endocrinology BIOL 4330 Molecular Evolution
BIOL 4361 Neuroscience I: Cellular and Molecular BIOL 4413 General Virology BIOL 4417 Bacterial Genetics BIOL 4418 Electron Microscopy BIOL 4421 Biotechnology
b - Developmental/Morphology
Choose at least one:
BIOL 2428 Comparative Vertebrate Anatomy
BIOL 3405 Histology
BIOL 3406 Developmental Mechanisms
BIOL 3407 Comparative Embryology
BIOL 3408 Plant Morphology
BIOL 4420 Plant Anatomy
c - Organismal/Environmental
Choose at least one:
BIOL 3404 Conservation Biology
BIOL 3409 Ecology
BIOL 3414 Invertebrate Zoology
BIOL 4316 Environmental Toxicology
BIOL 4318 Ethnobotany
BIOL 4319 Medical Entomology
BIOL 4388 Global Change Ecology
BIOL 4402 Marine Zoology
BIOL 4403 Introduction to Remote Sensing Technology
BIOL 4404 Ichthyology
BIOL 4406 Mycology
BIOL 4407 Animal Parasitology
BIOL 4408 Plant Pathology
BIOL 4409 Herpetology
BIOL 4410 Marine Botany
BIOL 4412 Ornithology
BIOL 4414 Plant Taxonomy
BIOL 4415 Entomology
BIOL 4416 Mammalogy
BIOL 4419 Aquatic Entomology
BIOL 4424 Microbial Ecology
BIOL 4426 Marine Ecology
BIOL 4427 Marine Animal Field Studies
BIOL 4432 Animal Behavior
d - Physiology
Choose at least one:
BIOL 1322 Human Nutrition
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
BIOL 3310 Neurobiology
BIOL 3345 Animal Nutrition
BIOL 3411 Mammalian Physiology
BIOL 4317 Disease Epidemiology
BIOL 4362 Neuroscience II: System, Developmental, and Disorders
BIOL 4405 Plant Physiology
BIOL 4411 Ecological Physiology of Animals
BIOL 4422 Neurobiology Methods

## C - SUPPORT COURSES - 6 HOURS

PSYC 2301 General Psychology
SOCI 1301 Introduction to Sociology

D - FREE ELECTIVES - 14 HOURS (8 advanced minimum) Pre-medical/Pre-dental/Pre-optometry/Pre-veterinary students are strongly encouraged to take CHEM 2325/CHEM 2125 Organic Chemistry II, CHEM 3303 Biochemistry, and PHYS 1402 General Physics II.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements

Admission requirements to this program: BIOL 1406 (or BIOL 1487 Honors), BIOL 1407 (or BIOL 1488 Honors), and CHEM 1311/CHEM 1111 with a ' $C$ ' or better grade in all of these courses and Department approval.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN BIOLOGY <br> (FOCUS IN BIOLOGY WITH MINOR)

The Department of Biology is committed to excellence in instruction, scholarly accomplishment, research, professional service and student success. The Department provides a broad-based undergraduate education in Biology so as to give students the opportunity to pursue a career best-suited to their interests and abilities. Graduates are prepared to enter the workforce or continue their education in graduate or professional school. The Department provides rigorous pre-professional preparation for students seeking careers in biological sciences and health professions.

## STUDENT LEARNING OUTCOMES:

1. Role of the Cell: The Biology graduate knows the role of the cell in life and living systems, and understands the interrelationships among subcellular structures that contribute to its functioning as a unit.
2. Role of Genetics: The Biology graduate understands the role of genetics in inheritance and can explain how environmental conditions influence natural selection processes and contribute to adaptation.
3. Diversity of Life: The Biology graduate is aware of the diversity of life and interrelationships between an organism and its environment.
4. Structure and Function: The biology graduate understands how the organization of a specific structure within an organism is related to a specific function, understands interrelationships among organs and organ systems within an organism, and how interaction between structure and function contribute to the survival of the organism.
5. Scientific Method: The biology graduate understands the Scientific Method, is able to analyze and interpret data, and communicate research findings in both oral and written form.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - 3 hours
Choose one:
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors) MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
Life and Physical Science - 6 hours
CHEM 1311 General Chemistry I CHEM 1312 General Chemistry II
Integrative and Experiential Learning - $\mathbf{2}$ hours
CHEM 1111 General Chemistry I Lab CHEM 1112 General Chemistry II Lab

B - MAJOR REQUIREMENTS - 44 HOURS (36 advanced)
1 - Biology Foundation - 23 hours ( $\mathbf{1 5}$ advanced)
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 3301 Biological Evolution
BIOL 3409 Ecology
BIOL 3413 Genetics
BIOL 4400 Biological Communication (Capstone)
2 - Advanced Biology Electives - 21 hours (9 advanced minimum)
Students must take at least one course from each group representing one of three
organizational levels of Biology. Group criteria do not need to be met with advanced hours.
a - Cellular/Molecular
Choose at least one:
BIOL 3401 General Microbiology
BIOL 3403 Medical Microbiology and Immunology
BIOL 3405 Histology
BIOL 3406 Developmental Mechanisms
BIOL 3412 Cell Biology
BIOL 3415 Molecular Biology
BIOL 4313 Endocrinology

BIOL 4330 Molecular Evolution BIOL 4408 Plant Pathology BIOL 4413 General Virology BIOL 4417 Bacterial Genetics BIOL 4418 Electron Microscopy BIOL 4421 Biotechnology BIOL 4428 Medical Genomics CHEM 3303 Biochemistry

## b - Organismal

Choose at least one:
BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
BIOL 2428 Comparative Vertebrate Anatomy
BIOL 3310 Neurobiology
BIOL 3345 Animal Nutrition
BIOL 3407 Comparative Embriology
BIOL 3408 Plant Morphology
BIOL 3411 Mammalian Physiology
BIOL 3414 Invertebrate Zoology
BIOL 4319 Medical Entomology
BIOL 4362 Neuroscience II: System, Developmental, and Disorders)
BIOL 4402 Marine Zoology
BIOL 4404 Ichthyology
BIOL 4405 Plant Physiology
BIOL 4406 Mycology
BIOL 4407 Animal Parasitology
BIOL 4409 Herpetology
BIOL 4410 Marine Botany
BIOL 4412 Ornithology
BIOL 4414 Plant Taxonomy
BIOL 4415 Entomology
BIOL 4416 Mammalogy
BIOL 4419 Aquatic Entomology
BIOL 4420 Plant Anatomy
BIOL 4422 Neurobiology Methods
c - Ecological/Environmental
Choose at least one:
BIOL 3404 Conservation Biology
BIOL 4316 Environmental Toxicology
BIOL 4317 Disease Epidemiology
BIOL 4318 Ethnobotany
BIOL 4388 Global Change Ecology
BIOL 4403 Introduction to Remote Sensing Technology
BIOL 4411 Ecological Physiology of Animals

BIOL 4424 Microbial Ecology
BIOL 4426 Marine Ecology
BIOL 4427 Marine Animal Field Studies
BIOL 4429 Agroecology
BIOL 4432 Animal Behavior

## C - SUPPORT COURSES - 4 HOURS

CHEM 2123 Organic Chemistry I Lab
CHEM 2323 Organic Chemistry I

D - FREE ELECTIVES - 12 HOURS
Advanced hours will vary to meet 42 advanced hour requirement.

E - MINOR - 18 HOURS (6 advanced)
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

## Admission requirements

Admission requirements to this program: BIOL 1406 (or BIOL 1487 Honors), BIOL 1407 (or BIOL 1488 Honors), and CHEM 1311/CHEM 1111 with a 'C' or better grade in all of these courses and Department approval.

## Graduation requirements

1. Minimum 44 credit hours in Biology and 2.50 Biology GPA; At least 36 upper division hours in Biology.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> BIOLOGY <br> (7-12 TEACHER CERTIFICATION AND FOCUS IN LIFE SCIENCES)

The Department of Biology is committed to excellence in instruction, scholarly accomplishment, research, professional service and student success. The Department provides a broad-based undergraduate education in Biology so as to give students the opportunity to pursue a career best-suited to their interests and abilities. Graduates are prepared to enter the workforce or continue their education in
graduate or professional school. The Department provides rigorous pre-professional preparation for students seeking careers in biological sciences and health professions.

The Department also provides a service function to the university by providing a means for students to fulfill their science requirement. Non-majors receive instruction in scientific methods, a general overview of biology, new discoveries, and the importance of biology in society. An M.S. degree program provides the opportunity for advanced study, specialization, and research. The program prepares students for further graduate study at the doctorate level and for careers in the biological sciences and related disciplines.

The Department of Biology is committed to the discovery of new knowledge through research that is conveyed to professional and lay constituencies through publication and presentation and participation in policy decision-making.

The Department of Biology also engages the community through outreach programs, continuing education, educational leadership, and collaborations with local school districts and governmental agencies. Faculty members are also encouraged to take leadership roles in societies of their research specialties.

## STUDENT LEARNING OUTCOMES:

1. Role of the Cell: The Biology graduate knows the role of the cell in life and living systems, and understands the interrelationships among subcellular structures that contribute to its functioning as a unit
2. Role of Genetics: The Biology graduate understands the role of genetics in inheritance and can explain how environmental conditions influence natural selection processes and contribute to adaptation.
3. Diversity of Life: The Biology graduate is aware of the diversity of life and interrelationships between an organism and its environment.
4. Structure and Function: The biology graduate understands how the organization of a specific structure within an organism is related to a specific function, understands interrelationships among organs and organ systems within an organism, and how interaction between structure and function contribute to the survival of the organism.
5. Scientific Method: The biology graduate understands the Scientific Method, is able to analyze and interpret data, and communicate research findings in both oral and written form.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - $\mathbf{6}$ hours
CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II
Social and Behavioral Sciences - $\mathbf{3}$ hours
PSYC 2301 General Psychology

## Integrative and Experiential Learning - $\mathbf{3}$ hours

CHEM 1111 General Chemistry I Lab CHEM 1112 General Chemistry II Lab BIOL 1406 General Biology I (or BIOL 1487 Honors) one-hour lab

## B - MAJOR REQUIREMENTS - 61 HOURS (37 advanced minimum) 1 - Life Sciences Foundation - 49 hours ( 28 advanced)

BIOL 1406 General Biology I (or BIOL 1487 Honors) three-hour lecture BIOL 1407 General Biology II (or BIOL 1488 Honors) BIOL 3301 Biological Evolution BIOL 3330 Functions and Modeling BIOL 3409 Ecology BIOL 3412 Cell Biology BIOL 3413 Genetics BIOL 4392 Research Methods in the Science and Mathematics Classroom (UTeach) BIOL 4400 Biological Communication (Capstone)
CHEM 2123 Organic Chemistry Lab CHEM 2323 Organic Chemistry MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture PHIL 3301 Perspectives on Mathematics and Science PHYS 1401 General Physics I PHYS 1402 General Physics II
2 - Diversity of Life - 12 hours (9 advanced minimum)
Complete 12 advanced hours from the following sections:
a - Plants - $\mathbf{3}$ hours minimum ( 3 advanced minimum)
Choose at least one:
BIOL 3408 Plant Morphology
BIOL 4318 Ethnobotany
BIOL 4405 Plant Physiology
BIOL 4406 Mycology
BIOL 4408 Plant Pathology
BIOL 4410 Marine Botany
BIOL 4414 Plant Taxonomy
BIOL 4420 Plant Anatomy
b-Animals - $\mathbf{3}$ hours minimum
Choose at least one:
BIOL 2428 Comparative Vertebrate Anatomy
BIOL 3345 Animal Nutrition
BIOL 3405 Histology
BIOL 3407 Comparative Embryology
BIOL 3411 Mammalian Physiology
BIOL 3414 Invertebrate Zoology
BIOL 4319 Medical Entomology
BIOL 4402 Marine Zoology
BIOL 4404 Ichthyology
BIOL 4407 Animal Parasitology
BIOL 4409 Herpetology

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            BIOL 4411 Ecological Physiology of Animals
            BIOL 4412 Ornithology
            BIOL 4415 Entomology
            BIOL 4416 Mammalogy
                BIOL 4419 Aquatic Entomology
                BIOL 4427 Marine Animal Field Studies
            BIOL 4432 Animal Behavior
c - Microbiology - 4 hours minimum (4 advanced minimum)
                Choose at least one:
            BIOL 3401 General Microbiology
                    BIOL 3403 Medical Microbiology and Immunology
                    BIOL 4413 General Virology
                    BIOL 4417 Bacterial Genetics
                    BIOL 4424 Microbial Ecology
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C - UTEACH CERTIFICATION - 21 HOURS (19 advanced)
Area of Certification: Life Science (7-12)
UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science
UTCH 3302 Classroom Interactions
UTCH 3303 Project-Based Instruction
UTCH 4101 Apprentice Teaching Seminar
UTCH 4601 Apprentice Teaching
READ 4305 Content Area Literacy

TOTAL CREDIT HOURS FOR GRADUATION - 124 HOURS TOTAL ADVANCED HOURS - 56 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Admission to the College of Education is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 3 advanced hours, as recommended by advisor.

## Graduation requirements

1. Minimum GPA of 2.75 is required for graduation. BIOL 1406 (or BIOL 1487 Honors), BIOL 1407 (or BIOL 1488 Honors), CHEM 1311/CHEM 1111, CHEM 1312/1112, UTCH 1101, UTCH 1102, UTCH 3301, UTCH 3302, UTCH 3303, UTCH 4101, UTCH 4601 with a grade of 'C' or better grade in all of these courses; and approval of UTeach portfolio are required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

A - MINOR REQUIREMENTS - 18 HOURS (6 advanced minimum)
1 - Biology Core - 8 hours
BIOL 1406 General Biology I
BIOL 1407 General Biology II
$\mathbf{2}$ - Biology Electives - 10 hours ( 6 advanced minimum)
Choose 10 hours in Biology, of which at least 6 hours must be advanced.

# Department of Chemistry 

Dr. Wei Lin<br>Associate Professor, Department of Chemistry<br>Location: LHSB1.814<br>Phone: 956-882-5945<br>Email: wei.lin@utrgv.edu<br>Dr. Javier Macossay-Torres<br>Associate Professor, Department of Chemistry<br>Location: SCNE 3352<br>Phone: 956-665-3371<br>Email: javier.macossaytorres@utrgv.edu

## BACHELOR OF SCIENCE (BS)

WITH A MAJOR IN CHEMISTRY

Students receiving the BS Degree in Chemistry (Broadfield Major) can continue their academic studies into masters or doctoral programs in Chemistry or can use the degree to find employment as a chemist. This degree can also be combined with teacher certification work to enter a career as a secondary school teacher of chemistry. The Chemistry (Broadfield Major) degree is certified by the American Chemical Society.

## STUDENT LEARNING OUTCOMES:

1. Graduates will demonstrate knowledge of current chemical and scientific theories and applications and the ability to communicate chemical knowledge in a variety of ways.
2. Graduates will have both broad knowledge and skills of critical thinking, high level problem solving, and analytical reasoning in the chemical sciences.
3. Graduates will be prepared to conduct or participate in advanced research and the ability to use computers and scientific instrumentation to solve chemical problems.
4. Graduates will be prepared to search for employment or continue on to medical, dental, or graduate school.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Sciences - 6 hours
CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II
Integrative and Experiential Learning - $\mathbf{2}$ hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab

B - MAJOR REQUIREMENTS - 37 HOURS (25 advanced)
CHEM 2301 Analytical Chemistry
CHEM 2101 Analytical Chemistry Lab
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CHEM 2325 Organic Chemistry II
CHEM 2125 Organic Chemistry II Lab
CHEM 3301 Inorganic Chemistry
CHEM 3202 Inorganic Chemistry Lab
CHEM 3303 Biochemistry I
CHEM 3103 Biochemistry I Lab
CHEM 3304 Physical Chemistry I
CHEM 3104 Physical Chemistry I Lab
CHEM 3305 Physical Chemistry II
CHEM 3105 Physical Chemistry II Lab
CHEM 4101 Chemistry Seminar
CHEM 4201 Chemistry Problems I
CHEM 4304 Instrumental Analysis
CHEM 4104 Instrumental Analysis Lab
CHEM 4105 Chemistry Capstone

## C - SUPPORT COURSES - 16 HOURS ( 3 advanced)

MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 3341 Differential Equations
PHYS 1401 General Physics I
PHYS 1402 General Physics II

D - TECHNICAL ELECTIVES - 20 HOURS (20 advanced)
Complete 6 advanced hours in CHEM, and complete 14 advanced hours in one of the following areas: CHEM, BIOL, PHYS, MATH, or ENGR.

## E - FREE ELECTIVES - 5 HOURS

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS <br> TOTAL ADVANCED HOURS - 48 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF SCIENCE (BS) 

WITH A MAJOR IN CHEMISTRY<br>(7-12 UTEACH CERTIFICATION)

Students receiving the BS Degree in Chemistry with Teacher Certification can continue their academic studies into masters or doctoral programs in Chemistry, can use the degree to find employment as a chemist, or can enter a career as a secondary school teacher of chemistry. The Chemistry degree is certified by the American Chemical Society.

## STUDENT LEARNING OUTCOMES:

1. Graduates will demonstrate knowledge of current chemical and scientific theories and applications and the ability to communicate chemical knowledge in a variety of ways.
2. Graduates will have both broad knowledge and skills of critical thinking, high level problem solving and analytical reasoning in the chemical sciences.
3. Graduates will be prepared to conduct or participate in advanced research and the ability to use computers and scientific instrumentation to solve chemical problems.
4. Graduates will be prepared to search for employment or continue on to medical, dental or graduate school.
5. Graduates will demonstrate pedagogical content knowledge by successfully completing all state teacher certification requirements.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - $\mathbf{3}$ hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture

## Life and Physical Science - $\mathbf{6}$ hours

CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II
Integrative and Experiential Learning - 2 hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab

## B - MAJOR REQUIREMENTS - 43 HOURS (31 advanced)

CHEM 2301 Analytical Chemistry
CHEM 2101 Analytical Chemistry Lab
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CHEM 2325 Organic Chemistry II
CHEM 2125 Organic Chemistry II Lab
CHEM 3301 Inorganic Chemistry
CHEM 3202 Inorganic Chemistry Lab
CHEM 3303 Biochemistry I
CHEM 3103 Biochemistry I Lab
CHEM 3304 Physical Chemistry I
CHEM 3104 Physical Chemistry I Lab
CHEM 3305 Physical Chemistry II
CHEM 3105 Physical Chemistry II Lab
CHEM 4101 Chemistry Seminar
CHEM 4201 Chemistry Problems I
CHEM 4304 Instrumental Analysis
CHEM 4104 Instrumental Analysis Lab
CHEM 4105 Chemistry Capstone PHYS 3330 Functions and Modeling PHYS 4392 Research Methods

## C - SUPPORT COURSES - 16 HOURS ( 3 advanced)

MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture MATH 2414 Calculus II (or MATH 2488 Honors) PHIL 3317 Perspectives on Mathematics and Science PHYS 1401 General Physics I PHYS 1402 General Physics II

D - UTEACH CERTIFICATION - 21 HOURS (19 advanced)
Area of Certification: Chemistry (7-12)
UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science
UTCH 3302 Classroom Interactions
UTCH 3303 Project-Based Instruction
UTCH 4601 Apprentice Teaching
UTCH 4101 Apprentice Teaching Seminar READ 4305 Content Area Literacy

## TOTAL CREDIT HOURS FOR GRADUATION - 122 HOURS TOTAL ADVANCED HOURS - 53 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

Admission to the College of Education is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 5 advanced hours, as recommended by advisor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# MINOR IN <br> BIOCHEMISTRY 

## A - MINOR REQUIREMENTS - 21 HOURS (9 advanced)

1 - Biochemistry Core - 12 hours
CHEM 1311 General Chemistry I
CHEM 1111 General Chemistry I Lab
CHEM 1312 General Chemistry II
CHEM 1112 General Chemistry II Lab
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
2 - Advanced Biochemistry Core - 9 hours (9 advanced)
CHEM 3303 Biochemistry
CHEM 4302 Advanced Biochemistry
Choose one:
CHEM 3103 Biochemistry Lab and CHEM 4203 Advanced Biochemistry Lab
CHEM 4306 Special Topics in Biochemistry

MINOR IN
CHEMISTRY

## A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)

Choose 18 hours of CHEM, of which 6 must be advanced.

# School of Mathematical \& Statistical Sciences 

## BACHELOR OF SCIENCE (BS) <br> WITH A MAJOR IN <br> MATHEMATICS

Mathematics is both an exact science and a highly creative endeavor; a field of study that develops problem-solving skills and a passion for inquiry. Mathematics majors are surprisingly attractive to many professional branches in our society, particularly intelligence, technology, finance, security, engineering and physics. Mathematics Majors with Teacher Certification are attractive to the growing demand for teachers in high schools, middle schools and elementary schools. A BS in Mathematics will prepare the graduate for a competitive position in society and provide the necessary preparation graduate for an exciting and rewarding teaching position and for graduate studies.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate in-depth knowledge of Mathematics, its scope, application, history, problems, methods, and usefulness to mankind both as a science and as an intellectual discipline.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Recommended
Social and Behavioral Sciences - $\mathbf{3}$ hours
Choose from:
ECON 1301 Introduction to Economics
ECON 2301 Principles of Macroeconomics
Life and Physical Sciences - 6 hours
PHYS 2425 Physics for Scientist and Engineers I three-hour lecture
PHYS 2426 Physics for Scientist and Engineers II three-hour lecture

## Integrative and Experiential Learning - 5 hours

PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab Choose one:

CSCI/CMPE 1370 Engineering Computer Science I (or CSCI/CMPE 1378 Honors)
CSCI 1380 Computer Science I (or CSCI 1387 Honors)
B - MAJOR REQUIREMENTS - 78 HOURS MINIMUM (51 advanced minimum)
1 - Mathematics Core - 33 hours (21 advanced)
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture MATH 2414 Calculus II (or MATH 2488 Honors) MATH 2415 Calculus III MATH 2318 Linear Algebra
MATH 3341 Differential Equations
MATH 3350 Introduction to Mathematical Proof
MATH 3352 Modern Geometry I
MATH 3363 Modern Algebra I
MATH 3372 Real Analysis I
MATH 4337 Probability and Statistics I
MATH 4390 Mathematics Project
2 - Concentrations - 45 hours minimum (27 advanced minimum)
a - Applied Mathematics - 45 hours ( 33 advanced)
i - Applied Mathematics Core - 9 hours ( 9 advanced)
MATH 3331 Applied Statistics I
MATH 3343 Introduction to Mathematical Software MATH 3349 Numerical Methods
ii - Advanced Mathematics Electives - $\mathbf{1 8}$ hours (18 advanced) Choose from:

MATH 3332 Applied Statistics II
MATH 3345 Linear Optimization
MATH 3347 Elementary Cryptology
MATH 3361 Applied Discrete Mathematics
MATH 4342 Complex Variables
MATH 4344 Boundary Value Problems
MATH 4346 Integral Transforms
iii - Free Electives - $\mathbf{1 8}$ hours (6 advanced)
b - Pure Mathematics - 45 hours ( 33 advanced)
i - Pure Mathematics Core - $\mathbf{1 2}$ hours ( $\mathbf{1 2}$ advanced)
MATH 3349 Numerical Methods
MATH 3365 Number Theory
MATH 4342 Complex Variables
MATH 4355 Topology
ii - Advanced Mathematics Electives - $\mathbf{1 5}$ hours (15 advanced)
Choose one:
MATH 3341 Differential Equations
MATH 3345 Linear Optimization

MATH 3349 Numerical Methods MATH 3361 Applied Discrete Mathematics
Choose two:
MATH 4352 Modern Geometry II MATH 4359 Differential Geometry MATH 4364 Modern Algebra II MATH 4367 Advanced Linear Algebra MATH 4373 Real Analysis II Choose two 4000 level Mathematics courses.
iii - Free Electives - $\mathbf{1 8}$ hours (6 advanced)
c - Secondary School - 46 hours (44 advanced)
i - Secondary Mathematics Core - $\mathbf{2 5}$ hours (25 advanced)
MATE 3317 Perspectives in Mathematics and Science MATE 3321 Functions and Modeling MATE 3322 Secondary Mathematics in a Technological Environment MATE 4329 Research Methods in Secondary Mathematics MATE 4423 Advanced Studies in Secondary Mathematics MATH 3326 History of Math MATH 3361 Applied Discrete Mathematics MATH 3365 Number Theory
ii - UTeach Certification - $\mathbf{2 1}$ hours (19 advanced)
Area of Certification: Mathematics (7-12)
UTCH 1101 Inquiry Approaches to Teaching UTCH 1102 Inquiry-Based Lesson Design UTCH 3301 Knowing and Learning in Mathematics and Science UTCH 3302 Classroom Interactions UTCH 3303 Project-Based Instruction UTCH 4601 Apprentice Teaching UTCH 4101 Apprentice Teaching Seminar READ 4305 Content Area Literacy
d - Middle School - 48 hours (40 advanced)
i - Middle School Mathematics Core - 27 hours (21 advanced)
MATH 1350 Fundamentals of Mathematics I MATH 1351 Fundamentals of Mathematics II MATE 3301 Fundamentals of Middle School Mathematics MATE 3302 Fundamentals of Measurement and Geometry I MATE 3303 Fundamentals of Measurement and Geometry II MATE 3304 Fundamentals of Algebraic Structures MATE 3317 Perspectives in Mathematics and Science MATE 3321 Functions and Modeling MATE 4319 Research Methods in Middle School Mathematics
ii - UTeach Certification - $\mathbf{2 1}$ hours (19 advanced)
Area of Certification: Mathematics (4-8)
UTCH 1101 Inquiry Approaches to Teaching UTCH 1102 Inquiry-Based Lesson Design UTCH 3301 Knowing and Learning in Mathematics and Science UTCH 3302 Classroom Interactions UTCH 3303 Project-Based Instruction

> UTCH 4601 Apprentice Teaching UTCH 4101 Apprentice Teaching Seminar READ 4305 Content Area Literacy e - Statistics - 45 hours ( 30 advanced)
> i - Statistics Core - $\mathbf{2 4}$ hours (21 advanced)
> MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors) MATH 3331 Applied Statistics I MATH 3332 Applied Statistics II MATH 3334 Sampling MATH 3335 Applied Regression MATH 3343 Introduction to Mathematical Software MATH 3349 Numerical Methods MATH 4338 Probability and Statistics II
> ii - Advanced Mathematics Electives - 3 hours (3 advanced)
> Choose 3 advanced hours of MATH.
> iii - Free Electives - 18 hours (6 advanced)
> f - Science and Engineering - 45 hours ( 27 advanced)
> i - Science and Engineering Core - 27 hours (21 advanced)
> Choose 27 hours, of which 21 must be advanced, from the College of
> Engineering and Computer Science and College of Sciences (excluding MATH and MATE).
> ii - Free Electives - 18 hours ( 6 advanced)
> g - Economics - 45 hours ( 27 advanced)
> i - Economics Core - $\mathbf{2 4}$ hours (18 advanced)
> ECON 2301 Principles of Macroeconomics
> ECON 2302 Principles of Microeconomics
> ECON 3341 Econometrics
> ECON 3342 Business and Economics Forecasting
> ECON 3351 Macroeconomic Theory
> ECON 3352 Microeconomic Theory
> ECON 4361 Studies in Economics
> MATH 3343 Introduction to Mathematical Software
> ii - Advanced Mathematics Electives - 3 hours (3 advanced)
> Choose 3 advanced hours of MATH.
> iii - Free Electives - 18 hours ( 6 advanced)

TOTAL CREDIT HOURS FOR GRADUATION (MINIMUM) - 120 HOURS
TOTAL ADVANCED HOURS (MINIMUM) - 48 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Progression requirements

Admission to the College of Education is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute advanced hours (3 hours for Secondary School concentration; 4 hours for Middle School concentration), as recommended by advisor.

## Graduation requirements

1. The student must complete all these major course requirements and all MATH and MATE courses with grades of ' C ' or better and have with a GPA for the major of 2.5 or better ( 2.75 or better for Middle School and Secondary School Concentrations).
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF INTERDISCIPLINARY STUDIES (BIS) 

WITH A MAJOR IN
INTERDISCIPLINARY STUDIES
(4-8 MIDDLE SCHOOL MATHEMATICS UTEACH CERTIFICATION)

Mathematics Majors with Teacher Certification are attractive to the growing demand for teachers in middle schools and elementary schools. A BIS in Middle School Mathematics will prepare the graduate for an exciting and rewarding teaching position and provide the necessary preparation for graduate studies in Mathematics Education.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate in-depth knowledge of Mathematics, its scope, application, history, problems, methods, and usefulness to mankind both as a science and as an intellectual discipline.
2. Demonstrate a sound conceptual understanding of Mathematics through the construction of mathematically rigorous and logically correct proofs.
3. Identify, formulate, and analyze real world problems with statistical or mathematical techniques.
4. Utilize technology as an effective tool in investigating, understanding, and applying mathematics.
5. Communicate mathematics effectively to mathematical and non-mathematical audiences in oral, written, and multi-media form.
6. Demonstrate pedagogical content knowledge by successfully completing all state teacher certification requirements.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 2412 Pre-Calculus three-hour lecture

## Recommended

Social and Behavioral Sciences - $\mathbf{3}$ hours
Choose from:
ECON 1301 Introduction to Economics
ECON 2301 Principles of Macroeconomics

## Life and Physical Sciences - 6 hours

PHYS 2425 Physics for Scientists and Engineers I three-hour lecture PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Integrative and Experiential Learning - 5 hours
PHYS 2425 Physics for Scientists and Engineers I one-hour lab PHYS 2426 Physics for Scientists and Engineers II one-hour lab Choose one:

CSCI/CMPE 1370 Engineering Computer Science I (or CSCI/CMPE 1378 Honors)
CSCI 1380 Computer Science I (or CSCI 1387 Honors)
B - MAJOR REQUIREMENTS - 53 HOURS (42 advanced)
1 - Mathematics Core - $\mathbf{3 8}$ hours (33 advanced)
MATH 2412 Pre-Calculus one-hour lecture MATH 2413 Calculus I (or MATH 2487 Honors) MATE 3301 Fundamentals of Middle School Mathematics MATE 3302 Fundamentals of Measurement and Geometry I MATE 3303 Fundamentals of Measurement and Geometry II MATE 3304 Fundamentals of Algebraic Structures MATE 3305 Fundamentals of Statistics and Probability MATE 3306 Middle School Mathematics in a Technological Environment MATE 3307 Fundamentals of Problem Solving MATE 3311 Fundamentals of Discrete Mathematics MATE 3312 Fundamentals of Number Theory MATE 3313 Fundamentals of Mathematics History MATE 3314 Fundamentals of Mathematical Structures \& Processes
2 - Interdisciplinary Component - 15 hours (9 advanced)
MATH 1350 Fundamentals of Mathematics I MATH 1351 Fundamentals of Mathematics II MATE 3317 Perspectives in Mathematics and Science MATE 3321 Functions and Modeling MATE 4319 Research Methods in Middle School Mathematics

C - UTEACH CERTIFICATION - 21 HOURS (19 advanced)
Area of Certification: Mathematics (4-8)
UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning Mathematics and Science
UTCH 3302 Classroom Interaction
UTCH 3303 Project-Based Instruction
UTCH 4601 Apprentice Teaching
UTCH 4101 Apprentice Teaching Seminar
READ 4305 Content Area Literacy
D- SUPPORT COURSES - 4 HOURS
Choose 4 hours of Life and Physical Science beyond the core.

## TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS

TOTAL ADVANCED HOURS - 61 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Admission to the College of Education and P-16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 7 advanced hours, as recommended by advisor.

## Graduation requirements

1. A grade of ' $C$ ' or better with a GPA of 2.75 or greater is required in all MATH and MATE.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## MINOR IN <br> APPLIED MATHEMATICS

A - MINOR REQUIREMENTS - 23 HOURS (12 advanced minimum)
All courses in this minor must be completed with a grade of ' $C$ ' or better.
1 - Applied Mathematics Core - $\mathbf{8}$ hours
MATH 2413 Calculus I (or MATH 2487 Honors)
MATH 2414 Calculus II (or MATH 2488 Honors)
$\mathbf{2}$ - Applied Mathematics Electives - $\mathbf{1 5}$ hours (12 advanced minimum)
Choose from:
MATH 2305 Discrete Mathematics
MATH 2346 Mathematics for Electrical and Computer Engineers
MATH 2415 Calculus III
MATH 3331 Applied Statistics I
MATH 3332 Applied Statistics II
MATH 3335 Applied Regression
MATH 3341 Differential Equations
MATH 3345 Linear Optimization
MATH 3347 Elementary Cryptology
MATH 3349 Numerical Methods
MATH 3361 Applied Discrete Mathematics
MATH 4337 Probability and Statistics I
MATH 4338 Probability and Statistics II
MATH 4342 Complex Variables
MATH 4344 Boundary Value Problems
MATH 4346 Integral Transforms

MINOR IN

## MIDDLE SCHOOL MATHEMATICS

A - MINOR REQUIREMENTS - 27 HOURS (21 advanced)
All courses in this minor must be completed with a grade of ' $C$ ' or better.
1 - Middle School Mathematics Core - 27 hours (21 advanced)
MATH 1350 Fundamentals of Mathematics I
MATH 1351 Fundamentals of Mathematics II
MATE 3301 Fundamentals of Middle School Mathematics
MATE 3302 Fundamentals of Measurement and Geometry I
MATE 3303 Fundamentals of Measurement and Geometry II
MATE 3304 Fundamentals of Algebraic Structures
MATE 3305 Fundamentals of Statistics and Probability
MATE 3306 Middle School Mathematics in a Technological Environment
MATE 3307 Fundamentals of Problem Solving

## MINOR IN <br> PURE MATHEMATICS

A - MINOR REQUIREMENTS - 23 HOURS (12 advanced)
All courses in this minor must be completed with a grade of ' $C$ ' or better.
1 - Mathematics Core - 14 hours (3 advanced)
MATH 2413 Calculus I (or MATH 2487 Honors)
MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 2318 Linear Algebra
MATH 3350 Introduction to Mathematical Proof
2 - Advanced Mathematics - 9 hours ( 9 advanced)
Complete 9 hours of advanced Mathematics, of which at least 6 hours must be of the following:

MATH 3352 Modern Geometry I
MATH 3363 Modern Algebra I
MATH 3365 Number Theory
MATH 3372 Real Analysis I
MATH 4355 Topology

MINOR IN
SECONDARY SCHOOL MATHEMATICS

A - MINOR REQUIREMENTS - 26 HOURS (16 advanced)
All courses in this minor must be completed with a grade of ' $C$ ' or better.

1 - Mathematics Core - $\mathbf{2 3}$ hours (13 advanced)
MATH 2413 Calculus I (or MATH 2487 Honors)
MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 2318 Linear Algebra
Choose one:
MATH 3331 Applied Statistics I MATH 4337 Probability and Statistics I
MATH 3352 Modern Geometry I
MATH 3363 Modern Algebra I
MATE 4423 Advanced Studies in Secondary Mathematics
2 - Advanced Mathematics Core - $\mathbf{3}$ hours (3 advanced) Choose from:

MATH 3326 History of Mathematics
MATH 3361 Applied Discrete Mathematics
MATH 3365 Number Theory
MATE 3322 Secondary Mathematics in a Technological Environment

## MINOR IN STATISTICS

A - MINOR REQUIREMENTS - $\mathbf{2 3}$ HOURS (6 advanced)
All courses in this minor must be completed with a grade of 'C' or better.
1 - Mathematics Core - $\mathbf{1 1}$ hours
MATH 2318 Linear Algebra
MATH 2413 Calculus I (or MATH 2487 Honors)
MATH 2414 Calculus II (or MATH 2488 Honors)
$\mathbf{2}$ - Advanced Statistics Electives - $\mathbf{1 2}$ hours (6 advanced minimum)
Choose from:
Choose only one:
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors) MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
Choose only one:
MATH 2334 Applied Statistics for the Health Sciences
MATH 3331 Applied Statistics I
MATH 3332 Applied Statistics II
MATH 3334 Sampling
MATH 3335 Applied Regression
MATH 3343 Introduction to Mathematical Software
MATH 4337 Probability and Statistics I
MATH 4338 Probability and Statistics II

# School of Multidisciplinary Sciences 

Dr. David Hicks<br>Director, School of Multidisciplinary Sciences<br>Location: LHSB 1.814A (UTRGV Brownsville Campus)<br>Phone: 956-882-5055<br>Email: david.hicks@utrgv.edu<br>Dr. Frank Dirrigl, Jr.<br>Associate Director, School of Multidisciplinary Sciences (SMS); Program Director, Environmental and Earth Sciences (EES), School of Multidisciplinary Sciences<br>Location: SCNE 2344<br>Phone: 956-665-8732<br>Fax: 956-665-3657<br>Email: frank.dirrigl@utrgv.edu<br>\section*{BACHELOR OF SCIENCE (BS)<br><br>WITH A MAJOR IN<br><br>ENVIRONMENTAL SCIENCE}

The Interdisciplinary Bachelor of Science degree in Environmental Science prepares graduates for careers at local, state and federal government agencies, non-profit organizations, and environmental consulting firms. Additionally, graduates of this program are prepared to continue onto graduate studies in order to pursue research and scholarship opportunities. The program core focuses on key environmental issues while the restricted electives allow the students to choose to focus on areas of interest to the individual student.

## STUDENT LEARNING OUTCOMES:

1. The environmental sciences graduate can demonstrate the use of analytical and technical tools used in finding solutions to environmental sciences research questions.
2. The environmental sciences graduate can apply professional evaluative methodologies and appropriate environmental laws and regulations for impact analyses and environmental problem solving.
3. The environmental sciences major will develop and enhance the following cognitive skills:
a. Explain and apply fundamental environmental sciences theories;
b. Identify multiple dimensions of environmental sciences issues; and
c. Understand and apply knowledge of regulations to environmental issues.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - $\mathbf{3}$ hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture

## Life and Physical Sciences - 6 hours

GEOL 1403 Physical Geology three-hour lecture GEOL 1404 Historical Geology three-hour lecture Integrative and Experiential Learning - 2 hours

GEOL 1403 Physical Geology one-hour lab GEOL 1404 Historical Geology one-hour lab

## B - MAJOR REQUIREMENTS - 46 HOURS (38 advanced)

1 - Environmental Science Core - 26 hours (18 advanced)
ENVR 1401 Introduction to Environmental Science I ENVR 1402 Introduction to Environmental Science II ENVR 3301 Natural Resources Conservation ENVR 3302 Environmental Ethics ENVR 3303 Research Methodology and Data Analysis in Environmental Sciences ENVR 4301 Environmental Regulations ENVR 4302 Environmental Impact Analysis ENVR 4303 Environmental Sciences Research Project
$\mathbf{2}$ - Advanced Electives - $\mathbf{2 0}$ hours ( $\mathbf{2 0}$ advanced)
Students may choose any advanced electives in BIOL, CHEM, ENVR, or GEOL. List of
recommended courses available within Department. Recommended courses include:
BIOL 3409 Ecology
BIOL 3414 Invertebrate Zoology
BIOL 4402 Marine Zoology
BIOL 4403 Introduction to Remote Sensing Technology
BIOL 4404 Ichthyology
BIOL 4410 Marine Botany
BIOL 4414 Plant Taxonomy
BIOL 4409 Herpetology
BIOL 4316 Environmental Toxicology
BIOL 4429 Agroecology
BIOL 4430 Coastal Ecology
BIOL 4412 Ornithology
BIOL 4370 Special Topics II
BIOL 4170 Laboratory Topics in Biology
BIOL 3404 Conservation Biology
BIOL 4415 Entomology
BIOL 4416 Mammalogy
BIOL 4419 Aquatic Entomology
BIOL 4388 Global Change Ecology
BIOL 4423 Wildlife Ecology and Management
CHEM 3303 Biochemistry I
CHEM 3103 Biochemistry I Lab
CHEM 3304 Physical Chemistry I
CHEM 3104 Physical Chemistry I Lab
CHEM 3305 Physical Chemistry II
CHEM 3105 Physical Chemistry II Lab
CHEM 4304 Instrumental Analysis

CHEM 4104 Instrumental Lab
CHEM 3401 Environmental Chemistry
GEOL 3408 Introduction to Geographic Information Systems
GEOL 3402 Hydrologic Systems
GEOL 3401 Geomorphology
GEOL 4302 Environmental Geology
GEOL 4401 Advanced Geographic Information Systems
GEOL 4403 Sedimentology and Stratigraphy
GEOL 4404 Coastal Geology
ENVR 3405 Oceanography
ENVR 4304 Environmental Sciences Internship
ENVR 4370 Topics in Environmental Sciences
ENVR 4170 Topics in Environmental Sciences Lab
C - ELECTIVES - 32 HOURS (4 advanced)
BIOL 1406 General Biology I (or BIOL 1487 Honors Biology I)
BIOL 1407 General Biology II (or BIOL 1488 Honors Biology II)
CHEM 1311/1111 General Chemistry I/Lab
CHEM 1312/1112 General Chemistry II/Lab
PHYS 1401 General Physics I
PHYS 1402 General Physics II
MATH 1342 Elementary Statistical Methods (or MATH 1387 Honors)
2-Mathematics - 1 hour
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
$\mathbf{2}$ - Free Electives - 4 hours (4 advanced)
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 42 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Graduation requirements

1. Minimum of 73 hours in Environmental Sciences major requirements restricted Environmental Sciences electives and support courses with an overall GPA of 2.5.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

# BACHELOR OF INTERDISCIPLINARY STUDIES (BIS) 

WITH A MAJOR IN
INTERDISCIPLINARY STUDIES
(4-8 LIFE SCIENCE UTEACH CERTIFICATION)

The Department of Biology is committed to excellence in instruction, scholarly accomplishment, research, professional service, and student success. The Department provides a broad-based undergraduate education in Biology so as to give students the opportunity to pursue a career best-suited to their interests and abilities. Graduates are prepared to enter the workforce or continue their education in graduate or professional school. The Department provides rigorous pre-professional preparation for students seeking careers in biological sciences and health professions.

The Department also provides a service function to the university by providing a means for students to fulfill their science requirement. Non-majors receive instruction in scientific methods, a general overview of biology, new discoveries, and the importance of biology in society. An M.S. degree program provides the opportunity for advanced study, specialization, and research. The program prepares students for further graduate study at the doctorate level and for careers in the biological sciences and related disciplines.

The Department of Biology is committed to the discovery of new knowledge through research that is conveyed to professional and lay constituencies through publication and presentation and participation

STUDENT LEARNING OUTCOMES:

1. Role of the Cell: The Biology graduate knows the role of the cell in life and living systems, and understands the interrelationships among subcellular structures that contribute to its functioning as a unit.
2. Role of Genetics: The Biology graduate understands the role of genetics in inheritance and can explain how environmental conditions influence natural selection processes and contribute to adaptation.
3. Diversity of Life: The Biology graduate is aware of the diversity of life and interrelationships between an organism and its environment.
4. Structure and Function: The biology graduate understands how the organization of a specific structure within an organism is related to a specific function, understands interrelationships among organs and organ systems within an organism, and how interaction between structure and function contribute to the survival of the organism.
5. Scientific Method: The biology graduate understands the Scientific Method, is able to analyze and interpret data, and communicate research findings in both oral and written form.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

Required
Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Science - $\mathbf{6}$ hours
Choose one pair:
PHYS 1401 General Physics I and PHYS 1402 General Physics II
PSCI 1421 Physical Science I and PSCI 1422 Physical Science II
Integrative and Experiential Learning - $\mathbf{3}$ hours
Choose labs corresponding to Life and Physical Science section, and complete:
CHEM 1111 General Chemistry I Lab
B - MAJOR REQUIREMENTS - 60 HOURS (33 advanced)
1 - Life Sciences Foundation - 54 hours (27 advanced)
ASTR 1401 Introduction to Astronomy I
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 2406 Environmental Biology
BIOL 3301 Biological Evolution
BIOL 3330 Functions and Modeling
BIOL 4392 Research Methods in Science and Mathematics Classroom
BIOL 4400 Biological Communication (Capstone)
CHEM 1311 General Chemistry I
GEOG 2313 Principles of Geography Physics Elementary
GEOL 1403 Physical Geology
GEOL 3401 Geomorphology
GEOL 3405 Oceanography
MATE 3305 Fundamentals of Statistics and Probability
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
PHIL 3317 Perspectives on Science and Mathematics
$\mathbf{2 - L i f e}$ Science Electives - $\mathbf{6}$ hours ( $\mathbf{6}$ advanced)
Choose from:
BIOL 3404 Conservation Biology
BIOL 3409 Ecology
BIOL 3413 Genetics
GEOL 4403 Sedimentology and Stratigraphy
GEOL 4302 Environmental Geology
PSCI 3310 Planter Earth and Its Place

C - UTEACH CERTIFICATION - 21 HOURS (19 advanced)
Area of Certification: Life Science (4-8)
UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science UTCH 3302 Classroom Interactions

UTCH 3303 Project-Based Instruction
UTCH 4101 Apprentice Teaching Seminar
UTCH 4601 Apprentice Teaching
READ 4305 Content Area Literacy

## TOTAL CREDIT HOURS FOR GRADUATION - 123 HOURS TOTAL ADVANCED HOURS - 52 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Admission to the College of Education is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 4 advanced hours, as recommended by advisor.

## Graduation requirements

1. Minimum GPA of 2.75 is required for graduation. BIOL 1406 (or BIOL 1487 Honors), BIOL 1407 (or BIOL 1488 Honors), CHEM 1311/CHEM 1111, CHEM 1312/1112, UTCH 1101, UTCH 1102, UTCH 3301, UTCH 3302, UTCH 3303, UTCH 4101, UTCH 4601 with a grade of 'C' or better grade in all of these courses; and approval of UTeach portfolio are required for graduation.
2. In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS)

## WITH A MAJOR IN

MARINE BIOLOGY

The Department of Biology is committed to excellence in instruction, scholarly accomplishment, research, professional service, and student success. The Department provides a broad-based undergraduate education in Biology so as to give students the opportunity to pursue a career best-suited to their interests and abilities. Graduates are prepared to enter the workforce or continue their education in graduate or professional school. The Department provides rigorous pre-professional preparation for students seeking careers in biological sciences and health professions.

## STUDENT LEARNING OUTCOMES:

1. Role of the Cell: The Biology graduate knows the role of the cell in life and living systems, and understands the interrelationships among subcellular structures that contribute to its functioning as a unit
2. Role of Genetics: The Biology graduate understands the role of genetics in inheritance and can explain how environmental conditions influence natural selection processes and contribute to adaptation.
3. Diversity of Life: The Biology graduate is aware of the diversity of life and interrelationships between an organism and its environment.
4. Structure and Function: The Biology graduate understands how the organization of a specific structure within an organism is related to a specific function, understands interrelationships among organs and organ systems within an organism, and how interaction between structure and function contribute to the survival of the organism.
5. Scientific Method: The Biology graduate understands the Scientific Method, is able to analyze and interpret data, and communicate research findings in both oral and written form.

A - GENERAL EDUCATION CORE - 42 HOURS
Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 1343 Introduction to Biostatistics (or MATH 1388 Honors)
Life and Physical Sciences - 6 hours
CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II
Language, Philosophy and Culture - 3 hours
PHIL 1366 Philosophy and History of Science and Technology
Integrative and Experiential Learning - $\mathbf{2}$ hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab
B - MAJOR REQUIREMENTS - 58 HOURS (47 advanced)
1 - Marine Biology Core - 37 hours ( 26 advanced)
BIOL 1406 General Biology I (or BIOL 1487 Honors)
BIOL 1407 General Biology II (or BIOL 1488 Honors)
BIOL 2310 Marine Processes and Ecosystem Dynamics
BIOL 3320 Marine Biogeochemistry
BIOL 3430 Field Methods and Analysis in Marine Biology
BIOL 3413 Genetics
Choose one:
BIOL 3415 Molecular Biology
BIOL 3412 Cell Biology
BIOL 3301 Biological Evolution
BIOL 3409 Ecology
BIOL 4401 Marine Biology Seminar (Capstone)
2 - Marine Biology Electives - 17 hours (17 advanced)
Choose from:
BIOL 4199 Research Problems in Biology
BIOL 4399 Research Problems in Biology
BIOL 3414 Invertebrate Zoology
BIOL 3416 Coral Reef Ecology
BIOL 4388 Global Change Ecology
BIOL 4402 Marine Zoology
BIOL 4403 Introduction to Remote Sensing Technology

> BIOL 4404 Ichthyology
> BIOL 4410 Marine Botany
> BIOL 4426 Marine Ecology
> BIOL 4427 Marine Animal Field Studies
> BIOL 4430 Coastal Ecology
> GEOL 3408 Introduction to Geographic Information Systems

3 - Biology Electives - 4 hours (4 advanced) Choose 4 hours of advanced Biology.

## C - SUPPORT COURSES - 20 HOURS (4 advanced)

CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CHEM 2325 Organic Chemistry II
CHEM 2125 Organic Chemistry II Lab
PHYS 1401 General Physics I
PHYS 1402 General Physics II
ENVR 3405 Oceanography
TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
TOTAL ADVANCED HOURS - 51 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017
Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours.
Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
ENVIRONMENTAL SCIENCES

## A - MINOR REQUIREMENTS - 18 HOURS MINIMUM (6 advanced)

1 - Environmental Sciences Core - $\mathbf{1 2}$ hours
ENVR 1401 Introduction to Environmental Sciences I ENVR 1402 Introduction to Environmental Sciences II Choose one:

BIOL 1407 General Biology II (or BIOL 1488 Biology II Honors) CHEM 1311/1111 General Chemistry I/Lab GEOL 1403 Physical Geology

2 - Environmental Sciences Electives - 6-8 hours (6 advanced) Choose 6-8 hours of Environmental Sciences courses, of which at least 6 hours must be advanced.

# Department of Physics 

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BACHELOR OF SCIENCE (BS)
WITH A MAJOR IN
PHYSICAL SCIENCE
(6-12 UTEACH CERTIFICATION)


#### Abstract

A BS in Physical Science with teaching certification will enable future educators to gain solid training and education in the areas of chemistry and physics. Future graduates will have a leadership role in improving science education and in enabling the youth to become more interested in STEM careers.


## STUDENT LEARNING OUTCOMES:

1. Demonstrate solid understanding of physics and chemistry by successfully passing the content exam in 6-12 physical science.
2. Apply knowledge of physics and chemistry principles through a successful student teaching internship.
3. Demonstrate strong pedagogical content knowledge by passing the state teaching certification requirements.

## A - GENERAL EDUCATION - 42 hours

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Sciences - 6 hours
CHEM 1311 General Chemistry I
CHEM 1312 General Chemistry II
Integrative and Experiential Learning - $\mathbf{3}$ hours
CHEM 1111 General Chemistry I Lab
CHEM 1112 General Chemistry II Lab

B - MAJOR REQUIREMENTS - 60 hours ( $\mathbf{3 2}$ advanced)
1 - Physics Core Courses - 30 hours ( 22 advanced)
PHYS 2411 Physics for Teachers I
PHYS 2412 Physics for Teachers II
PHYS 3301 Electromagnetic Theory
PHYS 3402 Modern Physics
PHYS 3404 Optics
PHYS 4401 Physics Education
PHYS 3101 Junior Laboratory Research I
PHYS 3330 Functions and Modeling PHYS 4392 Research Methods
2 - Chemistry - $\mathbf{1 8}$ hours (7 advanced)
CHEM 2323 Organic Chemistry I
CHEM 2123 Organic Chemistry I Lab
CHEM 2325 Organic Chemistry II
CHEM 2125 Organic Chemistry II Lab
CHEM 2301 Analytical Chemistry
CHEM 3303 Biochemistry
CHEM 4401 Chemistry Education
3 - Mathematics - 12 hours ( 3 advanced)
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 2415 Calculus III
MATE 3317 Perspective in Mathematics and Science (or PHIL 3317)

## C - UTEACH CERTIFICATION - 21 hours (19 advanced)

Area of Certification: Physical Science (6-12)
UTCH 1101 Inquiry Approaches to Teaching
UTCH 1102 Inquiry-Based Lesson Design
UTCH 3301 Knowing and Learning in Mathematics and Science
UTCH 3302 Classroom Interactions
UTCH 3303 Project-Based Instruction
UTCH 4601 Apprentice Teaching
UTCH 4101 Apprentice Teaching Seminar
READ 4305 Content Area Literacy

## TOTAL CREDIT HOURS FOR GRADUATION - 123 HOURS

TOTAL ADVANCED HOURS - 51 HOURS

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Progression requirements
Admission to the College of Education and $\mathrm{P}-16$ Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 4 advanced hours, as recommended by advisor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

## BACHELOR OF SCIENCE (BS)

## WITH A MAJOR IN PHYSICS

A Physicist has a solid understanding of fundamental laws, which in turn can be applied to a wide area of scientific and engineering fields. It is an exciting career that requires discipline and significant amount of work. It also requires development of mathematical, experimental, theoretical, and computational skills. As a result of the Physicist's solid and broad background, Physicists can apply to a wide range of job opportunities, including National Laboratories and Research Centers, Industry, and Academia.

## STUDENT LEARNING OUTCOMES:

1. To develop a solid foundation in Physics.
2. To apply mathematical knowledge to analysis of Physical systems.
3. To apply experimental knowledge to the study of Physical systems.
4. To apply computational and numerical knowledge to the modeling of Physical systems.
5. To develop oral and written communications skills used by Physicists.
6. To develop team skills geared towards contributing to multidisciplinary research.
7. To develop a clear understanding of how Physics has evolved to its current form.
8. To have a clear knowledge of current major issues and problems that Physics is facing today.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. The courses listed below satisfy both degree requirements and General Education Core requirements.

## Required

Mathematics - 3 hours
MATH 2413 Calculus I (or MATH 2487 Honors) three-hour lecture
Life and Physical Sciences - 6 hours
PHYS 2425 Physics for Scientists and Engineers I three-hour lecture
PHYS 2426 Physics for Scientists and Engineers II three-hour lecture
Integrative and Experiential Learning - 6 hours
CSCI 1380 Computer Science I (or CSCI 1387 Honors)
PHYS 2425 Physics for Scientists and Engineers I one-hour lab
PHYS 2426 Physics for Scientists and Engineers II one-hour lab

B - MAJOR REQUIREMENTS - 79 HOURS MINIMUM (58 advanced minimum) 1 - Physics Core Courses - 23 hours ( 23 advanced)

PHYS 3303 Thermodynamics
PHYS 3402 Modern Physics
PHYS 3305 Classical Mechanics
PHYS 3311 Math Methods in Physics I
PHYS 3404 Optics
PHYS 3301 Electromagnetic Theory I
PHYS 4303 Quantum Mechanics I
$\mathbf{2}$ - Capstone Course(s) - $\mathbf{2}$ hours (2 advanced)
Choose one:
PHYS 4101 Laboratory Research (Repeated once)
PHYS 4201 Advanced Physics Lab
3 - Mathematics - $\mathbf{1 2}$ hours (3 advanced)
MATH 2413 Calculus I (or MATH 2487 Honors) one-hour lecture
MATH 2414 Calculus II (or MATH 2488 Honors)
MATH 2415 Calculus III
MATH 3341 Differential Equations
4 - Concentration - 42 hours minimum ( 30 advanced minimum)
Choose one concentration:
a - Pure and Applied Physics - 42 hours ( 30 advanced)
i-Required courses - 9 hours ( 9 advanced)
PHYS 4305 Statistical Mechanics
PHYS 4304 Quantum Mechanics II
PHYS 3302 Electromagnetic Theory II
ii - Physics Electives - $\mathbf{1 2}$ hours (12 advanced)
Choose any advanced Physics.
iii - Minor - 18 hours ( 9 advanced)
iv - Electives - $\mathbf{3}$ hours
b - Medical Physics - 42 hours ( 30 advanced)
i- Required courses - 21 hours (21 advanced)
PHYS 4305 Statistical Mechanics
PHYS 4304 Quantum Mechanics II
PHYS 3302 Electromagnetic Theory II
PHYS 3306 Introduction to Biophysics
PHYS 3310 Radiation Biophysics
PHYS 3309 Introduction to Medical Imaging
PHYS 4312 Introductory Nuclear Engineering and Health Physics Concepts
ii - Minor - 18 hours (9 advanced)
iv - Electives - 3 hours
c - Educational Physics - 45 hours (40 advanced)
i - Educational Physics - 6 hours ( 6 advanced)
PHYS 4392 Research Methods
PHYS 3330 Functions and Modeling
ii - Additional Math Courses - 15 hours (12 advanced)
MATH 2318 Linear Algebra MATH 3352 Modern Geometry I

> MATH 3343 Introduction to Mathematical Software MATH 3361 Applied Discrete Mathematics MATH 4337 Probability and Statistics I
> iii - UTeach Certification - $\mathbf{2 4}$ hours ( $\mathbf{2 2}$ advanced)
> Area of Certification: Physics/Mathematics (7-12)
> UTCH 1101 Inquiry Approaches to Teaching UTCH 1102 Inquiry-Based Lesson Design
> UTCH 3301 Knowing and Learning in Mathematics and Science
> UTCH 3302 Classroom Interactions
> UTCH 3303 Project-Based Instruction
> UTCH 4601 Apprentice Teaching
> UTCH 4101 Apprentice Teaching Seminar
> READ 4305 Content Area Literacy
> MATE 3317 Perspective in Mathematics and Science (or PHIL 3317)

## TOTAL CREDIT HOURS FOR GRADUATION (MINIMUM) - 121 HOURS TOTAL ADVANCED HOURS (MINIMUM) - 58 HOURS

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: Progression requirements

Admission to the College of Education and P -16 Integration is required for participation in Apprentice Teaching and Seminar (UTCH 4101, 4601). Students unable to be admitted to UTCH 4601 and UTCH 4101 will be required to substitute 4 advanced hours, as recommended by advisor.

## Graduation requirements

In addition to the graduation requirements listed in the UTRGV 2015-2017 Undergraduate Catalog, demonstration of proficiency in a language other than English is required at the undergraduate level equivalent to a minimum of six credit hours. Proficiency can be demonstrated by a college credit exam, a placement test approved through the UTRGV Department of Writing and Language Studies, and/or up to six credit hours of college-level language coursework.

MINOR IN
ASTRONOMY

A - MINOR REQUIREMENTS - 18 HOURS (6 advanced minimum)
Choose from:
ASTR 1401 Introduction to Astronomy I
ASTR 1402 Introduction to Astronomy II
ASTR 2101 Astronomy Night Lab
ASTR 2301 Solar System Astronomy
ASTR 3301 Stellar and Galactic Astronomy
ASTR 3302 Introductory Astrophysics
ASTR 3303 Introduction to Numerical Modeling in Astronomy
PHYS 4360 Stellar Astrophysics

## MINOR IN <br> GEOGRAPHIC INFORMATION SYSTEMS

## A - MINOR REQUIREMENTS - 18 HOURS (10 advanced) <br> 1-Science Core - 8 hours <br> Choose one pair:

GEOL 1401 Physical Geology and GEOL 1402 Historical Geology PSCI 1421 Physical Sciences I and PSCI 1422 Physical Sciences II PHYS 1401 General Physics I and PHYS 1402 General Physics II PHYS 2425 Physics for Scientists and Engineers I and PHYS 2426 Physics for Scientists and Engineers II
ASTR 1401 Introduction to Astronomy I and ASTR 1402 Introduction to Astronomy II NOTE: Education majors need to check with their advisor as to whether or not their natural science core requirements will also satisfy the natural science core courses within this minor.
2 - Geographic Information Systems Electives - 10 hours (10 advanced)
GEOL 3408 Introduction to Geographic Information Systems GEOL 4309 Undergraduate Research Geoscience Choose one:

GEOL 4408 Applications of Geographic Information Systems BIOL 4403 Introduction to Remote Sensing Technology

A - MINOR REQUIREMENTS - 18 HOURS (10 advanced) Choose from:

GEOL 1403 Physical Geology
MINOR IN
GEOLOGY AND EARTH SCIENCE

GEOL 1402 Historical Geology
GEOL 2271 Field Methods
GEOL 3288 Lab Exp Teaching Geology
GEOL 3408 Introduction to Geographic Information Systems
GEOL 3402 Hydrologic Systems
GEOL 3401 Geomorphology
GEOL 3405 Oceanography
GEOL 4403 Sedimentology \& Stratigraphy
GEOL 3411 Mineralogy
GEOL 3412 Petrology
GEOL 3421 Structural Geology

GEOL 4302 Environmental Geology
GEOL 4309 Undergraduate Research Geoscience
GEOL 4385 Special Topics in Geology
GEOL 4408 Applications of Geographic Information Systems
GEOL 4471 Field Geology
With approval from Department Chair, additional GEOL or GEOG courses may be accepted.

## A - MINOR REQUIREMENTS - $\mathbf{1 8}$ HOURS (18 advanced)

This minor is suitable for STEM students who wish to have a general introduction to applications of physics. Minor criteria: completion of MATH 2414 Calculus II (or MATH 2488 Honors) and PHYS 2426 Physics for Scientists and Engineers II. NOTE: Any other nanotechnology-related science courses can be taken after getting approval from the academic advisor.

1 - Nanotechnology Core - 12 hours (12 advanced)
PHYS 3308 Introduction to Nanoscience
PHYS 4301 Introduction to Bio-Nanotechnology
PHYS 4302 Nano Optics
PHYS 4316 Undergraduate Capstone Design
2 - Nanotechnology Electives - 6 hours ( 6 advanced)
Choose from:
PHYS 3307 Introduction Solid State Physic
BENG 4120 Molecular Bioengineering Lab
BENG 4320 Molecular Bioengineering
ENGR 3312 Engineering of Nanomaterials
ENGR 4311 Nanofabrication and Nanoelectronics

MINOR IN PHYSICAL SCIENCE

A - MINOR REQUIREMENTS - 18 HOURS (6 advanced)
1 - Physical Science Core - 8 hours
PSCI 1421 Physical Sciences I
PSCI 1422 Physical Sciences II
2 - Physical Science Electives - 10 hours (6 advanced)
Choose 10 hours in Physical Sciences (PSCI, GEOL, GEOG, ASTR, or PHYS), of which 6 must be advanced.

## MINOR IN <br> PHYSICS

## A - MINOR REQUIREMENTS - 18 HOURS (9 advanced)

1 - Physics Core - 8 hours
Only one 8 hour course sequence can be counted for the 18 Physics hours required for the Physics Minor. Choose one pair:

PHYS 1401 General Physics I and PHYS 1402 General Physics II
PHYS 2425 Physics for Scientists and Engineers I and PHYS 2426 Physics for Scientists and Engineers II
2 - Physics Electives - 10 hours (9 advanced)
Complete 10 hours of Physics, of which 9 must be advanced.

## Course Inventory for College of Sciences (COS) <br> Astronomy

ASTR 1103 Introduction to Astronomy II Lab
This course exposes the student to information about the stellar universe. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: ASTR 1401.

ASTR 1104 Introduction to Astronomy I Lab
This course introduces the student to basic concepts in Astronomy and of our Solar System.
Telescopes and other instruments, including the planetarium, are used as an integral part of the course. The course includes three laboratory hours a week to emphasize course concepts.

ASTR 1303 Introduction to Astronomy II
This course exposes the student to information about the stellar universe. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: ASTR 1401.

ASTR 1304 Introduction to Astronomy I
This course introduces the student to basic concepts in Astronomy and of our Solar System. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. The course includes three laboratory hours a week to emphasize course concepts.

ASTR 1401 Introduction to Astronomy I
This course introduces the student to basic concepts in Astronomy and of our Solar System.
Telescopes and other instruments, including the planetarium, are used as an integral part of the course. The course includes three laboratory hours a week to emphasize course concepts.

ASTR 1402 Introduction to Astronomy II
This course exposes the student to information about the stellar universe. Telescopes and other instruments, including the planetarium, are used as an integral part of the course. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: ASTR 1401.
ASTR 2101 Astronomy Night Lab
This course is a hands-on night-sky-telescopes laboratory. Students will work directly with telescopes studying both solar system objects as well as stars, nebulas, clusters, and other astronomical objects. Students observe and analyze astronomical events such as the phases of Venus, retrograde motion of planets, orbits of Jupiter's moons, etc. Students use sky simulation software as part of this course. Prerequisites: ASTR 1401.

## ASTR 2301 Solar System Astronomy

This is an algebra/geometry/trigonometry/vector-based course in which students study the basic concepts in Astronomy and of our Solar System. Topics include: current understanding of the Universe; general physics applied to Astronomy; current understanding of the formation of our Solar System; planetary surfaces, interiors, atmospheres and magnetospheres; moons, asteroids, and comets. Prerequisites: ASTR 1401.

ASTR 3301 Stellar and Galactic Astronomy
This is an algebra/geometry/trigonometry/vector-based course in which students study stars and galaxies. Topics include: our Sun; star types, properties and evolution; our Milky Way Galaxy; galaxies types and general properties; Hubble's Law; the expansion of the Universe; the Big Bang Model. Prerequisites: ASTR 1401.

ASTR 3302 Introductory Astrophysics
This is a calculus-based course that introduces the student to several topics in Astrophysics, including: Orbital Mechanics, Radiative Transfer, Thermodynamic Equilibrium, Radiative Processes in Astrophysics, Stellar Structure, Galactic Dynamics, and Special Relativity. Prerequisites: ASTR 3301 and MATH 2413 (or MATH 2487).

ASTR 3303 Introduction to Numerical Modeling in Astronomy
This course introduces the student to numerical modeling in Astronomy. Students will be continuously developing numerical programming codes that represent/simulate given astronomical systems/objects. Prerequisites: ASTR 3301 and MATH 2413 (or MATH 2487).

## Bioengineering

BENG 4120 Molecular Bioengineering Lab
Laboratory experiments in macromolecular design. Prerequisites: Concurrent enrollment in BENG 4320.

BENG 4320 Molecular Bioengineering
The course is designed for students in Bachelors of Science in Engineering Physics/Bioengineering Program. The topics include biomaterials, designing biomolecules for therapeutics and diagnostics, and advanced biomolecular assemblies. Prerequisites: PHYS 3315 and concurrent enrollment in BENG 4120.

## Biology

BIOL 1106 General Biology I Lab
A study of the basic principles of Biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics, evolution, and the structure and function of bacteria, viruses, protozoan, algae, fungi, and plants.

BIOL 1107 General Biology II Lab
A continuation of Biology 1401. Topics include evolution and diversity of invertebrate and vertebrate animals; mechanisms of support and movement, digestion and nutrition, respiration, circulation homeostasis, hormonal control, nervous control, sexual reproduction, development, behavior, and ecology. Prerequisites: BIOL 1406 or BIOL 1487.

BIOL 1108 Biological Concepts I Lab
This course covers laboratory investigations related to BIOL 1308. Prerequisites: Credit/registration in BIOL 1308.

BIOL 1109 Biological Concepts II Lab
This course covers laboratory investigations related to BIOL 1309. Prerequisites: Credit/registration in BIOL 1309.

BIOL 1301 General Biology I for Premed Majors (APT Program)
A study of the basic principles of biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics, and evolution. Medical/clinical applications of the general biology concepts will be integrated into the course.

BIOL 1302 General Biology II for Premed Majors (APT Program)
A study of the basic principles of biology. Topics include evolution and diversity of prokaryotes invertebrate and vertebrate animals, mechanisms of support and movement, digestion and nutrition, respiration, circulation, homeostasis, hormonal control, nervous control, sexual reproduction, development, behavior, and ecology. Prerequisites: BIOL 1301.

BIOL 1306 General Biology I
A study of the basic principles of Biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics, evolution, and the structure and function of bacteria, viruses, protozoan, algae, fungi, and plants.

BIOL 1307 General Biology II
A continuation of Biology 1401. Topics include evolution and diversity of invertebrate and vertebrate animals; mechanisms of support and movement, digestion and nutrition, respiration, circulation homeostasis, hormonal control, nervous control, sexual reproduction, development, behavior, and ecology. Prerequisites: BIOL 1406 or BIOL 1487.

BIOL 1308 Biological Concepts I for Non-Majors
This introductory course is designed to provide Non-Majors a conceptual approach to topics ranging from molecular and cellular biology, to genetics, and biotechnology as they relate to current events, cultural, and societal issues. Prerequisites: Credit/registration in BIOL 1108.

BIOL 1309 Biological Concepts II for Non-Majors
This introductory course is designed to provide Non-Majors a conceptual approach to topics ranging from evolution biodiversity, ecology, to conservation biology as they relate to current events, cultural, and societal issues. Prerequisites: Credit/registration in BIOL 1109.

BIOL 1322 Human Nutrition
A study of the basic principles of nutrition in health and disease. Stresses the modern concepts of an adequate diet based on the nutritional needs of the individual.

BIOL 1406 General Biology I
A study of the basic principles of Biology. Topics will include biological chemistry, cell structure and function, photosynthesis and respiration, DNA structure and function, mitosis, meiosis, Mendelian genetics, evolution, and the structure and function of bacteria, viruses, protozoan, algae, fungi, and plants.

BIOL 1407 General Biology II
A continuation of Biology 1406. Topics include evolution and diversity of invertebrate and vertebrate animals; mechanisms of support and movement, digestion and nutrition, respiration, circulation homeostasis, hormonal control, nervous control, sexual reproduction, development, behavior, and ecology. Prerequisites: BIOL 1406 or BIOL 1487.

BIOL 1487 General Biology I (Honors)
An accelerated study of the basic principles of Biology. Topics covered include cellular biology, photosynthesis, respiration, protein synthesis, cellular reproduction, genetics, microbial genetics and a survey of the diversity of organisms. Open to students enrolled in the Honors Studies Program or by permission of the instructor. Prerequisites: Admission to Honors Program.

BIOL 1488 General Biology II (Honors)
An accelerated study of the basic concepts of Biology. Topics covered include reproduction and development, digestion and nutrition, transport, homeostasis, the nervous system, ecology and evolution. Open to students enrolled in the Honors Studies Program or by permission of the instructor. Prerequisites: BIOL 1487 and admission to Honors Program.

BIOL 2101 Anatomy and Physiology I Lab
A study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous system, and special senses.

BIOL 2102 Anatomy and Physiology II Lab
A continuation of BIOL 2401. Includes endocrine, circulatory, respiratory, digestive, urinary and reproductive systems. Other topics include metabolism, acid-base balance, development and heredity. Prerequisites: BIOL 2401.

BIOL 2121 General Microbiology Lab
A general survey of the field of microbiology with emphasis on bacteria. Topics will include structure, growth, reproduction, metabolism, genetics and taxonomy of bacteria; a general survey of fungi, algae, protozoa and viruses and microbiology of soil, water, foods, and industry. Laboratory work will include staining, growing, biochemistry, characterization, and control of bacteria with a general survey of other microorganisms. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 1112.

BIOL 2143 General Biology III Lab
This course covers laboratory investigations related to BIOL 2343. Prerequisites: BIOL 1407 (or BIOL 1488) and credit/registration in BIOL 2343.

BIOL 2201 Special Problems in Biology
Study of special topics in Biology for freshman- and sophomore-level students. The course will involve the independent study of a specific problem through conferences and activities directed by the instructor. Prerequisites: Consent of instructor.

BIOL 2301 Anatomy and Physiology I
A study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous system, and special senses.

BIOL 2302 Anatomy and Physiology II
A continuation of BIOL 2401. Includes endocrine, circulatory, respiratory, digestive, urinary and reproductive systems. Other topics include metabolism, acid-base balance, development and heredity. Prerequisites: BIOL 2401.

BIOL 2310 Marine Processes and Ecosystem Dynamics
This course investigates the interactions between organisms and the physical processes that regulate productivity and distribution of marine life in oceanic and coastal ecosystems. Prerequisites: BIOL 1407 (or BIOL 1488).

BIOL 2321 General Microbiology
A general survey of the field of microbiology with emphasis on bacteria. Topics will include structure, growth, reproduction, metabolism, genetics and taxonomy of bacteria; a general survey of fungi, algae, protozoa and viruses and microbiology of soil, water, foods, and industry. Laboratory work will include staining, growing, biochemistry, characterization, and control of bacteria with a general survey of other microorganisms. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 1112.

BIOL 2343 General Biology III
This course is a comparative study of form and function in protists, fungi, and plants including a survey of diversity, physiology, reproduction and development. Other topics to be discussed include the origin and diversification of life, population genetics, taxonomy, and systematics. Prerequisites: BIOL 1407 (or BIOL 1488) and credit/registration in BIOL 2143.

BIOL 2401 Anatomy and Physiology I
A study of the structure and function of the human body including cells, tissues, and organs of the following systems: integumentary, skeletal, muscular, nervous system, and special senses.

BIOL 2402 Anatomy and Physiology II
A continuation of BIOL 2401. Includes endocrine, circulatory, respiratory, digestive, urinary and reproductive systems. Other topics include metabolism, acid-base balance, development and heredity. Prerequisites: BIOL 2401.

BIOL 2406 Environmental Biology
A consideration of the biological problems of population expansion, environmental destruction, and resource conservation as they relate to man's past, present, and future.

BIOL 2428 Comparative Vertebrate Anatomy
Comparative studies of the morphological, embryological, and physiological relationships among vertebrates, with inclusion of histological and paleontological data. Prerequisites: Consent of instructor.

BIOL 3103 Genetics Lab
Introductory lectures and laboratories in classical genetics. Topics will include Mendelian genetics, cell mechanics, sex determination, sex linkage, DNA structure and function, genetic linkage, crossing over, gene mapping, mutation, regulation of gene expression, chromosomal variations, population genetics, and evolution. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 1112.

BIOL 3109 Ecology Lab
A study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Field work. Prerequisites: 9 hours of Biology, including BIOL 1407 (or BIOL 1488).

BIOL 3111 Mammalian Physiology Lab
A survey of the physiological mechanisms of the organs and organ systems of mammals with emphasis on man. The laboratory will provide experiences with modern techniques. Topics will include muscle, nerve, digestive, urinary, respiratory, circulatory, and reproductive systems. Prerequisites: 12 hours of Biology, including 4 hours from either BIOL 2401, BIOL 2402, or BIOL 2403; and also 8 hours of Chemistry.

BIOL 3112 Cell Biology Lab
A study of cell structure and function with emphasis on bio-energetics, membranes, genes, and genetic control, cell division and its regulation, and cellular differentiation. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), CHEM 2123, and CHEM 2323.

BIOL 3114 Invertebrate Zoology Lab
Study of the comparative morphology, evolution, systematics, and natural history of the invertebrates. Recommended as a preparatory course for BIOL 4402, BIOL 4407, BIOL 4415 and BIOL 5316. Prerequisites: 6 hours of Biology and junior standing.

BIOL 3301 Biological Evolution
Genetic, ecological, and paleontological aspects of evolution. Includes review of evolutionary history and thought, species concepts, speciation, and other evolutionary processes. Emphasis is on evolutionary mechanisms. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488), or permission of instructor.

BIOL 3303 Genetics
Introductory lectures and laboratories in classical genetics. Topics will include Mendelian genetics, cell mechanics, sex determination, sex linkage, DNA structure and function, genetic linkage, crossing over, gene mapping, mutation, regulation of gene expression, chromosomal variations, population genetics, and evolution. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 1112.

BIOL 3309 Ecology
A study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Field work. Prerequisites: 9 hours of Biology, including BIOL 1407 (or BIOL 1488).

BIOL 3310 Neurobiology
Studies of nervous systems. Topics range from physiology of single neurons to neural basis of behavior in intact animals. This course emphasizes comparative methods, with examples drawn from a wide range of invertebrates and vertebrates. Prerequisites: BIOL 2401 and BIOL 3411.

BIOL 3311 Mammalian Physiology
A survey of the physiological mechanisms of the organs and organ systems of mammals with emphasis on man. The laboratory will provide experiences with modern techniques. Topics will include muscle, nerve, digestive, urinary, respiratory, circulatory, and reproductive systems. Prerequisites: 12 hours of Biology, including 4 hours from either BIOL 2401, BIOL 2402, or BIOL 2403; and also 8 hours of Chemistry.

BIOL 3312 Cell Biology
A study of cell structure and function with emphasis on bio-energetics, membranes, genes, and genetic control, cell division and its regulation, and cellular differentiation. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), CHEM 2123, and CHEM 2323.

BIOL 3314 Invertebrate Zoology
Study of the comparative morphology, evolution, systematics, and natural history of the invertebrates. Recommended as a preparatory course for BIOL 4402, BIOL 4407, BIOL 4415 and BIOL 5316. Prerequisites: 6 hours of Biology and junior standing.

BIOL 3320 Marine Biogeochemistry
This course is a study of the biological, chemical, geological, and physical processes that influence cycling of bioactive elements in marine waters and sediments. Prerequisites: BIOL 2310, CHEM 1311 and CHEM 1111.

BIOL 3330 Functions and Modeling
Students will engage in explorations and lab activities designed to strengthen and expand their knowledge of the topics found in secondary school mathematics and other sciences through activities of data collection; modeling the data with elementary mathematical functions; using tools from calculus to determine the best model for the data; and using concepts from mathematics, physics and chemistry to interpret the results of the model. The major objective of this course is for students. Prerequisites: A grade of 'C' or better in the following: MATH 2413 and UTCH 1102.

BIOL 3345 Animal Nutrition
Students will become familiar with the anatomy and digestive processes that take place in digestive tracts of various domesticated animals. They will also learn how to balance a ration that meets protein and energy requirements of livestock. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 3401 General Microbiology
A general survey of the field of microbiology with emphasis on bacteria. Topics will include structure, growth, reproduction, metabolism, genetics and taxonomy of bacteria; a general survey of fungi, algae, protozoa and viruses and microbiology of soil, water, foods, and industry. Laboratory work will include staining, growing, biochemistry, characterization, and control of bacteria with a general survey of other microorganisms. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 1112.

BIOL 3403 Medical Microbiology and Immunology
A study of microorganisms that cause disease and immune response of the host to these pathogens. Emphasis will be on principles of immunology and selected infectious disease processes. Laboratory exercises will include a study of basic serologic procedures and cultural characteristics of related pathogenic microorganisms. Prerequisites: BIOL 3401.

BIOL 3404 Conservation Biology
This course provides a scientific foundation for resource management efforts aimed at conserving, restoring, and sustaining the biological diversity in habitats. Biological diversity includes genetic variation among individuals and populations; species richness and abundance; habitat heterogeneity and all of the interactions that determine the distribution and abundance of species. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488). BIOL 3409 is recommended.

BIOL 3405 Histology
Lectures in this offering will place major emphasis on the structure and function of major tissue types and their cellular components. The laboratory will provide an opportunity for first-hand experience in examining the microscopic structure of the major tissue types and their relationships in organ structure. Prerequisites: 12 hours of Biology, including 4 hours from either BIOL 2401, BIOL 2402.

BIOL 3406 Developmental Mechanisms
Study of processes that lead to the diversity of animal and plant morphologies with an emphasis on mechanisms of pattern induction at the molecular level. Lectures will focus on common patterns and novel adaptations from a comparative point of view, while laboratories will give students experience in a variety of fundamental protocols using Drosophila as a model. Prerequisites: BIOL 3412 or consent of instructor.

BIOL 3407 Comparative Embryology
Developmental studies from the zygote through embryological stages (chiefly concerned with amphibians, birds, and mammals). Prerequisites: 9 hours of Biology, including 4 hours from BIOL 2401, BIOL 2402, or BIOL 3413 recommended.

BIOL 3408 Plant Morphology
A study of the morphology, development and relationships of algae, lichens, liverworts, mosses, ferns, gymnosperms and angiosperms. Particular attention is given to the evolution of these groups.
Prerequisites: 9 hours of Biology, including BIOL 1407 (or BIOL 1488).
BIOL 3409 Ecology
A study of the basic environmental factors affecting plants and animals, and their relation to economic and conservation problems. Field work. Prerequisites: 9 hours of Biology, including BIOL 1407 (or BIOL 1488).

BIOL 3410 Survey of the Plant Kingdom
A study of the anatomy and physiology of plants, based on the study of higher plants, together with a correlative and comparative survey of the plant kingdom. Emphasis will be placed on the development and reproduction of plants and their relationships to man.

BIOL 3411 Mammalian Physiology
A survey of the physiological mechanisms of the organs and organ systems of mammals with emphasis on man. The laboratory will provide experiences with modern techniques. Topics will include muscle, nerve, digestive, urinary, respiratory, circulatory, and reproductive systems. Prerequisites: 12 hours of Biology, including 4 hours from either BIOL 2401, BIOL 2402, or BIOL 2403; and also 8 hours of Chemistry.

BIOL 3412 Cell Biology
A study of cell structure and function with emphasis on bio-energetics, membranes, genes, and genetic control, cell division and its regulation, and cellular differentiation. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), CHEM 2123, and CHEM 2323.

BIOL 3413 Genetics
Introductory lectures and laboratories in classical genetics. Topics will include Mendelian genetics, cell mechanics, sex determination, sex linkage, DNA structure and function, genetic linkage, crossing over, gene mapping, mutation, regulation of gene expression, chromosomal variations, population genetics, and evolution. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, and CHEM 1112.

BIOL 3414 Invertebrate Zoology
Study of the comparative morphology, evolution, systematics, and natural history of the invertebrates. Recommended as a preparatory course for BIOL 4402, BIOL 4407, BIOL 4415 and BIOL 5316. Prerequisites: 6 hours of Biology and junior standing.

BIOL 3415 Molecular Biology
A study of the structure and function of biological macromolecules as they relate to the functioning of whole cells and organisms. Topics include the structure and function of nucleic acids and proteins, DNA replication and repair, transcription, translation, gene regulation, genetic engineering and gene regulation, genetic engineering, applications of molecular technologies and biotechnology, bacteriophages, and mobile genetic elements. Prerequisites: Either BIOL 3413 or BIOL 3401; and also CHEM 2323 CHEM 2123.

BIOL 3416 Coral Reef Ecology
The course examines the biotic and abiotic ecology of coral reefs including their zonational and community structure. Emphasis is placed on directed, field-oriented, individual research projects as a means of examining the morphology, evolutionary patterns, and ecological importance of coral reefs. Prerequisites: BIOL 3409.

BIOL 3430 Field Methods and Analysis in Marine Biology
This course introduces the study of marine systems utilizing specialized field methods and provides students with a basic knowledge of coastal habitats and associated fauna and flora. Students will design experiment and collect and analyze data from field research projects as a group. Prerequisites: BIOL 3409.

BIOL 4102 Marine Zoology Lab
A study of the common marine animals, especially invertebrates in coastal waters. Particular attention is given to structural and physiological relationships. Strenuous field work required. Students must provide their own transportation to and from South Padre Island or other field trip sites. Prerequisites: 9 hours of Biology (BIOL 3414 recommended) and junior standing.

BIOL 4104 Ichthyology Lab
A study of ecology, distribution, adaptations, physiology, systematics, and evolution of freshwater and marine fishes, with an emphasis on local forms. Laboratories will stress identification and other practical applications of modern ichthyological techniques. Prerequisites: 9 hours of Biology.

BIOL 4109 Herpetology Lab
A study of anatomy, evolution, distribution, systematics, ecology, and physiology of amphibians and reptiles, primarily of North American species, with special emphasis on local forms. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4120 Plant Anatomy Lab
This is a laboratory study of the anatomy of seed plants. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4127 Coastal Ecology Lab
This course examines the major near shore habitats and communities of the western Gulf of Mexico including: beaches, sand dunes, estuaries, salt marshes, mud flats, sea grass meadows, and rocky shores. Emphasis is placed on directed, field-oriented, group, and/or individual research projects. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), and also either BIOL 3409, BIOL 3414, or BIOL 4402.

BIOL 4132 Animal Behavior Lab
Lectures introduce students to the biological basis of animal behavior. Emphasis is placed on evolutionary explanations of: behavioral genetics and development, neural and hormonal mechanisms, instincts and learning, reproductive, and social behavior. Laboratory projects introduce students to laboratory and field methods for observing, quantifying, analyzing, and reporting animal behavior. Typical research projects address: sensory mechanisms, chemical and vocal communication signals, and dynamic behavioral interactions. Prerequisites: Junior standing and completion of 12 hours in Biology.

BIOL 4150 Ornithology Lab
Principles of avian classification, morphology and ecology, including migration, distribution, and relationships to man. Field work. Prerequisites: 9 hours of Biology, including 4 hours from either BIOL 2401, or BIOL 2402.

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. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488). Must take BIOL 4370 concurrently.

BIOL 4199 Research Problems in Biology
Research under the supervision of a Biology faculty member. May be repeated for credit, but no more than 3 hours may apply toward the Biology Major. Prerequisites: BIOL 1406 (or BIOL 1487) , BIOL 1407 (or BIOL 1488), and approval of instructor.

BIOL 4201 Biology Problems I
A course adapted to the study of special topics in biology. For advanced students capable of developing a problem independently through conference and activities directed by the instructor. Problem is chosen by the student with the approval of the instructor prior to registration. Prerequisites: Biology Major with at least junior standing. Consent of instructor.

BIOL 4202 Biology Problems II
A continuation of BIOL 4201. Prerequisites: BIOL 4201 and consent of instructor.
BIOL 4301 Evolution
This course involves the study of organic evolution with an emphasis on mechanics, especially genetics and modern theories. This course will provide a common foundation of understanding of the fundamental principles that underpin biology. Prerequisites: BIOL 2343.

BIOL 4302 Marine Zoology
A study of the common marine animals, especially invertebrates in coastal waters. Particular attention is given to structural and physiological relationships. Strenuous field work required. Students must provide their own transportation to and from South Padre Island or other field trip sites. Prerequisites: 9 hours of Biology (BIOL 3414 recommended) and junior standing.

BIOL 4304 Ichthyology
A study of ecology, distribution, adaptations, physiology, systematics, and evolution of freshwater and marine fishes, with an emphasis on local forms. Laboratories will stress identification and other practical applications of modern ichthyological techniques. Prerequisites: 9 hours of Biology.

BIOL 4309 Herpetology
A study of anatomy, evolution, distribution, systematics, ecology, and physiology of amphibians and reptiles, primarily of North American species, with special emphasis on local forms. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4313 Endocrinology
Advanced study of the endocrine system with emphasis on humans. Topics include hormonal control of homeostasis, feeding, stress, and reproduction; functions of endocrine organs, cellular mechanisms of hormone action, animal models of endocrinology, endocrine techniques, and endocrine related diseases. Prerequisites: 12 hours of biology, including 4 hours from BIOL 2402, or BIOL 3411; and 8 hours of Chemistry.

BIOL 4315 Inquiry-Based Science and Laboratory Techniques
Designed for students interested in teaching secondary life sciences to provide additional preparation and skills to become an effective high school life sciences teacher. The course will emphasize the inquiry-based approach to science and cover mechanisms to apply this approach in lecture, lab and in assessment of content. Prerequisites: Students should enroll in the course during the semester in which they are finishing degree plan coursework and prior to the internship. Prerequisites: Consent of instructor.

BIOL 4316 Environmental Toxicology
A survey of interaction of environmental pollutants with living systems. Laboratory consists of toxicological evaluation of selected environmental chemicals. Prerequisites: BIOL 3412 and 6 hours of organic chemistry or biochemistry.

BIOL 4317 Disease Epidemiology
An introduction to the principles of epidemiology. Emphasis on ecological and evolutionary factors affecting disease processes. Both historical and current epidemics will be examined. Prerequisites: BIOL 3301 or BIOL 3413.

BIOL 4318 Ethnobotany
Surveys on the historical uses of plants and their impacts on the evolution of human civilizations, natural sciences, and natural environments. Emphasis is placed on the practice of artificial selection and the exploitation of plant-based foods, medicines, stimulants, psychoactive compounds, fibers, spices, aromatics, biofuels, and construction materials. The promise of new and powerful biotechnological tools will be considered in light of economic and environmental concerns.

BIOL 4319 Medical Entomology
Study of the medically important insects. The focus will be on insect vectors and the diseases that they can transmit. We will examine insect life history, population dynamics, ecology, and human impact. We will also cover some basic epidemiology and disease transmission models. Prerequisites: 8 hours from BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488); or consent of instructor.

BIOL 4321 Integrative Biology for Middle School 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. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

## BIOL 4327 Coastal Ecology

This course examines the major near shore habitats and communities of the western Gulf of Mexico including: beaches, sand dunes, estuaries, salt marshes, mud flats, sea grass meadows, and rocky shores. Emphasis is placed on directed, field-oriented, group, and/or individual research projects. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), and also either BIOL 3409, BIOL 3414, or BIOL 4402.

BIOL 4330 Molecular Evolution
An examination of recent and current techniques in phylogenetic inference, population genetics and molecular evolution. The course will focus on both the theory and practical application of these techniques through review of seminal studies and a hands-on approach to gathering, processing and analyzing data for a group of genes or organisms of each student's choice. Prerequisites: Either BIOL 3301, BIOL 3413, or consent of instructor.

BIOL 4331 Integrative Biology for High School Teachers
This course provides an introduction to laboratory techniques used in the education of biology students. Students learn principles of organization and presentation of biological principles necessary to effectively set-up and run undergraduate teaching labs in middle, high, and post-secondary school. Prerequisites: Junior standing with a 3.0 GPA and at least 16 hours of Biology.

BIOL 4332 Animal Behavior
Lectures introduce students to the biological basis of animal behavior. Emphasis is placed on evolutionary explanations of: behavioral genetics and development, neural and hormonal mechanisms, instincts and learning, reproductive, and social behavior. Laboratory projects introduce students to laboratory and field methods for observing, quantifying, analyzing, and reporting animal behavior. Typical research projects address: sensory mechanisms, chemical and vocal communication signals, and dynamic behavioral interactions. Prerequisites: Junior standing and completion of 12 hours in Biology.

BIOL 4350 Ornithology
Principles of avian classification, morphology and ecology, including migration, distribution, and relationships to man. Field work. Prerequisites: 9 hours of Biology, including 4 hours from either BIOL 2401, or BIOL 2402.

BIOL 4361 Neuroscience I: Cellular and Molecular
This is a comprehensive first course in the cell and molecular neuroscience for students with biology and/or health science majors. The course offers general principles with a useful blend of data from vertebrate and invertebrate, and provides clear focus and well rounded modern knowledge. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), and junior/senior standing.

BIOL 4362 Neuroscience II: System, Developmental, and Disorders
This is a comprehensive course in systems, developmental, and disorders of the nervous system. Neuronal mechanisms underlying intercellular communication, learning and memory, and diseases will be taught based on the knowledge in cellular and molecular neuroscience. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), and junior/senior standing.

BIOL 4370 Special Topics II
Topics will cover specialized areas of study in the biological sciences that tend to not be part of regular course offerings. Subjects may vary from semester to semester, depending on the faculty member teaching the course. A student may take this course up to two times for credit. Prerequisites: Biology Major or Minor and 8 hours of BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488); or consent of instructor.

BIOL 4387 Inquiry-Based Science (Honors)
Applications of inquiry in science and an interdisciplinary approach to problem-solving. Prerequisites: Consent of instructor.

BIOL 4388 Global Change Ecology
This course will cover different aspects of global change, emphasizing topics such as habitat alteration, species extinctions, spread of diseases, invasive species, global warming, and the impact of these factors on conservation efforts. Prerequisites: BIOL 3409 or consent of instructor.

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. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4392 Research Methods in the Science and Mathematics Classroom (UTeach)
A course intended for students in the UTeach program. Students will design research projects, perform independent inquiries, and learn to combine skills from mathematics and science in order to solve research problems. Coursework will include inquiry, writing, and quantitative reasoning. Prerequisites: Grade of 'C' or better in the following: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488 ); or CHEM 1111, 1112, 1311, 1312; or MATH 1314 or 1414 ; or PHYS 1401, 1402 or PHYS 2425, 2426 or PHYS 2411, 2412; and UTCH 1101, 1102 or consent of instructor.

BIOL 4398 Special Topics I
Topics will cover specialized areas of study in the biological sciences that tend to not be part of regular course offerings. Subjects may vary from semester to semester, depending on the faculty member teaching the course. A student may take this course up to two times for credit. Prerequisites: Biology Major or Minor and 8 hours of BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488); or consent of instructor.

BIOL 4399 Research Problems in Biology
Research under the supervision of a Biology faculty member. May be repeated for credit, but no more than 3 hours may apply toward the Biology Major. Students enrolling for BIOL 4399 will present research results in a Department seminar. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), and approval of instructor.

BIOL 4400 Biological Communication (Capstone)
Capstone Course. Describes, analyzes, critiques, and applies biological communication and writing styles. Writing topics include vitas, professional letters, research/laboratory reports, and research proposals. Also focuses on manuscript editing, literature searches and referencing, reviewing published research papers, and data analysis, and interpretation. Prerequisites: Biology Major of junior standing.

BIOL 4401 Marine Biology Seminar
The student completes an independent scholarly review of a marine biology research topic, makes an oral report on the topic, and debates current marine issues with faculty and students. (Cannot be used for credit with BIOL 4100.) Prerequisites: Senior standing and 24 hours of Biology.

BIOL 4402 Marine Zoology
A study of the common marine animals, especially invertebrates in coastal waters. Particular attention is given to structural and physiological relationships. Strenuous field work required. Students must provide their own transportation to and from South Padre Island or other field trip sites. Prerequisites: 9 hours of Biology (BIOL 3414 recommended) and junior standing.

BIOL 4403 Introduction to Remote Sensing Technology
This course provides training in the use of electromagnetic radiation for monitoring environmental conditions and resources. Emphasis will be placed on the operation of various remote sensors, collection of analog and digital data, and use of computer software for image processing, interpretation, and integration of imagery into geographic information systems. Prerequisites: Consent of instructor.

BIOL 4404 Ichthyology
A study of ecology, distribution, adaptations, physiology, systematics, and evolution of freshwater and marine fishes, with an emphasis on local forms. Laboratories will stress identification and other practical applications of modern ichthyological techniques. Prerequisites: 9 hours of Biology.

BIOL 4405 Plant Physiology
An introduction of the basic principles of the physiology, growth, and development of plants. Prerequisites: 6 hours of Biology.

BIOL 4406 Mycology
This course will provide training in the following areas: fungal morphology and taxonomy, structure and function relationships, physiology and genetics, molecular biology, parasitism of animals and plants, and applied and environmental mycology. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488); and either BIOL 3401, BIOL 3412, or BIOL 3413.

BIOL 4407 Animal Parasitology
Introduction to study of parasitic protozoa and worms (especially trematodes, cestodes, nematodes, and acanthocephala). Prerequisites: 9 hours of biology, including 4 hours from either BIOL 2401, BIOL 2402, or BIOL 3414; and also junior standing.

BIOL 4408 Plant Pathology
An introductory course on the causes, nature, and control of plant diseases. Emphasis will be given to diseases of plants of economic importance. Prerequisites: 6 hours of Biology.

BIOL 4409 Herpetology
A study of anatomy, evolution, distribution, systematics, ecology, and physiology of amphibians and reptiles, primarily of North American species, with special emphasis on local forms. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4410 Marine Botany
A study of the common local marine flora with emphasis on macroscopic algae, sea grasses and terrestrial angiosperms. Students are expected to furnish their own transportation to field laboratory sessions at South Padre Island. Prerequisites: 9 hours of Biology, including BIOL 1407 (or BIOL 1488).

BIOL 4411 Ecological Physiology of Animals
A comparative study of the physiological adaptations of vertebrate animals to their environments.
Emphasis is placed on the physiological basis of animal distribution and evolution. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4412 Ornithology
Principles of avian classification, morphology and ecology, including migration, distribution, and relationships to man. Field work. Prerequisites: 9 hours of Biology, including 4 hours from either BIOL 2401, or BIOL 2402.

BIOL 4413 General Virology
Comprehensive course that covers fundamental aspects on the effect of viruses on procaryotic and eucaryotic organisms. It also covers interactions between viruses and populations and the impact of viral diseases on organisms, mechanisms of replication, and strategies of viral gene expression. Prerequisites: BIOL 3401. BIOL 3403 is recommended.

BIOL 4414 Plant Taxonomy
Identification of vascular plants based on historical and modern molecular approaches to plant classification. Prerequisites: BIOL 1406 (or BIOL 1487) and BIOL 1407 (or BIOL 1488).

BIOL 4415 Entomology
An introduction to the study of insects and other arthropods of agricultural, medical, and veterinary importance. Includes basic insect morphology, physiology, classification and pest management. Laboratory consists of insect identification supported by field trips. Prerequisites: BIOL 3414.

BIOL 4416 Mammalogy
A study of anatomy, evolution, distribution, systematics, ecology, and physiology of mammals of North America, with special emphasis on local forms. Prerequisites: 9 hours of Biology.

BIOL 4417 Bacterial Genetics
This course will cover bacterial genetics from both classical and molecular perspectives. Topics will include transcription, translation, mutagenesis, transduction, transformation, conjugation, and transposition. The lab will include techniques related to those topics and will include northern blotting, DNA sequencing, and the polymerase chain reaction. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, CHEM 1112, and BIOL 3415. BIOL 3401 is also recommended.

BIOL 4418 Electron Microscopy
This course will provide an opportunity to learn scanning and transmission electron microscopy. Topics include the principles of electron microscopes, cell ultrastructure, specimen preparation, microtomy, immunocytochemistry, operation of electron microscopes, darkroom techniques, and graphic arts. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, and 2 hours computer literacy from: INFS 2398, CSCI 1380 (or CSCI 1387), CSCI 1370 (or CSCI 1378 ), CMPE 1370 (or CMPE 1378).

BIOL 4419 Aquatic Entomology
This course will cover the identification, taxonomy, and ecology of aquatic insects. Emphasis will be on local aquatic environments. Laboratories will consist of field trips and identification of specimens. Prerequisites: 9 hours of Biology, including BIOL 1407 (or BIOL 1488).

BIOL 4420 Plant Anatomy
Anatomy of seed plants. Prerequisites: 8 hours of Biology.

This course will utilize the computational methods, online databases, and internet resources to answer questions in biology ranging from organism development to human disease. The laboratory will be internet based and students will explore online database resources to answer questions in a wide variety of areas relating to cellular and molecular biology. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), CHEM 1311, CHEM 1111, CHEM 1312, CHEM 11012, CHEM 2321, CHEM 2121, and also either BIOL 3413, BIOL 3401, or BIOL 3412.

BIOL 4422 Neurobiology Methods
An intensive introduction to techniques for studying neural anatomy and physiology, including staining, labelling, extracellular recording, and intracellular recording. Invertebrates are used as subjects. Prerequisites: Consent of instructor and BIOL 3310.

BIOL 4423 Wildlife Ecology and Management
The course examines the biological, ecological, historical and sociological factors influencing patterns or wildlife distribution, abundance, and diversity and the application of science and theory in the management of wildlife populations and habitats. Prerequisites: BIOL 3409.

BIOL 4424 Microbial Ecology
An introduction to the diversity of microbes found in nature. Emphasis is placed on the ecological significance of bacterial communities found in terrestrial, aquatic and extreme ecosystems, as well as their metabolic activities, interactions, and survival strategies. The effects of microbial activities in areas such as bioremediation and biogeochemistry are also addressed. Prerequisites: BIOL 3401.

BIOL 4426 Marine Ecology
This course is an introduction to marine ecology. It will include discussion of marine ecosystems and

BIOL 4428 Medical Genomics
This course will examine the ever-changing field of genomics. Specifically, the roles that genomics and population genetics play in expanding our knowledge of human biology, disease detection and personalized medicine will be studied. Prerequisites: BIOL 3413, BIOL 3301, or BIOL 4330.

BIOL 4429 Agroecology
Ecological concepts and principles are applied to the design and management of agroecosystems. Alternatives for agriculture are discussed in terms of ecosystem structure and function. A weekly three-hour lab is required. Prerequisites: BIOL 3409 or consent of instructor.

BIOL 4430 Coastal Ecology
This course examines the major near shore habitats and communities of the western Gulf of Mexico including: beaches, sand dunes, estuaries, salt marshes, mud flats, sea grass meadows, and rocky shores. Emphasis is placed on directed, field-oriented, group, and/or individual research projects. Prerequisites: BIOL 1406 (or BIOL 1487), BIOL 1407 (or BIOL 1488), and also either BIOL 3409, BIOL 3414, or BIOL 4402.

BIOL 4432 Animal Behavior
Lectures introduce students to the biological basis of animal behavior. Emphasis is placed on evolutionary explanations of: behavioral genetics and development, neural and hormonal mechanisms, instincts and learning, reproductive, and social behavior. Laboratory projects introduce students to laboratory and field methods for observing, quantifying, analyzing, and reporting animal behavior. Typical research projects address: sensory mechanisms, chemical and vocal communication signals, and dynamic behavioral interactions. Prerequisites: Junior standing and completion of 12 hours in Biology.

## Chemistry

CHEM 1103 Chemistry in Society I Lab
This course is an introduction to basic laboratory techniques using experiments involving chemical reactions, stoichiometry, and titrations to understand and reinforce chemical concepts covered in CHEM 1303. Prerequisites: Credit/registration in CHEM 1303.

CHEM 1104 Chemistry in Society II Lab
This course is a continuation of CHEM 1103 using more advanced laboratory techniques such as spectrophotometric methods of analysis and qualitative analysis to understand and reinforce chemical concepts covered in CHEM 1304. Prerequisites: Credit/registration in CHEM 1304.

CHEM 1105 Introductory Chemistry I Lab
A terminal course in chemistry for non-science majors and technology students. Major topics covered are: atomic and molecular structure, chemical bonding, the state of matter, solution calculations, and acid-base concepts includes a brief introduction to organic chemistry and biochemistry.

CHEM 1107 Chemistry for Engineers Lab
This course will cover basic laboratory operations and include qualitative analysis plus selected experiments related to engineering. Prerequisites: Credit/registration in CHEM 1307.

CHEM 1111 General Chemistry I Lab
An introduction to basic laboratory techniques using experiments to understand chemical concepts of reactions, stoichiometry and titrations. Prerequisites: Credit/registration in CHEM 1301.

CHEM 1112 General Chemistry II Lab
A continuation of CHEM 1111 using more advanced laboratory techniques such as volumetric, gravimetric and spectrophotometric methods of analysis and qualitative inorganic analysis to reinforce topics covered in CHEM 1312. Prerequisites: Credit/registration in CHEM 1312.

CHEM 1303 Chemistry in Society I
This course is an introduction to atomic structure, electronic structure and the periodic table, nomenclature, nuclear chemistry, chemical bonding, stoichiometry, chemical reactions, and representative organic compounds, all applied within the context of society and the environment for non-science majors.

CHEM 1304 Chemistry in Society II
This course is an introduction to the properties of solids, liquids, gases, and solutions, chemical thermodynamics, biochemistry, and food chemistry, along with the application of chemistry to health and nutrition, pharmaceuticals, toxicology, and household chemicals for non-science majors. Prerequisites: CHEM 1303.

CHEM 1305 Introductory Chemistry I
A terminal course in chemistry for non-science majors and technology students. Major topics covered are: atomic and molecular structure, chemical bonding, the state of matter, solution calculations, and acid-base concepts includes a brief introduction to organic chemistry and biochemistry.

CHEM 1307 Chemistry for Engineers
This course will cover stoichiometry, structure, bonding, thermodynamics, and kinetics plus a brief survey of organic chemistry, biochemistry, and analytical chemistry. Prerequisites: MATH 1314, MATH 1414, MATH 2412, or MATH 2487 with a grade of C or higher.

CHEM 1311 General Chemistry I
Fundamentals of atomic structure, electronic structure and periodic table, nomenclature, the stoichiometry reactions, gas laws, thermochemistry, chemical bonding, and structure and geometry of molecules. Prerequisites: MATH 1314, MATH 1414, MATH 1342, MATH 1343, MATH 1388, MATH 2412, MATH 2413, or MATH 2487 with a grade of C or higher.

CHEM 1312 General Chemistry II
This course presents the properties of liquids and solids, solutions-acid-base theory, chemical kinetics, equilibrium, chemical thermodynamics, electrochemistry, nuclear chemistry, and representative organic compounds. Prerequisites: CHEM 1311.

CHEM 1405 Introductory Chemistry I
A terminal course in chemistry for non-science majors and technology students. Major topics covered are: atomic and molecular structure, chemical bonding, the state of matter, solution calculations, and acid-base concepts includes a brief introduction to organic chemistry and biochemistry.

CHEM 2101 Analytical Chemistry Lab
A laboratory hands-on experience in quantitative inorganic analytical methods including gravimetric, titrimetric, colorimetric and electroanalytical methods. Prerequisites: CHEM 2301.

CHEM 2123 Organic Chemistry I Lab
An introduction to organic synthesis. Fundamental techniques such as crystallization, distillation, extraction and chromatography are discussed and applied to the preparation of organic compounds. Prerequisites: Credit/registration in CHEM 2323.

CHEM 2125 Organic Chemistry II Lab
Syntheses are more advanced, with greater emphasis on aromatic compounds. Grignard and diazonium salt preparations are included. Compounds are characterized by spectroscopic techniques. Prerequisites: CHEM 2123.

CHEM 2301 Analytical Chemistry
Modern analytical chemistry including separation methods and quantitative chemistry, introduction to methods of analysis in electrochemistry, absorption and emission spectroscopy.

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.

CHEM 2325 Organic Chemistry II
Continuation of CHEM 2323. Includes a brief introduction to the chemistry of polymers, fats, carbohydrates, amino acids and proteins.

CHEM 3101 Inorganic Chemistry Lab
Microscale synthesis and characterization of inorganic, organometallic, coordination and bioinorganic compounds employing advanced laboratory techniques. Prerequisites: Credit/registration in CHEM 3301.

CHEM 3103 Biochemistry I Lab
Introduction to the application of various techniques such as column chromatography, electrophoresis to study macromolecules such as protein estimation, enzyme kinetics and chemistry of carbohydrate, lipids and nucleic acids. Prerequisites: Credit/registration in CHEM 3303.

CHEM 3104 Physical Chemistry I Lab
Experiments are designed to demonstrate and reinforce the concepts developed in physical chemistry lectures. Emphasis is given to error analysis and statistical treatment of data. Prerequisites: Credit/registration in CHEM 3304.

CHEM 3105 Physical Chemistry II Lab
This course is a continuation of CHEM 3104. Experiments are performed to reinforce concepts in quantum mechanics, spectroscopy and chemical kinetics. Prerequisites: Credit/registration in CHEM 3305.

CHEM 3202 Inorganic Chemistry Lab
Microscale synthesis and characterization of inorganic, organometallic, coordination and bioinorganic compounds employing advanced laboratory techniques. Prerequisites: Credit/registration in CHEM 3301.

CHEM 3206 Advanced Chemistry Research
This course is designed to provide students already exposed to scientific research with more chemistry or biochemistry research experience. The student will work directly with their mentors on a directed individual research project to answer specific research questions and learn more advanced techniques. Please note that this course cannot be counted toward a chemistry minor. Prerequisites: Registration in a junior-level course and a lab in a specific area.

CHEM 3301 Inorganic Chemistry
A descriptive study of modern topics in inorganic chemistry that includes periodicity, acid-base theories, structure, bonding and reactivity of inorganic compounds and chemistry of nontransition elements and their compounds. This course is writing intensive. Prerequisites: 12 hours of chemistry, including CHEM 2323.

CHEM 3303 Biochemistry I
A discussion of the structural and functional viewpoint of biological macromolecules including proteins, carbohydrates and nucleic acids and the techniques used in their study. The course material will also include study of energy yielding metabolic pathways such as glycolysis, the Krebs cycle, fatty acid oxidation and oxidative phosphorylation. Prerequisites: CHEM 2323.

CHEM 3304 Physical Chemistry I
An introduction to the properties of gases, the kinetic molecular theory and the study of thermodynamics, including an in-depth coverage of the first, second and third laws of thermodynamics and equilibrium. Statistical mechanics is used in the development of energy related concepts. Prerequisites: PHYS 1402; MATH 2413 (or MATH 2487) with a grade of 'C' or better and registration in MATH 2414 (or MATH 2488).

CHEM 3305 Physical Chemistry II
The second half of physical chemistry investigates concepts in quantum mechanics, group theory and symmetry and spectroscopy. Studies of chemical kinetics and electrochemistry are also included. Prerequisites: CHEM 3304.

CHEM 3306 Polymer Science and Engineering
A general introduction to the theories and industrial practices for polymeric materials. The course includes synthesis, physical characterization and structure-property relationships of polymers. Emphasis is given to industrially important polymers as materials. Prerequisites: CHEM 1312.

CHEM 3307 Biochemistry II
A detailed study of the design, integration and control of metabolism. Hormone action and the regulation of gene expression. Prerequisites: CHEM 3303 with a 'C' or better.

CHEM 3308 Chemical Literature
A course 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. Prerequisites: Junior standing in Chemistry and consent of instructor.

CHEM 3401 Environmental Chemistry
Environmental chemistry is an introduction to the study of the natural and anthropogenic aspects of the chemistry of the earth including the atmosphere, hydrosphere, and geosphere. This course will provide students with an understanding of field and laboratory methods of environmental chemistry in addition to a comprehensive investigation of current topics in the discipline. Students should have a strong background in general and or organic chemistry. Field investigation is an important part of this course. Prerequisites: CHEM 2323 and CHEM 2123.

CHEM 4101 Chemistry Seminar
An introduction to the use of current chemical literature and periodicals. Each student is expected to conduct an in-depth study of a chemical topic that will serve as a basis for a presentation in a seminar. Required of all chemistry majors. Prerequisites: Chemistry Major with senior standing or consent of instructor.

CHEM 4104 Instrumental Analysis Lab
A hands-on laboratory experience in instrumental analysis. Includes application of modern instrumentation and scientific software in solving analytical problems. Prerequisites: CHEM 4304.

CHEM 4105 Chemistry Capstone
This course will include a review and integration of chemical concepts, assessment, job search tools, exposure to graduate school opportunities, scientific ethics and chemical education as part of the final preparation of our ACS chemistry majors. Prerequisites: Senior standing.

CHEM 4201 Chemistry Problems I
A course adapted to the study of special topics in chemistry through research. Students are allowed to select the research problem through individual conferences with faculty members, who develop one- or two-semester research projects for the course. Students must have the consent of the instructor prior to registration. Prerequisites: Chemistry major with junior standing or consent of instructor.

CHEM 4202 Chemistry Problems II
A continuation of CHEM 4201. A course adapted to the study of special topics in chemistry through research. Students are allowed to select the research problem through individual conferences with faculty members, who develop one-or two-semester research projects for the course. Students must have approval of the instructor prior to registration. Prerequisites: CHEM 4201.

CHEM 4203 Advanced Biochemistry Lab
An inquiry-based lab that exposes students to undergraduate research, experimental design, the research literature, writing and reporting results, isolation and characterization of biological molecules of selected importance from specific model systems. Students will be exposed to a variety of techniques commonly used in answering biochemistry-related questions such a spectroscopy, electrophoresis, bioassay and biotechnology tools. Prerequisites: CHEM 3303.

CHEM 4206 Advanced Chemistry Research
This course is designed to provide students already exposed to scientific research with more chemistry or biochemistry research experience. Students will work directly with their mentors on a directed individual research project to answer specific research questions and learn more advanced techniques. Please note that this course cannot be counted toward a chemistry minor. Prerequisites: Registration in senior-level course and a lab in a specific area or CHEM 3206.

CHEM 4207 Biochemistry Writing and Seminar
A course designed to introduce students to the use of current biochemical literature and periodicals as well as biochemical writing. Each student is expected to conduct and in-depth study of a biochemical topic that will serve as the basis for a presentation in a seminar and a term paper. Prerequisites: Chemistry, biochemistry, or science major with junior standing.

CHEM 4278 Special Topics in Chemistry
A course designed to cover specialized areas in the science of chemistry. It can be repeated when topic changes. However, a maximum of four credit hours is applicable to the degree requirement. Prerequisites: Chemistry Major with junior standing.

CHEM 4301 Advanced Inorganic Chemistry
Study of nomenclature, structure and reactivity of coordination compounds, Ligand field theory, and chemistry of transition elements.

CHEM 4302 Advanced Biochemistry
The course is a continuation of CHEM 3303. This course reviews the mechanisms of biosynthesis of macromolecules, particularly amino acids, proteins, fatty acids, lipids, polysaccharides, purines, pyrimidines and nucleic acids. Emphasis will be given to how these processes are controlled and integrated with the metabolism of the cell and molecular basis of disorders related to intermediary metabolism. Prerequisites: CHEM 3303.

CHEM 4303 Advanced Organic Chemistry
The course describes the advanced organic synthetic methods and mechanisms and illustrations of their applications in the synthesis of biologically active molecules such as chiral medicinal drugs and insect pheromones. Prerequisites: CHEM 2323 and CHEM 2325.

CHEM 4304 Instrumental Analysis
A study of principles of instrumental analysis measurements and techniques. Components and operation of basic and modern instrumentation will be covered. Prerequisites: CHEM 2301 and CHEM 2101.

CHEM 4306 Special Topics in Biochemistry
A course designed to cover specialized areas in biochemistry. It can be repeated when topics change. However, a maximum of six credit hours is applicable to the degree requirement. Prerequisites: Chemistry, biochemistry, or science major with junior standing.

CHEM 4307 Advanced Inorganic Chemistry
Advanced Inorganic Chemistry is an introduction to the coordination chemistry of the transition metals. Theoretical understanding of the synthesis, characterization, and applications of selected transition metal complexes, bioinorganic complexes, and organometallic compounds will be introduced. The course also introduces group theory and its application to molecules in the description of bonding. Prerequisites: CHEM 3301 with a ' $C$ ' or better.

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 and consent of instructor.

CHEM 4378 Special Topics in Chemistry
A course designed to cover specialized areas in the science of chemistry. It can be repeated when topic changes. However, a maximum of six credit hours is applicable to the degree requirement. Prerequisites: Chemistry Major with junior standing.

CHEM 4401 Chemistry Education
This course is an introduction to the intersection between chemistry content, learning chemistry content, and teaching chemistry content. Topics covered in the course include inquiry in chemistry, methods of teaching and learning chemistry, assessment of learning in chemistry, the history and nature of chemistry, chemistry in society, and the use of models in chemistry. Prerequisites: CHEM 1111, CHEM 1112, and CHEM 1312.

## Geography

GEOG 1301 Physical Geography
The earth's external features landscape development under the influence of volcanism and mountainbuilding forces, rivers and their work, underground waters, waves and currents, and the wind the principle soil groups as related to landscape and climate.

GEOG 1303 World Regional Geography
This course includes the study of the major world regions with emphasis on prevailing conditions and developments, including emerging conditions and trends, and the awareness of diversity of ideas and practices to be found in those regions.

GEOG 2313 Principles of Geography Physics Elementary
An introduction to physical geography with emphasis on weather, ocean currents and climates. Soils and vegetation types and distributions are also studied. Can be counted in the supporting areas of elementary education curriculum.

GEOG 3320 Cultural Geography for Educators I
The Cultural geography is the study of the interaction between humans and the natural environment. The course will examine the relationship from the historical past to the present time with major emphasis human cultural diversity.

GEOG 3333 Latin American Geography
A regional study of geography of Mexico, the Caribbean, Central and South America. Includes an investigation of the physical, cultural, and economic factors of various regions and how these affect present day conditions.

## Geology

GEOL 1401 Earth Sciences I
Topics are selected from geology, geophysics, meteorology, and oceanography in order to illustrate the philosophy and methods of science. Other topics include earth materials, processes of plate tectonics, and atmosphere.

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.

GEOL 1404 Historical Geology
The geologic history of the Earth and its inhabitants as revealed by fossil record with emphasis on North America.

GEOL 2271 Field Methods
A course dealing with the geological history of the earth and its inhabitants as revealed by the fossil record with emphasis on North America. Prerequisites: GEOL 1403 with a grade of 'C' or better.

GEOL 3288 Lab Exp Teaching Geology
Student will act as undergraduate teaching assistants in lower level and some upper level geology laboratory sections under direction of the course instructor. Students have responsibility for preparing and presenting lab materials, assisting students in lab work and on field trips, holding office hours, and evaluating student lab papers. Normally students will TA in two lab sections, 8-10 hours per week. Prerequisites: Courses assigned must be previously completed with a grade of $A$ or $B$; and permission of instructor.

GEOL 3401 Geomorphology
Geomorphology is the study of landforms. This class will emphasize the physical, chemical, and biological processes that create and modify landforms. This course covers the history of landform evolution and the climatic and tectonic conditions that influence landform development.
Prerequisites: GEOL 1403 with a grade of ' $C$ ' or better.
GEOL 3402 Hydrologic Systems
This course will explore the circulation of water in earth systems. Surface water processes studied will include runoff, routing, evapotranspiration, infiltration, and flooding. Groundwater process will include the basics of ground water flow, aquifer characteristics, and others. Global, national, and regional aspects of water resources management will also be introduced. Prerequisites: GEOL 1403, PHYS 1401 and MATH 2413 (or MATH 2487) all with a grade of 'C' or better.

## GEOL 3405 Oceanography

An introduction to the nature and origin of the world's oceans. Topics will cover geological, chemical, physical, and biological processes throughout the oceans. Credit may be received only in one of ENVR 3405 or GEOL 3405 . Prerequisites: GEOL 1403 and either GEOL 1404 or BIOL 1406. All with a grade of ' $C$ ' or better.

GEOL 3408 Introduction to Geographic Information Systems
This course covers fundamental concepts and techniques of Geographic Information Systems (GIS). Concepts include: the basics of maps including projections, datums, coordinate systems, map interpretation, design and field mapping techniques. Additional concepts include: GPS theory and application within a GIS framework as well as an introduction to ArcGIS software to include geospatial data acquisition, processing, and mapping.

GEOL 3411 Mineralogy
Physical, chemical and crystallographic properties, and occurrence of minerals. Examination and description of hand specimens and crystal models. Theory and practice in optical mineralogy and Xray diffraction. Prerequisites: GEOL 1403, CHEM 1311 and CHEM 1111. All with a grade of 'C' or better.

GEOL 3412 Petrology
This course introduces the student to basic properties, modes of origin, and methods of identifying, classifying and describing the rock-forming minerals and the three classes of rocks. This course includes three laboratory hours per week with emphasis on identifying, describing and interpreting samples in hand specimens and outcrops; thin section examination with the polarizing microscope will be introduced and practiced. Field trips required. Prerequisites: GEOL 3411 with a grade of ' $C$ ' or better.

GEOL 3421 Structural Geology
An introduction to the description and interpretation of geologic structures with emphasis on the mechanisms of rock deformation, mechanics of faulting and folding, and analysis of regional tectonics of selected areas. Prerequisites: GEOL 1403 with a grade of ' $C$ ' or better.

GEOL 4170 Topics in Geology Lab
Specialized lab content not available in other courses. May be retaken for credit as topics change. Prerequisites: Consent of the instructor.

GEOL 4302 Environmental Geology
This course explores the human-planet relationship - how Earth processes influence human lives, and how human actions, in turn, alter the interactions of Earth systems. Hazardous geologic processes, use and care of energy resources, and the human impacts on the environment are the focus of this course. Prerequisites: GEOL 1403 and GEOL 1404 with a grade of 'C' or better.

GEOL 4309 Undergraduate Research Geoscience
Independent work in geosciences and/or environmental geosciences under the direction of a faculty member. Prerequisites: Consent of instructor.

GEOL 4370 Topics in Geology
Specialized lecture content not available in other courses. May be retaken for credit as topics change. Prerequisites: Consent of instructor.

GEOL 4385 Special Topics in Geology
Selected topics in geology. Topics are varied according to student interest and availability of faculty. Course may be repeated once for different topics for a maximum of six credit hours. Prerequisites: Junior/Senior standing and consent of instructor.

GEOL 4401 Advanced Geographic Information Systems
This course covers more advanced concepts and techniques of Geographic Information Systems (GIS). Concepts include: spatial analysis techniques for both vector and raster-based data models; examination of relational databases and database management systems; and hands-on use of ArcGIS software with an emphasis on the following extensions: Spatial Analyst, Network Analyst, 3-D Analyst, Geostatistical Analyst and Business Analyst in a laboratory setting, and course project. Prerequisites: GEOL 3408 with a grade of ' $C$ ' or better.

GEOL 4403 Sedimentology and Stratigraphy
This course will explore the formation of sediments and sedimentary rocks. Students will learn to interpret depositional environments and sequences of stratigraphic beds using multiple tools. Prerequisites: GEOL 1403 and 1404 with a grade of ' $C$ ' or better.

GEOL 4404 Coastal Geology
This course explores the sedimentary features and stratigraphy of the Gulf of Mexico coastline. The exploration of the impact of geology on humans and the impact of humans on the geologic features will be emphasized. Prerequisites: GEOL 4403 with a grade of ' $C$ ' or better.
GEOL 4408 Applications of Geographic Information Systems
This course is designed to provide the student with knowledge in new methods of using georeferenced data. Integration of information from multiple sources is used to analyze interdependencies of both human and physical systems in a rapidly changing rural to urban environment. Examples are provided to illustrate uses in evaluating resource capability units, analyzing hazardous radiation areas, mineral exploration, land management, flood prediction and control, earthquake prediction, and hurricane preparation. Attention will be given to problems of data quality, errors, accuracy, and logical consistency. Prerequisites: GEOL 4401 with a grade of ' $C$ ' or better.

GEOL 4471 Field Geology
Basic concepts of field relationships and field techniques are used to develop geologic maps, stratigraphic columns, cross-sections, and geologic interpretations in one or several geologic provinces. Course is conducted off-campus in a field camp for five to six weeks. Prerequisites: GEOL 2271, GEOL 3401, GEOL 3412, and GEOL 3421; or consent by instructor.

## Environmental Sciences

ENVR 1101 Introduction to Environmental Science I Lab
This course provides students with an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air, and water management, sustainability, energy, and environmental policy issues. Lab provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course.

ENVR 1102 Introduction to Environmental Science II Lab
This course provides students with a continuation of an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air and water management, sustainability, energy, and environmental policy issues. Lab provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course. Prerequisites: ENVR 1401 with a grade of 'C' or better.

ENVR 1301 Introduction to Environmental Science I
This course provides students with an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air, and water management, sustainability, energy, and environmental policy issues. Lab provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course.

ENVR 1302 Introduction to Environmental Science II
This course provides students with a continuation of an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air and water management, sustainability, energy, and environmental policy issues. Lab provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course. Prerequisites: ENVR 1401 with a grade of 'C' or better.

ENVR 1401 Introduction to Environmental Science I
This course provides students with an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air, and water management, sustainability, energy, and environmental policy issues. Lab provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course.

ENVR 1402 Introduction to Environmental Science II
This course provides students with a continuation of an introduction to environmental science from various perspectives (regional to global). Topics include: population, environmental health, biodiversity, geology and earth resources, air and water management, sustainability, energy, and environmental policy issues. Lab provides students an opportunity to learn practical applications for the basic principles learned in the Introduction to Environmental Science course. Prerequisites: ENVR 1401 with a grade of 'C' or better.

ENVR 3301 Natural Resources Conservation
A survey of the distribution of natural resources, with special emphasis on new solutions to problems of resource scarcity. Topics include: energy, water, air, and food resources and other selected components of the lithosphere, hydrosphere, atmosphere, and biosphere. Economic, demographic, and political issues are considered as they affect natural resources. Prerequisites: ENVR 1402 with a grade of 'C' or better.

ENVR 3302 Environmental Ethics
This course considers the moral relationship of humans to the environment through an examination of different ethical frameworks and case studies. Students will examine the role of personal and societal attitudes and values toward the environment as they apply to perceptions of land, water, biodiversity, natural resources, and pollution. Prerequisites: ENVR 1401 with a grade of 'C' or better.

ENVR 3303 Research Methodology and Data Analysis in Environmental Sciences
This course will introduce research and data analysis methods. Students use large and small data sets for analysis using appropriate statistical tests. Students will develop environmental reporting skills. Prerequisites: Environmental Sciences Major or Minor with junior status and MATH 1325 with a grade of 'C' or better.

ENVR 3304 Environmental Approaches to Sustainable Development
This course considers environmental approaches to issues of preserving renewable and nonrenewable resources for future generations. Students will examine the roles of scientists, government, non-government agencies, and local people in sustainable development. Topics covered include land, subsistence, and cultural rights, environmental cooperation, relationships between technology, environment and economy, water wildlife, and forestry resources. Prerequisites: ENVR 1402 with a grade of 'C' or better.

ENVR 3405 Oceanography
An introduction to the nature and origin of the world's oceans. Topics will cover geological, chemical, physical, and biological processes throughout the oceans. Credit may be received only in one of ENVR 3405 or GEOL 3405. Prerequisites: GEOL 1403 and either GEOL 1404 or BIOL 1406 (or BIOL 1487); all with a grade of 'C' or better.

ENVR 4170 Topics in Environmental Sciences Lab
Specialized lab content not available in other courses. May be retaken for credit as topics change. Prerequisites: Junior standing, with 12 hours of ENVR courses; or consent of the instructor.

ENVR 4301 Environmental Regulations
An overview of pertinent state, national and international environmental regulations, policies and treaties. Topics include: common law liability, the Clean Air and Water Acts, sustainable development, stratospheric ozone, global warming, endangered species, environmental justice hazardous waste, and much more. An emphasis will be placed on U.S.-Mexico specific issues. Prerequisites: ENVR 3301 and ENVR 3302 both with a grade of 'C' or better.

ENVR 4302 Environmental Impact Analysis
This course includes an overview of state and federal environmental agencies, laws, and regulations. The practical consequences of these law and regulations are demonstrated through case studies. Students gain experience in preparing environmental impact statements. Prerequisites: ENVR 4301 with a grade of ' $C$ ' or better.

ENVR 4303 Environmental Sciences Research Project
This capstone course provides students with training and experience in conducting independent research on special topics in environmental science. The topic chosen will represent a problem mutually agreed upon by the student and instructor. Course may not be taken concurrently with ENVR 4300 or any other independent study, problems, or internship/coop course. Prerequisites: Senior standing ENVR Major. Consent of Instructor. Capstone Course.

ENVR 4304 Environmental Sciences Internship
This course provides students with on-site training and experience in environmental science while completing an internship or co-operative education placement. The placement chosen will be mutually agreed upon by the student and the faculty member. Prerequisites: Junior standing, ENVR major and consent of instructor.

Specialized lecture content not available in other courses. May be retaken for credit as topics change, but no more than three credit hours may apply toward the Environmental Science major.
Prerequisites: Junior standing, with 12 hours of ENVR courses; or consent of the instructor.

## Mathematics Education

MATE 3300 Fundamentals of Elementary Mathematics III
This course advances knowledge and skills from MATH 1350 and MATH 1351 and involves analyses of elementary mathematical structures, their construction, and synchronous mappings into multiple embodiments (e.g., symbolic, situational, technological, geometric, and others). Clinical, laboratory, and field experiences provide opportunities to construct and assess selected structures according to established theories. Prerequisites: MATH 1351 with a grade of 'C' or better.

MATE 3301 Fundamentals of Middle School Mathematics
This course advances knowledge and skills from MATH 1350 and MATH 1351 and involves analyses of intermediate mathematical structures, their construction, and synchronous mappings into multiple embodiments (e.g., symbolic, situational, technological, geometric, and others). Clinical, laboratory, and field experiences provide opportunities to construct and assess selected structures according to established theories. Prerequisites: MATH 1351 with a grade of ' C ' or better.

MATE 3302 Fundamentals of Measurement and Geometry I
This course is intended for middle school mathematics teacher certification students. It extends fundamental geometry and measurement concepts and principles, with use of technology, across an array of topics: length, area, volume, transformations, symmetry, congruency, similarity, coordinate and measurement systems. Emphasis is on developing structured knowledge up to the van Hiele model level of order/informal deduction for geometric thinking. Prerequisites: MATH 1351 with a grade of 'C' or better.

MATE 3303 Fundamentals of Measurement and Geometry II
This course is a continuation of MATE 3302 as an in-depth study of measurement and geometry. This course studies Euclidean and non-Euclidean geometries through axiomatic systems. It characterizes middle school geometry in terms of logical and axiomatic structure emphasizing the development of structured knowledge at the van Hiele model level of deduction. Prerequisites: MATE 3302 with a grade of 'C' or better.

MATE 3304 Fundamentals of Algebraic Structures
This course is intended for middle school mathematics teacher certification students. Topics include meaningful learning of concepts and properties of relations, functions, binary operations, groups, rings, and fields, using technology when appropriate. Prerequisites: MATH 1351 with a grade of ' C ' or better.

MATE 3305 Fundamentals of Statistics and Probability
This course is intended for middle school mathematics teacher certification students. Topics include meaningful learning of concepts and properties of descriptive statistics, probability, and inferential statistics, using technology when appropriate. Prerequisites: MATH 1351 or MATH 2413 (or MATH 2487) with a grade of 'C' or better.

MATE 3306 Middle School Mathematics in a Technological Environment
This course is intended for middle school mathematics teacher certification students. This course studies mathematics that can be developed and explored in an environment in which calculators and computers are primary investigative tools. Prerequisites: MATH 1351 with a grade of 'C' or better.

MATE 3307 Fundamentals of Problem Solving
This course is a study of mathematical problem solving using heuristics to investigate problems drawn from algebra, geometry, probability, statistics, and calculus using technology when appropriate. Topics include Poyla's problem-solving model; teaching for, about and via problem solving; and problem posing. Prerequisites: MATH 1351 with a grade of ' C ' or better.

MATE 3311 Fundamentals of Discrete Mathematics
This course is intended for middle school mathematics teacher certification students. Topics include meaningful learning of concepts and properties of election theory, fairness, apportionment methods, recursion, mathematical induction, graph theory, and combinatorics, using technology when appropriate. Prerequisites: MATH 1351 with a grade of 'C' or better.

MATE 3312 Fundamentals of Number Theory
This course is intended for middle school mathematics teacher certification students. Topics include meaningful learning of concepts and properties of the divisibility relation, primes, linear Diophantine equations, multiplicative functions, modular arithmetic, linear congruences, Pythagorean triples, and introductory cryptography using technology when appropriate Prerequisites: MATH 1351 with a grade of 'C' or better.

MATE 3313 Fundamentals of Mathematics History
This course is intended for middle school mathematics teacher certification students. An introductory study of history of mathematics. The mathematics of various civilizations will be studied and will include topics from number systems, Euclidean geometry, number theory, algebra, analytic geometry, calculus, and non-Euclidean geometries. Prerequisites: MATH 1351 and MATH 2412, each with a grade of 'C' or better.

MATE 3314 Fundamentals of Mathematical Structures and Processes
This course is intended for middle school mathematics teacher certification students. Topics include concepts, principles, skills, proofs, and applications of logical, axiomatic, and algorithmic mathematical structures and processes. Prerequisites: MATH 1351 with a grade of ' $C$ ' or better.

MATE 3317 Perspectives in Mathematics and Science
This upper-division course explores a selection of topics and episodes in the history of mathematics and science. It provides an overview of the history of mathematics and science, and puts these historical perspectives to work in pedagogy. Also, it promotes intellectual curiosity and enhances students' critical thinking skills, and improves their presentation and writing skills. Students will design and prepare two 5E lessons plans of 1200 words each and make a presentation of one lesson plan to a group of peers and critique presentations of others. Prerequisites: MATE 3321, BIOL 3330, or PHYS 3330 with a grade of $C$ or better.

MATE 3321 Functions and Modeling
This course focuses on enhancing students' mathematics content knowledge, with an emphasis on concepts needed to teach secondary mathematics at various levels. The course consists of four instructional units: 1) Functions, 2) Modeling, 3) Overlooked Topics and Explorations, and 4) Geometry of Complex Numbers. Specific topics of investigation include function properties and patterns, complex numbers, parametric equations, polar equations, vectors, and exponential growth and decay. Explorations involve the use of multiple representations, transformations, data analysis techniques (such as curve fitting) and interconnections among topics in algebra, analytic geometry, statistics, trigonometry, and calculus. The lab investigations include use of various technologies including computers, calculators, and computer graphing software. Prerequisites: MATH 2413 (or MATH 2487) and UTCH 1102, each with a grade of 'C' or better.

MATE 3322 Secondary Mathematics in a Technological Environment
This course is intended for secondary mathematics teacher certification students. This course studies mathematics that can be developed and explored in an environment in which calculators and computers are primary investigative tools. Prerequisites: MATH 2414 (or MATH 2488) with a grade of ' C ' or better.

MATE 4319 Research Methods in Middle School Mathematics
This course is intended for middle school mathematics teacher certification students. Students will perform independent inquiries and learn to combine skills from mathematics and science in order to solve research problems. Coursework will include inquiry, writing, and quantitative reasoning. Prerequisites: Consent of instructor.

MATE 4329 Research Methods in Secondary Mathematics
This is a one-semester, three-hour course in the required UTeach sequence. It is one of several content courses specially designed to meet the needs of future teachers. UTeach students are provided tools that scientists use to solve scientific problems and to use these tools in a laboratory setting. Students learn how scientists communicate with each other through peer-reviewed scientific literature and to understand how scientists develop new knowledge and insights. Students design and carry out four independent inquiries, which they write up and present in the manner that is common in the scientific community. Prerequisites: MATE 3317 or PHIL 3317 with a grade of C or better.

MATE 4423 Advanced Studies in Secondary Mathematics
This course is intended for secondary mathematics teacher certification students. It examines connections of secondary mathematics content and processes to logical and axiomatic structures in modern geometry at the van Hiele model levels of deduction and rigor. It also examines connections of secondary mathematics content and processes to numerical and algebraic structures in modern algebra and Usiskin's characterization of algebra. Prerequisites: MATH 3352 and MATH 3363, each with a grade of ' C ' or better.

## Mathematics

MATH 1314 College Algebra
Topics include polynomial functions, rational functions, exponential functions, logarithmic functions, and matrices. Applications of these topics will be emphasized. Prerequisites: College Ready TSI status in Mathematics.

MATH 1324 Mathematics for Business and Social Sciences
Topics include functions (polynomial, rational, exponential, logarithmic) to problems in business and economics. Applications include financial mathematics, matrices, and linear programming. Prerequisites: College Ready TSI status in Mathematics.

MATH 1325 Calculus for Business and Social Sciences
Topics include limits, differentiation, optimization, graphing, and integration. Applications related to business and economics will be emphasized. Prerequisites: MATH 1314, MATH 1414, or MATH 1324 with a grade of 'C' or better or passing the College Algebra Exemption test administered by the Department of Mathematics.

MATH 1332 Contemporary Mathematics
Topics include voting methods, apportionment methods, financial mathematics, mathematical logic, graph theory, statistics, and probability with an emphasis on problem solving and critical thinking. Prerequisites: College Ready TSI status in Mathematics.

MATH 1333 Mathematics for Art and Music
This course explores the common foundations of mathematics, art and music. Topics from art include symmetry and the mathematics of dance; tessellations and tilings; fractals, origami; perspective and proportion; 3-dimensional printing. Topics from music include quantification of pitch, harmony, and musical scales; key signatures and equivalence relations; octaves and modular arithmetic; rhythm and the Euclidean algorithm; musical intervals and logarithms; tone and trigonometry; timbre and harmonic analysis. Prerequisites: College Ready TSI status in Mathematics.

MATH 1342 Elementary Statistical Methods
This course provides an elementary overview of the nature and uses of descriptive statistics, inferential statistics, and probability. Topics include statistical graphs, measures of central tendency and dispersion, linear regression, empirical and theoretical concepts of probability, the Central Limit Theorem, interval estimation, and hypothesis testing. Prerequisites: College Ready TSI status in Mathematics.

MATH 1343 Introduction to Biostatistics
Topics include introduction to biostatistics; biological and health studies and designs; probability and statistical inferences; one- and two-sample inferences for means and proportions; one-way ANOVA and nonparametric procedures. Prerequisites: College Ready TSI status in Mathematics.

MATH 1350 Fundamentals of Mathematics I
This course is designed for students seeking teacher certification from early childhood through eighth grade. Topics includes sets, numeration systems, and the development of special number sets (whole, integers, rationals, and real) with an emphasis on problem solving and the use of manipulatives. Prerequisites: MATH 1314 or MATH 1414 with a grade of 'C' or better.

MATH 1351 Fundamentals of Mathematics II
This course is designed for students seeking teacher certification from early childhood through eighth grade. Topics include probability, statistics, geometry, and measurement with an emphasis on problem solving and the use of manipulatives. Prerequisites: MATH 1350 with a grade of ' C ' or better.

MATH 1387 Elementary Statistical Methods (HONORS)
This course provides an elementary overview of the nature and uses of descriptive statistics, inferential statistics, and probability. Topics include statistical graphs, measures of central tendency and dispersion, linear regression, empirical and theoretical concepts of probability, the Central Limit Theorem, interval estimation, and hypothesis testing. Prerequisites: College Ready TSI status in Mathematics and admission to the honors program.

MATH 1388 Introduction to Biostatistics (Honors)
Topics include introduction to biostatistics; biological and health studies and designs; probability and statistical inferences; one- and two-sample inferences for means and proportions; one-way ANOVA and nonparametric procedures. Prerequisites: College Ready TSI status in mathematics and admission to the honors program.

MATH 1414 College Algebra
Topics include polynomial functions, rational functions, exponential functions, logarithmic functions, and matrices. Applications of these topics will be emphasized. Prerequisites: College Ready TSI status in Mathematics.

MATH 2305 Discrete Mathematics
This course addresses mathematical topics readily used in computer science, including logic, mathematical proof, counting techniques, functions and relations, an introduction to computability, and the Church-Turing thesis. Prerequisites: MATH 2413 (or MATH 2487) with a grade of 'C' or better.

MATH 2318 Linear Algebra
Topics include systems of linear equations, matrices and their algebraic properties, determinants, vectors, Euclidean $n$-space, linear transformations and their matrix representations, vector spaces, eigenvalues and eigenvectors, and applications to the sciences and business. Use of mathematical technology will be incorporated throughout the course. Prerequisites: MATH 2413 (or MATH 2487) with a grade of 'C' or better.

MATH 2321 Differential Equations and Linear Algebra
This course emphasizes solution techniques. Topics include differential equations, vector spaces, linear transformation, matrix/vector algebra, eigenvectors, Laplace Transform and systems of equations. Prerequisites: MATH 2414 (or MATH 2488) with a grade of 'C' or better.

MATH 2334 Applied Statistics for the Health Sciences
Topics to be covered are: descriptive statistics (including data summarization and simple linear regression), basics of probability, inferential statistics (including hypothesis testing, confidence intervals, one-way analysis of variance, introduction to nonparametric statistics), and the basics of experimental design in the context of health related sciences and disciplines. Computer laboratory experience will be an important part of this course. Prerequisites: MATH 1314, MATH 1414, MATH 1324 , or MATH 1342 with a grade of 'C' or better.

MATH 2346 Mathematics for Electrical and Computer Engineers

Topics include trigonometric functions, applications, graphs, equations, and identities; inverse trigonometric functions; vectors; sequences and series; the Binomial Theorem; conic sections; and parametric and polar equations. Prerequisites: MATH 1314 or MATH 1414 with a grade of ' C ' or better; or passing the College Algebra Exemption Test administered by the Department of Mathematics.

MATH 2413 Calculus I
Topics include limits, derivatives, antiderivatives, and definite integrals of algebraic and transcendental functions. Applications of these topics will be emphasized. Prerequisites: MATH 2412 with a grade of ' C ' or better; or passing the Precalculus Exemption Test administered by the Department of Mathematics.

MATH 2414 Calculus II
Topics include methods of integration, applications of definite integrals, parameterized curves, integration in polar coordinates, and infinite sequences and series. Prerequisites: MATH 2413 (or MATH 2487) with a grade of 'C' or better.

MATH 2415 Calculus III
Topics include functions of several variables, partial derivatives, multiple integrals, Lagrange multipliers, and vector calculus including the Divergence Theorem and Stoke's Theorem. Prerequisites: MATH 2414 (or MATH 2488) with a grade of 'C' or better.

MATH 2487 Calculus I (Honors)
Topics include limits, derivatives, antiderivatives, and definite integrals of algebraic and transcendental functions. Applications of these topics will be emphasized. Prerequisites: MATH 2412 with a grade of C or better and admission to the honors program.

MATH 2488 Calculus II (Honors)
Topics include methods of integration, applications of definite integrals, parameterized curves, integration in polar coordinates, and infinite sequences and series. Prerequisites: MATH 2413 (or MATH 2487) with a grade of $C$ or better and admission to the honors program.

MATH 290 Intermediate Algebra
A study of the real number system, equations, inequalities and its applications, graphs of equations and inequalities, exponents and polynomials, factoring and its applications, rational expressions and its applications, systems of linear equations and inequalities, roots and radicals, quadratic equations. This course may not be used to satisfy any University core curriculum requirements.

MATH 310 Elementary Algebra
A course in elementary algebra designed for the student with a background in numerical skills. Students have the opportunity to prepare for intermediate algebra and other mathematics coursework recommended in education, fine arts, the humanities or social sciences. Topics include basic operations on real numbers, elementary geometry, introduction to algebra, linear equations and graphs, linear equations with applications, exponent properties, systems of linear equations in two unknowns, polynomials and factoring methods. This course does not count toward a student's hours for graduation or in the determination of hours attempted or earned. This course may not be used to satisfy any University core curriculum requirements. Prerequisites: TSI Assessment score 336349 and with NEEDS IMPROVEMENT or LIMITED PROFICIENT in Elementary Algebra.

MATH 320 Intermediate Algebra
A course in algebra designed to prepare the student for College Algebra or the equivalent. Topics include factors of polynomials; rational expressions; radical expressions; an introduction to complex numbers, quadratic equations, rational equations, radical equations and elementary inequalities. This course may not be used to satisfy any University core curriculum requirements. Prerequisites: TSI Assessment score 336-349 and with PROFICIENT in Elementary Algebra or PROFICIENT in Intermediate Algebra or MATH 0310 with minimum grade RC.

MATH 330 Pre-Statistics and Probability
This course is a Developmental Mathematics option for students in majors and degree programs which do not require College Algebra (MATH 1340, MATH 1440). The course aims to provide students with the mathematical background necessary for success in Elementary Statistical Methods and Introduction to Biostatistics. Topics covered will include: Operations and Numbers, Rounding and Percentages, Fractions, Square Roots, Summations, Linear Equations and Graphs, Descriptive Statistics and Charts, Introductory Probability. This course may not be used to satisfy any University core curriculum requirements. Prerequisites: TSI Assessment score 336-349 and a major which does not require College Algebra.

MATH 3326 History of Mathematics
This course is a study of the historical development of ideas that shape modern mathematical thinking. Emphasis is placed on mathematical development and solving problems. Prerequisites: MATH 2414 (or MATH 2488) with a grade of 'C' or better.

MATH 3331 Applied Statistics I
This course concerns itself with probabilistic models, regression analysis, nonparametric statistics, and the basics of experimental design. Computer laboratory experience will be an important part of the class. Prerequisites: MATH 2413 (or MATH 2487) with a grade of 'C' or better.

MATH 3332 Applied Statistics II
This course is a continuation of MATH 3337 and includes special designs, analysis of variance and covariance, multiple comparisons, and coding. Prerequisites: MATH 3331 with a grade of 'C' or better.

MATH 3334 Sampling
This course surveys the basic elements of sampling including concept of population and sample, the organization of a sample survey, coverage content error, questionnaire design, basic survey designs, and computation of estimates and variances. Prerequisites: MATH 1342 (or MATH 1387), MATH 1343, or MATH 3331, with a grade of 'C' or better.

MATH 3335 Applied Regression
This course discusses applications of regression in various areas of study. Topics include simple and multiple linear regression, ordinary and weighted least square techniques, detection of outliers, multicollinearity, variable selection, dummy variables, and logistic regression. Prerequisites: MATH 1342 (or MATH 1387), MATH 1343, or MATH 3331, with a grade of 'C' or better.

MATH 3341 Differential Equations
This course studies first-order and linear second-order differential equations, Laplace transforms, power series solutions, and first order linear systems. Applications of these topics will be emphasized. Prerequisites: MATH 2414 (or MATH 2488) and MATH 2318 with a grade of ' $C$ ' or better.

MATH 3343 Introduction to Mathematical Software
This course involves using mathematical software such as Mathematica, Maple and MATLAB as an investigative tool for solving mathematical problems. Prerequisites: MATH 2414 (or MATH 2488) and MATH 2318 with a grade of 'C' or better.

MATH 3345 Linear Optimization
The course covers basic theory of linear priming, an introduction to the simplex method pathfollowing interior-point methods, and applications of linear programming. Examples will be presented through visualization and computational methods. Prerequisites: MATH 2318 with a grade of 'C' or better.

MATH 3347 Elementary Cryptology
Topics include elementary ciphers, public key ciphers, and error-correcting codes. Prerequisites: MATH 2318 with a grade of 'C' or better.

MATH 3349 Numerical Methods
This course studies the numerical solutions to various problems occurring in engineering, the sciences, and mathematics. These problems include finding solutions to nonlinear equations, solutions to linear and nonlinear systems of equations, interpolation of data, approximation of functions, numerical integration, and solutions to differential equations. It also studies the influence of data representation and computer architecture on the choice and development of algorithms. Prerequisites: MATH 2414 (or MATH 2488) and MATH 3343, each with a grade of 'C' or better.

MATH 3350 Introduction to Mathematical Proof
This course will prepare the student for advanced mathematics courses that require the writing of proofs. It reviews various elementary proof methods and the logical structure underlying them. It examines the formal definitions and basic properties of the mathematical structures that one encounters when constructing proofs, and it recounts famous theorems concerning these structures that every mathematician should know. Students are expected to construct non-routine mathematical proofs independently and to present their work in written form clearly and precisely. Substantial written work is required. Prerequisites: MATH 2318 with a grade of 'C' or better.

MATH 3352 Modern Geometry I
Topics include Euclidean geometry, analytic geometry, transformation geometry, and a brief introduction to non-Euclidean geometries. Prerequisites: MATH 2318 with a grade of 'C' or better.

MATH 3361 Applied Discrete Mathematics
Topics include applications of recurrence relations, advanced combinatorics, relations, graph theory, Boolean algebra, and modeling computation. Prerequisites: MATH 2318 with a grade of 'C' or better.

MATH 3363 Modern Algebra I
This course provides a rigorous introduction to algebraic structures. Topics are to be taken from groups, rings, and fields. Prerequisites: MATH 2318 and MATH 3350, each with a grade of 'C' or better.

MATH 3365 Number Theory
Topics include the binomial theorem, divisibility, the extended Euclidean algorithm, Diophantine equations, primes, congruences, Euler's Theorem, multiplicative functions, the Fibonacci sequence, Pythagorean triples, continued fractions, and applications to cryptology. Prerequisites: MATH 2318 and MATH 3350, each with a grade of 'C' or better.

MATH 3372 Real Analysis I
This course presents a rigorous introduction to the elements of real analysis. Topics include sequences, series, limits, continuity, and derivatives. Prerequisites: MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.

MATH 3382 Actuarial Probability Models
Probability tools used in quantitative risk management are introduced. The course covers material included in the Society of Actuaries' Exam P. Prerequisites: MATH 2414 (or MATH 2488) with a grade of 'C' or better.

MATH 3383 Actuarial Statistical Estimates
Statistical tools used for the construction and evaluation of actuarial models are covered in this course. The course covers material included in the Society of Actuaries' Exam C. Prerequisites: MATH 3382 with a grade of 'C' or better.

MATH 3385 Theory of Interest
The theory of interest will be developed. Emphasis is placed on topics included in the financial mathematics portion of the Society of Actuaries' Financial Mathematics exam. Prerequisites: MATH 2414 (or MATH 2488) with a grade of 'C' or better.

MATH 3386 Actuarial Financial Mathematics
Financial mathematics is applied to areas of financial economics important in actuarial applications. Emphasis is placed on topics included in the financial economics portion of the Society of Actuaries' Financial Mathematics exam. Prerequisites: MATH 2414 (or MATH 2488) and MATH 3385, each with a grade of 'C' or better.

MATH 3399 Special Topics in Mathematics
This course covers special undergraduate topics in mathematics which are not taught elsewhere in the department. This course may be repeated for credit when topic is different. Prerequisites: Departmental approval.

MATH 4192 Mathematical Problem Solving
This course is intended as a chance for mathematics majors to enhance their skills in mathematical problem solving. Students will learn how to use different techniques to tackle different types of problems ranging from the Calculus to advanced level math courses. In addition to learning problem solving techniques, students will be encouraged to discuss the best methods for solving problems efficiently. This course is highly recommended for math majors who are planning to apply for graduate school. Prerequisites: MATH 2414 (or MATH 2488), MATH 2318, and 9 advanced hours of MATH, all with grades of 'C' or better.

MATH 4337 Probability and Statistics I
Topics include probability, random variables, discrete, and continuous probability distributions, expectations, moments, and moment generating functions, functions of random variables and limiting distributions. Prerequisites: MATH 2414 (or MATH 2488) with a grade of 'C' or better.

MATH 4338 Probability and Statistics II
Topics include sampling distributions and data descriptions, estimation problems, test of hypothesis, regression models, analysis of variance, nonparametric statistics, statistical quality control, and Bayesian statistics. Prerequisites: MATH 4337 with a grade of 'C' or better.

MATH 4342 Complex Variables
This course is an introduction to the theory of functions of a complex variable with basic techniques and some applications. Topics include complex numbers and the extended complex plane, elementary functions of a complex variable, differentiation, conformal mappings, contour integration, Cauchy's theorem, Cauchy's formula, Taylor and Laurent series, and residue theory. Prerequisites: MATH 2415 with a grade of 'C' or better.

MATH 4344 Boundary Value Problems
This course is an introduction to elementary partial differential equations, with applications to physics and engineering. Heat conduction, diffusion processes, wave phenomenon, and potential theory are explored by means of Fourier analysis. Prerequisites: MATH 3341 or MATH 2321 with a grade of 'C' or better.

MATH 4346 Integral Transforms
This course is an introduction to transform analysis based on the theory of Fourier and Laplace integrals. Topics include contour integration, inverse formulas, convolution methods, with application to mathematical analysis, differential equations and linear systems. Prerequisites: MATH 2415 and either MATH 3341 or MATH 2321, both with a grade of ' $C$ ' or better.

MATH 4352 Modern Geometry II
Topics include a complete overview of Hilbert's axioms (connection, order, parallels, congruence, continuity), convex geometry (convex hull, extreme points, linear programming), and projective geometry (collineation, coordination, the Main Theorem, affine spaces). Prerequisites: MATH 3352 with a grade of 'C' or better.

MATH 4355 Topology
This course presents a rigorous introduction to the elements of topology. Topics include a study of metric spaces, separation axioms, topological spaces, and topological properties of point sets and mappings. Prerequisites: MATH 2414 (or MATH 2488) and MATH 3350, each with a grade of 'C' or better.

MATH 4357 Algebraic Geometry
This course is a first introduction to the ideas behind Algebraic Geometry: Nullstellensatz, the definition of varieties, and mappings between them. To Illustrate key ideas and motivate theorems, this course focuses its attention on concrete examples, often making use of mathematical software for visualization. Additionally, students will learn about computational techniques and how to use them. Prerequisites: MATH 3350 with a grade of ' C ' or better.

MATH 4359 Differential Geometry
Starting with multi-variable calculus, this course will develop the theme of invariants attached to the geometry of curves and surfaces. The various notations of curvature of surfaces are related to curvature and torsion of curves. The contrast between local and global phenomena is also emphasized. Topics will include Gauss' "Theorema Egregium" and the Gauss-Bonnett Theorem. Visualization of ideas with mathematical software will be regularly present. Prerequisites: MATH 2415 with a grade of 'C' or better.

MATH 4364 Modern Algebra II
This course is a continuation of MATH 3363. Topics include groups, rings, and fields, with applications to geometric constructability and solvability by radicals. Prerequisites: MATH 3363 with a grade of 'C' or better.

MATH 4367 Advanced Linear Algebra
This is a proof-based course of linear algebra topics chosen from vector spaces, linear transformations, determinants, matrices, equivalence relations, canonical forms, inner product spaces, linear functional, and applications. Prerequisites: MATH 2318 and MATH 3350, each with a grade of 'C' or better.

MATH 4373 Real Analysis II
This course is a continuation of MATH 3372. Topics include Riemann integration of a single-variable function; continuity, differentiation and integration of multivariable functions; the mean value theorem; the implicit and inverse function theorems; Green's theorem; and the convergence of sequences and series of functions. Prerequisites: MATH 3372 with a grade of 'C' or better.

MATH 4390 Mathematics Project
Students will complete a major mathematical project and will communicate its results in oral and written form. Prerequisites: MATH 2318, MATH 3350, and 9 additional advanced hours of MATH, all with grades of ' C ' or better.

MATH 4391 Research Experience in Mathematics
This course is designed to give students experience in research not normally covered within standard courses. Research projects will vary according to student interest and faculty availability. Students will complete a major mathematical research project communicating its results both in oral and written forms to the department faculty and students. Prerequisites: 12 advanced hours of MATH with grades of ' $C$ ' or better, and departmental approval.

## Physics

PHYS 1401 General Physics I
An algebra-based introduction to the principles of mechanics, fluids, heat, waves, and sound for students fulfilling a natural science requirement and premedical students. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: MATH 1414 or MATH 1314.

PHYS 1402 General Physics II
A continuation of PHYS 1401 covering the principles of electricity, magnetism, light, and modern physics. The course includes three laboratory hours a week to emphasize course concepts.
Prerequisites: PHYS 1401.
PHYS 1405 Elementary Physics and Acoustics I
The following topics will be treated: nature of vibrations, relation to music, sound waves and characteristics, vibratory sources of sounds used in music, stretched strings, air columns, percussive

A course designed primarily for non-science majors and students in the technology programs to explain the basic concepts of matter, mechanics, heat, electricity and magnetism with emphasis on applications, laboratory, and problem solving.

PHYS 2125 Physics for Scientists and Engineers I Lab
At the calculus-based level, this course introduces the student to the principles of mechanics, fluids, heat, waves and sound for majors in physics and engineering. The course includes three laboratory hours per week for reinforcing, through experiment, the concepts taught in the lecture. Prerequisites: MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).

PHYS 2126 Physics for Scientists and Engineers II Lab
A continuation of PHYS 2425 covering the principles of electricity, magnetism, electromagnetic wave phenomena, and optics. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: PHYS 2425.

PHYS 2325 Physics for Scientists and Engineers I
At the calculus-based level, this course introduces the student to the principles of mechanics, fluids, heat, waves and sound for majors in physics and engineering. The course includes three laboratory hours per week for reinforcing, through experiment, the concepts taught in the lecture. Prerequisites: MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).

PHYS 2326 Physics for Scientists and Engineers II
A continuation of PHYS 2425 covering the principles of electricity, magnetism, electromagnetic wave phenomena, and optics. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: PHYS 2425.

PHYS 2411 Physics for Teachers I
This course is primarily designed for students pursuing a degree in teaching physics. It involves a calculus-based study of mechanics, wave motion, sound, and fluids. The course is primarily taught using inquiry-based approach to provide students with solid content preparation. This course includes three laboratory hours a week to develop students' ability to gather, organize, analyze, and interpret experimental data. Laboratory, technology, and course fees charged. Prerequisites: MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).

PHYS 2412 Physics for Teachers II
This course is primarily designed for students pursuing a degree in teaching physics. It is a continuation of PHYS 2411 involving a calculus-based study of electricity, magnetism, electromagnetic wave phenomena, and optics. The course is primarily taught using inquiry-based approach to provide students with solid content preparation. This course includes three laboratory hours a week to develop students' ability to gather, organize, analyze, and interpret experimental data. Laboratory, technology, and course fees charged. Prerequisites: MATH 2414 (or MATH 2488) and either PHYS 2411 or PHYS 2425.

PHYS 2425 Physics for Scientists and Engineers I
At the calculus-based level, this course introduces the student to the principles of mechanics, fluids, heat, waves and sound for majors in physics and engineering. The course includes three laboratory hours per week for reinforcing, through experiment, the concepts taught in the lecture. Prerequisites: MATH 2413 (or MATH 2487) and concurrent enrollment in MATH 2414 (or MATH 2488).

PHYS 2426 Physics for Scientists and Engineers II
A continuation of PHYS 2425 covering the principles of electricity, magnetism, electromagnetic wave phenomena, and optics. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: PHYS 2425.

PHYS 3101 Junior Laboratory Research I
This course is designed to introduce the student to contemporary methods in scientific research. Students work directly with faculty on a directed individual research project. The course also acquaints students with the scientific publication process and literature searches. Prerequisites: Consent of instructor and either PHYS 2426 or PHYS 2412.

PHYS 3102 Junior Laboratory Research II
A continuation of PHYS 3101. Prerequisites: Consent of instructor and PHYS 3101.
PHYS 3150 Problem Solving in Physics
This course will cover problem solving techniques in physics with the intent to prepare students for the (GRE) Graduate Record Examination in physics. Prerequisites: PHYS 3305 and PHYS 3402.

## PHYS 3301 Electromagnetic Theory I

This course provides an introduction to vector field theory. The differential form of Maxwell's equations governing electromagnetic phenomena are introduced, along with techniques for solving the resulting differential equations. Topics covered include electrostatics and electric fields in matter along with magnetostatics and magnetic fields in matter. Prerequisites: MATH 2415 and either PHYS 2426 or PHYS 2412.

PHYS 3302 Electromagnetic Theory II
This course is a continuation of the exploration of electromagnetic theory begun in PHYS 3301 Electromagnetic Theory I. This course provides an introduction to electrodynamics. Topics include electromagnetic waves and optics, wave guides and transmission lines, potential and fields, radiation, and relativistic dynamics. Prerequisites: PHYS 3301.

PHYS 3303 Thermodynamics
This course is designed to provide a basic understanding of the laws of thermodynamics. Concepts covered include basic ideas of conventional thermodynamics including internal energy, entropy, and interactions between systems. The course acquaints students with models and equations of state for various systems. Prerequisites: MATH 2415 and either PHYS 2412 or PHYS 2426.

PHYS 3305 Classical Mechanics
This course is designed to provide a rigorous understanding of classical dynamics. Concepts covered include the motion of a particle to a system of particles in one, two, and three dimensions; detailed treatment of the conservation laws, rigid body motion, and rotating systems. It introduces students to Lagrange and Hamiltonian dynamics and noninertial reference frames. Prerequisites: PHYS 2426 and MATH 2415.

PHYS 3306 Introduction to Biophysics
Topics include the levels of organization within biological systems, flow of energy in living things including an introduction to the thermodynamic systems utilized in biological research, and an introduction to the physical techniques used in the study of biological systems. Prerequisites: PHYS 1402 or PHYS 2426.

PHYS 3307 Introduction Solid State Physic
An introduction to the field of solid state physics. Topics include crystal structure, bonding in condensed matter, x-ray diffraction, crystal binding energies, free electron theory of solids, energy bands, boundaries and interfaces, and mechanical, optical, magnetic, and superconducting properties of materials. Prerequisites: PHYS 2426.

PHYS 3308 Introduction to Nanoscience
This course is an introduction to nanoscale physics in order to understand nanoscience and nanotechnology. It will investigate size effects and fabrication methods of nanoscale systems. Topics covered in the course include role of size effects on the physical, chemical, and biological properties of nanoparticles, nanotubes, and catalysts and self-assembly approaches for nanoparticlebiomaterials hybrid systems in nanobiotechnology and medical treatment. The course will also examine the uses of nanotechnology and the impact it has on our society. Prerequisites: MATH 1314 and either PHYS 1402, PHYS 2426, PSCI 1422, CHEM 1312, or BIOL 1407 (or BIOL 1488).

PHYS 3309 Introduction to Medical Imaging
This course will look at the wide range of techniques used for medical imaging and the underlying physical principles they are based on. This course is an introduction to medical diagnosis imaging techniques, e.g. magnetic resonance imaging, scanning tomography, and general imaging by x-rays. Topics covered also include the interaction of light on living cells and use of ionizing radiation in diagnosis and therapy. Prerequisites: MATH 1314 and either PHYS 1402, PHYS 2426, PSCI 1422, CHEM 1312, or BIOL 1407 (or BIOL 1488).

PHYS 3310 Radiation Biophysics
This is an advanced course in radiation biophysics. It will cover radiation chemistry, radiation carcinogenesis, genetic effect of ionizing radiation metabolism and biological effects of deposited radionuclides, radiation inactivation of enzymes, nucleic acids and viruses, biological effects of ultraviolet radiation, photosensitization, radiation protection and sensitization, radiation effects in vivo, cancer radiation therapy and photo- therapy. Prerequisites: PHYS 1402 or PHYS 2426.

PHYS 3311 Math Methods in Physics I
This course provides an introduction to the mathematical tools used to describe physical systems and techniques for solving the resulting systems of equations. Topics may include vector analysis, complex analysis, Fourier series, and linear algebra. Prerequisites: MATH 3341.

PHYS 3312 Math Methods in Physics II
This course is a continuation of PHYS 3311. Prerequisites: PHYS 3311.
PHYS 3315 Physics of Biological Systems
This course will teach students how to apply the basics principles of physics to the problems of Life Sciences. Prerequisites: BIOL 1406 (or BIOL 1487) and PHYS 2426.

PHYS 3330 Functions and Modeling
This course is intended for secondary Physics teacher certification students. Students will engage in explorations and lab activities designed to strengthen and expand their knowledge of the topics found in secondary school mathematics and other sciences through activities of data collection; modeling the data with elementary mathematical functions; using tools from calculus to determine the best model for the data; and using concepts from mathematics, physics and chemistry to interpret the results of the model. The major objective of this course is for students. Prerequisites: A grade of 'C' or better in the following: MATH 2413 (or MATH 2487) and UTCH 1102.

PHYS 3402 Modern Physics
This course provides an introduction to 21st century physics. Topics may include a wide range of modern physics subjects of atoms, molecules, clusters, and nanomaterials, theory of solids. Also described will be the rudiments of quantum mechanics with simple applications, relativity, radioactive decay, particle physics, modern optics, and other recent research areas. Laboratory exercises illustrate key course principles and reproduce historic experiments. Prerequisites: PHYS 2426.

PHYS 3404 Optics
This course is designed to provide a basic understanding of physical optics. Concepts covered include diffraction, interference, polarization, geometrical optics, and spectroscopy. The course includes three laboratory hours a week to emphasize course concepts. Prerequisites: MATH 2415 and either PHYS 2412 or PHYS 2426.

Capstone course. The course is designed to acquaint the student with advanced research techniques. The student performs research and experiments with faculty on a directed individual research project. This course may be repeated up to five times for credit. Prerequisites: Consent of instructor.

PHYS 4104 Research Lab Physics Education
This course is designed to acquaint students with elements of the research field. It includes the study, understanding and the design of modern topics in physics and classroom demonstrations. The methodology of effective presentations will also be developed and emphasized. The student will develop a project which will be presented in a designated UTPA course or conference for student appeal and its ability to convey a principle of physics. Prerequisites: PHYS 1402 or equivalent.

PHYS 4108 Seminar in Physics
Investigations of problems and progress in contemporary physics will be undertaken. Individual research and reporting will be emphasized. Course may be repeated once for credit. Prerequisites: One year of physics and consent of instructor.

PHYS 4201 Advanced Physics Lab
Capstone Course. The course is designed to acquaint the student with advanced research techniques. Prerequisites: Consent of instructor.

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. Prerequisites: Senior standing in the Physics Degree Program and consent of a supervising faculty member.

PHYS 4301 Introduction to Bio-Nanotechnology
This new course is intended to expose students to multidisciplinary science which either applies nanotechnology to living systems or makes use of the biological structures to create novel materials. This course introduces concepts in nanomaterials and their use with biocomponents to synthesize and address larger systems. Prerequisites: MATH 1314 and either PHYS 1402, PHYS 2426, PSCI 1422, CHEM 1312, or BIOL 1407 (or BIOL 1488).

PHYS 4302 Nano Optics
This course focuses on interaction of light with matter at a sub-wavelength scale. The course begins with an overview of lasers and optics, followed by an introduction into modern optical measurement techniques. It will cover principles of confocal microscopy, near-field optical illumination and detection techniques, and nano-scale optics. Prerequisites: MATH 1314 and either PHYS 1402, PHYS 2426 , PSCI 1422, CHEM 1312, or BIOL 1407 (or BIOL 1488).

PHYS 4303 Quantum Mechanics I
This course provides an introduction to the basic ideas of quantum mechanics. Concepts to be covered include wave functions, operator-eigenvalue formalism, bound states of the potential well, the harmonics oscillators. Selected examples such as solutions of the hydrogen atom, angular momentum, and spin will be discussed. Prerequisites: PHYS 3305 and PHYS 3311.

PHYS 4304 Quantum Mechanics II
This course explores more advanced concepts in Quantum Mechanics. Topics to be covered include time-dependent and time-independent Schrodinger equations, addition of angular momenta, perturbation theory, relativistic quantum theory and group theory and quantum mechanics. Applications to physics and chemistry will also be explored. Prerequisites: PHYS 4303.

PHYS 4305 Statistical Mechanics
This course explores the development of the macroscopic thermodynamical properties of physical systems from the behavior of their microscopic constituents. Topics include the partition function and its applications: entropy of an ideal gas, Maxwell velocity distributions, and heat capacities of solids. Other topics will include blackbody radiation, Fermi-Dirac, and Bose-Einstein statistics. Prerequisites: PHYS 3303 and PHYS 3311.

PHYS 4309 Nuclear and Particle Physics
A study of atomic nuclei and the fundamental constituents of matter. Topics include nuclear structure, natural and artificial radioactivity, nuclear reactions, fission, fusion, particles, and their interactions, standard model or particle physics, particle accelerators, cosmic rays, experimental methods, and examples from current research topics. Prerequisites: PHYS 3402.

PHYS 4310 Intro to Atomic Physics
This elective course will introduce the undergraduate students to a variety of topics in atomic and nuclear physics such as properties of atoms, atomic models, the periodic system of elements, modern atomic spectroscopy, quantum mechanical probabilities, properties of stable nuclei, nuclear decays and excitations, nuclear reactions, nuclear models, particles, applications of nuclear techniques, and nuclear and atomic energy. Prerequisites: PHYS 4303.

PHYS 4312 Introductory Nuclear Engineering and Health Physics Concepts
The course will include: the history of nuclear development; radioactivity and radiation protection; global and national energy requirements and the impact of nuclear power plants; fission and fusion reactor concepts; industrial application; health physics as well as nuclear medicine. Some hands-on experiments in radiation detection, measurement, and use of dosimeters will be incorporated.
Educational trips to different cancer centers, and to the Radioisotope production center will be part of the course. Prerequisites: PHYS 3402 and PHYS 4309; or consent of the instructor.

PHYS 4315 Analysis of Biomolecules by Physical Methods
Provides basic information on physical methods currently used in bioengineering and biomedical research study physical properties of vitally important macromolecules. Prerequisites: PHYS 3402.

PHYS 4316 Undergraduate Capstone Design
The goal of the Undergraduate Capstone Design project is to provide the student with an opportunity to design and build a device or a system incorporating elements of nanotechnology. Examples of Capstone Design topics and associated project descriptions are: fabrication of nanomembrane filters, nanoscale magnetic patterned media, nanofluids, and nanocomposites. Prerequisites: PHYS 3301 and consent of a supervising faculty member.

PHYS 4350 Special Relativity
This course provides a detailed treatment of Einstein's special theory of relativity. Topics will include Lorentz transformations, relativistic kinematics and dynamics, relativistic optics and electromagnetism. Prerequisites: PHYS 3211 and PHYS 3402.

PHYS 4360 Stellar Astrophysics
The course covers the introduction to astrophysical processes governing the structure and evolution of stars. The physics of white dwarfs, neutron stars, and black holes will also be discussed.
Prerequisites: PHYS 3301 and PHYS 4303.
PHYS 4380 Special Topics in Physics
Special topics in physics, arranged for individuals or small groups. Prerequisites: Consent of the instructor.

PHYS 4390 Computational Methods for Engineers and Physicists
This is an introduction to the techniques and use of computers to solve engineering and physical problems. The topics covered include the study of finite difference methods, the implementation of linear algebra problems to solve systems of equations, and the use of Monte Carlo methods, spectrum analysis, and techniques of scientific visualization will be covered. Prerequisites: PHYS 3211 and CSCI 1380.

PHYS 4392 Research Methods
A course intended for students in the UTeach program. Students will design research projects, perform independent inquiries, and learn to combine skills from mathematics and science in order to solve research problems. Course work will include inquiry, writing, and quantitative reasoning. Prerequisites: Grade C or better in the following: MATH 2413 (or MATH 2487) and UTCH 1102.

PHYS 4401 Physics Education
This course is a capstone course primarily designed for students intending to become high school teachers. It provides these pre-service teachers with strong pedagogical content knowledge. Through the use of research-based teaching strategies and assessments, students develop improved understanding of difficult-to-grasp concepts in mechanics, electricity, magnetism, heat, thermodynamics, optics, and modern physics. Students will develop teaching/learning materials appropriate for high school students. The course is taught in an integrated lecture and laboratory format. Prerequisites: PHYS 3301 and PHYS 3404.

## Physical Science

PSCI 1421 Physical Science I
This course is designed to introduce the student to the concepts and principles of physical science for nonscience and elementary school teacher majors. The topics include mechanics, energy, astronomy, and meteorology. This course includes three laboratory hours per week for reinforcing, through experiment, the concepts taught in lecture.

PSCI 1422 Physical Science II
A continuation of PSCl 1421. A survey course and is designed to introduce the student to the concepts and principles of physical science for nonscience and elementary school teacher majors. The topics include: waves, the nature of matter, chemistry, and Earth science. This course includes three laboratory hours per week for reinforcing, through experiment, the concepts taught in lecture. Prerequisites: PSCI 1421.

PSCI 3310 Planet Earth \& Its Place
Through this course the student is exposed to the information about the formation and interaction of the solar system and the Earth. The evolution of the earth's atmosphere and surface are discussed as well as the impact that these have had on the origin of life. Prerequisites: PSCI 1421, PSCI 1422, and GEOG 2313.

PSCI 4210 Physical Science for Educators I
This is the first part of hands on physical science course designed for education majors in EC-8 programs. The course will provide the students with basic theoretical background in physical science (properties of matter, mechanics, waves), and will develop skills in physical experimentation. Prerequisites: 3 hours of an introductory Life and Physical Science course at an undergraduate level in any discipline; or consent of instructor.

PSCI 4220 Physical Science for Educators II
This is one of two parts of a hands-on physical science course designed for education majors in EC-8 programs. The course will provide the students with basic theoretical and experimental background in electricity, magnetism, and electronics. Prerequisites: 3 hours of an introductory Life and Physical Science course at an undergraduate level in any discipline; or consent of instructor.

## HONORS COLLEGE

Dr. Mark C. Andersen<br>Dean, Honors College<br>Location: STAC 2.109 (UTRGV Edinburg Campus)<br>Phone: 956-665-3386<br>Fax: 956-665-7211<br>Email: mark.andersen@utrgv.edu

## MINOR IN

HONORS
(TRACK 1)

The honors program serves academically talented and ambitious students who value intellectual growth and want to make the most of their undergraduate education. The program provides students a flexible, challenging, and innovative curriculum that helps them develop academically, personally, and professionally. Students of all majors at UTRGV may join the honors program. In fact, no one particular academic major or career goal is more suited to the program than any other. Membership in the honors program is a privilege and a commitment, but previous graduates of the program have found it a tremendous source of enrichment as they move through and beyond UTRGV into various avenues of success. The honors program is always interested in students who wish to think big when it comes to their academic and professional ambitions.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate problem-solving skills that harness interdisciplinary means of thinking and researching.
2. Reflect critically on academic and professional knowledge after engaging in co-curricular activities, such as internship or service learning project.
3. Compose critical writing projects that demonstrate logical analysis, correct disciplinary conventions, and well-supported arguments.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. Honors courses are recommended satisfy General Education Core requirements.

B - HONORS DEGREE REQUIREMENTS - 21 HOURS (12 advanced)
1 - Honors Core - 9 hours (3 advanced)
HONR 3380 Honors Practicum
Choose one pair:
HONR 2385 Honors Big History I and HONR 2386 Honors Big History II HONR 2387 Honors Humanities I and HONR 2388 Honors Humanities II

2 - Support Courses - 12 hours (9 advanced)
Choose 12 honors hours, of which at least 9 hours must be advanced. Honors hours may be satisfied by courses with the HONR prefix, through honors contracts, or by departmental courses whose numbers end in -87 or -88 (e.g., BIOL 1488).

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:<br>Admission requirements:

Freshmen with fewer than 15 hours: SAT Score 1670, ACT Score 24, or Top 10\% High School Class; Freshmen with more than 15 hours: GPA 3.5 or higher in college coursework (not dual or concurrent enrollment).
Progression requirements:
3.5 GPA or higher and progress through honors coursework.

Graduation requirements:
3.5 GPA or higher, completion of all required courses.

MINOR IN
HONORS
(TRACK 2)

The honors program serves academically talented and ambitious students who value intellectual growth and want to make the most of their undergraduate education. The program provides students a flexible, challenging, and innovative curriculum that helps them develop academically, personally, and professionally. Students of all majors at UTRGV may join the honors program. In fact, no one particular academic major or career goal is more suited to the program than any other. Membership in the honors program is a privilege and a commitment, but previous graduates of the program have found it a tremendous source of enrichment as they move through and beyond UTRGV into various avenues of success. The honors program is always interested in students who wish to think big when it comes to their academic and professional ambitions.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate problem-solving skills that harness interdisciplinary means of thinking and researching.
2. Reflect critically on academic and professional knowledge after engaging in co-curricular activities, such as internship or service learning project.
3. Compose critical writing projects that demonstrate logical analysis, correct disciplinary conventions, and well-supported arguments.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. Honors courses are recommended satisfy General Education Core requirements.

## A - HONORS DEGREE REQUIREMENTS - 25 HOURS (19 advanced) <br> 1 - Honors Core - 16 hours (10 advanced)

HONR 3380 Honors Practicum
HONR 3187 Honors Seminar Independent Study
HONR 3387 Honors Independent Study
HONR 4387 Honors Independent Study
Choose one pair:
HONR 2385 Honors Big History I and HONR 2386 Honors Big History II HONR 2387 Honors Humanities I and HONR 2388 Honors Humanities II
2 - Support Courses - 9 hours ( 9 advanced)
Choose 9 advanced honors hours. Honors hours may be satisfied by courses with the HONR prefix, through honors contracts, or by departmental courses whose numbers end in -87 or 88 (e.g., BIOL 1488).

ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable:
Admission requirements:
Freshmen with fewer than 15 hours: SAT Score 1670, ACT Score 24, or Top 10\% High School Class; Freshmen with more than 15 hours: GPA 3.5 or higher in college coursework (not dual or concurrent enrollment).
Progression requirements:
3.5 GPA or higher and progress through honors coursework.

Graduation requirements:
3.5 GPA or higher, completion of all required courses.

MINOR IN
HONORS
(TRACK 3)

The honors program serves academically talented and ambitious students who value intellectual growth and want to make the most of their undergraduate education. The program provides students a flexible, challenging, and innovative curriculum that helps them develop academically, personally, and professionally. Students of all majors at UTRGV may join the honors program. In fact, no one particular academic major or career goal is more suited to the program than any other. Membership in the honors program is a privilege and a commitment, but previous graduates of the program have found it a tremendous source of enrichment as they move through and beyond UTRGV into various avenues of success. The honors program is always interested in students who wish to think big when it comes to their academic and professional ambitions.

## STUDENT LEARNING OUTCOMES:

1. Demonstrate problem-solving skills that harness interdisciplinary means of thinking and researching.
2. Reflect critically on academic and professional knowledge after engaging in co-curricular activities, such as internship or service learning project.
3. Compose critical writing projects that demonstrate logical analysis, correct disciplinary conventions, and well-supported arguments.

## A - GENERAL EDUCATION CORE - 42 HOURS

Students must fulfill the General Education Core requirements. Honors courses are recommended satisfy General Education Core requirements.

A - HONORS DEGREE REQUIREMENTS - 28 HOURS (19 advanced)
1 - Honors Core - 16 hours (10 advanced)
HONR 3380 Honors Practicum
HONR 3187 Honors Seminar Independent Study
HONR 3387 Honors Independent Study
HONR 4387 Honors Independent Study
Choose one pair:
HONR 2385 Honors Big History I and HONR 2386 Honors Big History II HONR 2387 Honors Humanities I and HONR 2388 Honors Humanities II
2 - Support Courses - 12 hours (9 advanced)
Choose 12 honors hours, of which at least 9 must be advanced. Honors hours may be satisfied by courses with the HONR prefix, through honors contracts, or by departmental courses whose numbers end in -87 or -88 (e.g., BIOL 1488).

## ADMISSION, PROGRESSION, AND GRADUATION REQUIREMENTS, if applicable: <br> Admission requirements:

Freshmen with fewer than 15 hours: SAT Score 1670, ACT Score 24, or Top 10\% High School Class; Freshmen with more than 15 hours: GPA 3.5 or higher in college coursework (not dual or concurrent enrollment).
Progression requirements:
3.5 GPA or higher and progress through honors coursework.

Graduation requirements:
3.5 GPA or higher, completion of all required courses.

## Course Inventory for Honors College (HC) Honors

HONR 2385 Honors Big History I
Honors I is a course in Big History an interdisciplinary approach to understanding the universe and the individual's place in it through the study of cosmology, Earth and life sciences, and human history. Prerequisites: Instructor approval.

HONR 2386 Honors Big History II
Honors II applies the knowledge and skills gained in Honors I (Big History) to the lower Rio Grande Valley with a particular emphasis on the human experience in terms of economic, social, political and cultural developments and challenges on both sides of the international border. Prerequisites: HONR 2385.

HONR 2387 Honors Humanities I
An interdisciplinary course that emphasizes cultural roots from ancient Greece through the Middle Ages. The course stresses the integration of the humanities (philosophy, painting, sculpture, architecture, literature, music) into the Western civilization framework.

HONR 2388 Honors Humanities II
An interdisciplinary course that emphasizes cultural roots from the Renaissance to the present. The course stresses the integration of the humanities (philosophy, painting, sculpture, architecture, literature, music) into the Western civilization framework.

HONR 3187 Honors Seminar Independent Study
This course is an introduction to basic problems encountered in independent study. It aids the student in choosing a topic for independent study, in setting up objectives for the study and preparing a research proposal or project.

HONR 3380 Honors Practicum
Allows students to gain practicum experience within their respective disciplines through an internship, research assistantship, or service learning project. Prerequisites: Either both HONR 2387 and HONR 2388 or both HONR 2385 and HONR 2386.

HONR 3387 Honors Independent Study
Supervised independent research in student's topic, with periodic meetings for coordination, instruction in methodology and discussion.

HONR 3388 Honors Study Abroad Independent Study
This course promotes opportunities for University Honors Program students to develop attendance of and participation in study abroad as well as service learning in order to promote interdisciplinary learning, contextual insight, cultural appreciation, and critical thinking skills for outstanding future contributions to society and the world. Students taking this course will arrange a topic and appropriate academic work with a faculty member and/or the Director of the University Honors Program.

HONR 4387 Honors Independent Study
Supervised completion of research and writing of thesis or creative project, with periodic meetings for coordination, instruction in methodology and discussion.

HONR 4388 Honors Study Abroad Independent Study
[0-0-3]
This course promotes opportunities for University Honors Program students to develop attendance of and participation in study abroad as well as service learning in order to promote interdisciplinary learning, contextual insight, cultural appreciation, and critical thinking skills for outstanding future contributions to society and the world. Students taking this course will arrange a topic and appropriate academic work with a faculty member and/or the Director of the University Honors Program.

HONR 4680 Honors Archer Internship
This course offers a full time internship for students in the Archer Fellowship Program in Washington D.C. providing opportunities for high level internships augmenting student coursework while participating in the Archer Program. Students participate in 32-40 intern hours per week. Students are given regular evaluations by intern supervisors and will provide a final report to the Director of the Guerra Honors Program. Students are encouraged to contribute internship experiences into other classes for discussion. Prerequisite: Junior status at the time course is taken.

Dr. Joan Reed<br>Director of Learning Framework, University College<br>Location: STAC 2121 (UTRGV Edinburg Campus)<br>Phone: 956-665-7963<br>Fax: 956-665-7211<br>Email: joan.reed@utrgv.edu

## Course Inventory for University College

University Studies
UNIV 1301 Learning Framework
[3-0]
The purpose of the course is to provide an opportunity for students to understand the psychology of learning and its application to their own university experience and to their chosen major/profession. The course will focus on the assessment, understanding and application of the psychology of learning, cognition and motivation.

## GLOSSARY OF TERMS

## [3-0] or [3-0-12] (for example)

Regularly scheduled classes have prescribed contact hours (the actual number of hours each week a student will spend in lecture, laboratory and/or clinical sessions for that class) that are shown in brackets to the right of the course title in each department's course listings. The first number denotes the number of lecture contact hours, the second number denotes the laboratory contact hours, and a third number, if included, is the number of clinical contact hours. These numbers apply to the courses as they are scheduled for the fall or spring semester. Summer weekly contact hours will be adjusted to compensate for the shorter duration of the semester. Examples:
[3-0] The class will have three hours of lecture per week.
[2-3] The class will meet for two hours of lecture and three hours of laboratory per week.
[3-0-12] The class will have three hours of lecture and 12 hours of clinical experience each week.

## Accreditation - College or University

A college or university in the United States is considered accredited if it is recognized by one of the following regional accrediting agencies:

- Middle States Association of Colleges and Schools
- New England Association of Schools and Colleges
- North Central Association of Colleges and Schools
- Northwest Association of Schools and Colleges
- Southern Association of Colleges and Schools
- Western Association of Schools and Colleges


## Accreditation - High School

A high school in Texas is considered accredited if it is recognized by the Texas Education Agency (TEA). High schools outside of Texas are considered accredited if they are recognized by their state accreditation agency.

## Advanced-level Work

Courses numbered 3000-4000 are advanced or upper-division courses. Courses numbered 3000 are designated as junior level, and 4000-numbered courses are designated as senior level. Approval of the department chair or dean of the college is required for enrollment in advanced-level courses by students who have not reached junior standing. Students who have not passed all portions of the TASP exam may not enroll in any advanced-level coursework if, upon completion of the work, the student would have completed 60 or more hours.

## Attempted Hours

Attempted hours are the total number of hours for courses that a student has attempted, including failing grades such as "F," "DF" and "WF." Repeated courses, failing grades over seven years old, incomplete grades and credit (CR) grades are not included in attempted hours at the undergraduate level.

## Census Date

The official census date is the 12th class day for regular fall and spring semesters or the fourth class day for summer sessions. Dates for traditional programs are found in the Academic Calendar. Census dates for non-traditional students (online-accelerated programs) will be published by the registrar's office.

## Common Course Number

If the course is generally equivalent to other lower- division courses taught at universities and community colleges within the state, the Texas Common Course Number is shown in the course description for informational purposes. See p. 27 for further information.

## Contact Hours

Number of regularly scheduled hours per week that a lecture, laboratory or clinical experience is scheduled to meet during a long semester. (See [3-0] above.)

## Coursework in Residence

Coursework in residence refers to coursework actually completed on one of the UTRGV campuses. Extension, credit by examination, and transfer credit may not be used to complete the residency requirement for graduation.

## Dean's List

After each regular semester, a dean's list is published listing the names of all undergraduate students enrolled in a minimum of 12 college-level hours who have a grade point average of 3.5 or better for courses taken that semester. A dean's list is not produced during the summer sessions.

## Designated Electives

Students have choices within the category of designated electives but must complete the required number of courses or hours from those specified.

## Elective Hours

Required credit hours for which specific courses are not prescribed are listed as elective hours.

## Entering Freshman

A student admitted as an entering freshman has not attended any accredited college or university.

## Full-time Graduate

A graduate student who is enrolled for at least nine hours of credit during a regular semester, or a total of six hours of credit during the summer sessions, is considered fulltime.

## Full-time Undergraduate

An undergraduate student who is enrolled for at least 12 credit hours during a regular semester, or at least six hours of credit during a summer session, is considered fulltime.

## Half-time Graduate

A half-time graduate student is one who is enrolled for six to eight hours of credit during the regular semester or three hours of graduate credit during a summer session.

## Half-time Undergraduate

A half-time undergraduate student is one who is enrolled for six to 11 credit hours during the regular semester or three hours of credit during a summer session.

## Three-Quarter Time Undergraduate

A three-quarter time undergraduate student is one who is enrolled for nine to 11 credit hours during the regular semester.

## Hours

College credit at UTRGV is measured in terms of credit hours. Ordinarily, a class that meets one 50minute period per week for a regular semester will carry a credit of one hour. The majority of classes meet three periods or their equivalent each week and carry three hours of credit. Two or three laboratory hours per week are usually required for one hour of laboratory credit.

## International English Language Testing System (IELTS)

Students whose native language is not English and students who studied outside the U.S. will be expected to provide test scores for either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

## Leveling Work

Coursework designed to eliminate deficiencies in educational background of students admitted or being considered for admission to a graduate program is called leveling work. (Graduate programs are designed on the assumption that students have a common body of knowledge.)

## Maximum Course Load

The maximum load for a full-time undergraduate student is 18 hours in a regular semester and 15 for each summer session. Students may be permitted to enroll for additional hours with the approval of his or her undergraduate academic advisor and the dean of the college.

## Non-degree Seeking Students

Non-degree seeking students are students who take graduate coursework for professional improvement or other reasons and have not been admitted to a graduate program. If the non-degree seeking student decides to apply to a graduate program, the student must submit a graduate application online, pay the required fees, and submit an official transcript showing the awarding of a bachelor's or higher degree. Registration as a non-degree seeking student in a master's course requires the permission of the graduate program director or the department chair. Registration in doctoral courses requires acceptance to a doctoral program and/or approval of the vice provost for graduate studies and may require additional documentation. A maximum of 6 hours taken at the university as a non-degree seeking student can be applied to a graduate degree with the approval of the graduate department.

## Prerequisite

A course listed with a prerequisite means that specified requirements must be met before one can enroll in the course. Specific prerequisites are listed in course descriptions.

## Probation

Students are placed on scholastic probation when they fail to achieve the required overall grade point average. Students may be placed on disciplinary probation for infraction of any University regulation. In
either case, they must satisfy specific requirements before they can return to a non-probationary status. For further information, refer to the sections on scholastic probation and suspension in the undergraduate and graduate catalogs. Student Conduct is discussed on p. 120.

## Regular Semester

A regular semester is any $15-$ week fall or spring semester.

## Returning Student

A student whose last institution attended was UTRGV is admitted as a returning student after an absence of at least one regular semester.

## Semester

(See Regular Semester)

## Special Student

A student holding at least a bachelor's degree from an accredited institution who does not wish to enter the graduate school may be permitted to register as a special student in one of the undergraduate colleges and is subject to all rules and regulations of that college.

## Summer Session

As part of its regular program, the university offers two summer sessions, each five-and-one-half weeks long.

## Transfer Students

Students admitted as transfer students have last attended an accredited college or university other than, or in addition to, UTRGV.

## Test of English as a Foreign Language (TOEFL)

Students whose native language is not English and students who studied outside the U.S. will be expected to provide test scores for either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS).

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Ortiz, Dennis, Assistant Professor, School of Accountancy; Accounting; Ph.D., University of North Texas, 2000.
Osatuyi, Babajide, Assistant Professor, Department of Information Systems; Information Systems; Ph.D., New Jersey Institute of Technology, 2012.
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Park, Stephen, Assistant Professor, Department of Literatures and Cultural Studies; English; Ph.D., University of Southern California, 2011.
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Pasupuleti, Sudershan, Professor, Department of Social Work; Social Work, Ph.D., Osmania University, 1998.
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Pereyra, Nicolás, Assistant Professor, Department of Physics, Physics; Ph.D., University of Maryland at College Park; 1995.
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Potter, Gregory, Lecturer I, Department of Mechanical Engineering; Mechanical Engineering; M.S., The University of Texas-Pan American, 2011.

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Reed, Joan Mueller, Lecturer, University College; Educational Studies; Ph.D, University of Nebraska-Lincoln, 2005.
Reed, Michael D., Professor, Department of Literatures and Cultural Studies; Colonial and 19th Century American Literature, Psychoanalytic Criticism, Logic; Ph.D., University of Oregon, 1974.
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Ruiz, Diana, Assistant Professor in Practice, Department of Counseling and Guidance; Ph.D., Texas Women's University, 2005.
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Shirvani, Hossein, Associate Professor, Department of Teaching and Learning; Mathematics Education; Ph.D., Texas A\&M University, 2004.
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Tarawneh, Constantine, Professor, Department of Mechanical Engineering; Mechanical Engineering; Ph.D., University of Nebraska-Lincoln, 2003.
Tasnif, Yasar, Assistant Professor, Cooperative Pharmacy Program; Ph.D., University of Texas at Austin, 2002.
Taylor, Christopher, Professor, School of Multidisciplinary Sciences; Zoology; Ph.D., University of Oklahoma, 1994.
Taylor, Monty B., Professor, School of Mathematical and Statistical Science; Mathematics; Ph.D., University of Houston, 1988.
Taylor, Sean, Assistant Professor, School of Music; Choral Conducting; D.M.A., University of Cincinnati, 2013.
Telese, James, Professor, Department of Teaching and Learning; Mathematics Education; Ed.D., Texas A\&M University, 1994.
Temby, Owen, Assistant Professor, Department of Political Science; Political Science; Ph.D., Carleton University, 2012.
Terry, Matthew D., Associate Professor, Department of Biology; Integrative Biology; Ph.D., Brigham Young University, 2003.
Tevis, Martha, Professor, Department of Teaching and Learning; History and Philosophy of Education, Cultural Foundations of Education, Latin; Ph.D., The University of Texas at Austin, 1967.
Thomas, John, Assistant Professor, Department of Biology; Microbiology and Immunology; Ph.D., University of Texas Medical Branch, 2008.
Thomas, Susamma, Clinical Instructor, School of Nursing; Adult Health; M.S.N., The University of Texas-Pan American, 2010.
Thomas, Tina, Lecturer I, Department of Chemistry; Plant and Soil Science; Ph.D, Texas Tech University, 2009.
Thomson, Shawn C., Associate Professor, Department of Literatures and Cultural Studies; English; Ph.D., University of Kansas, Lawrence, 2006.
Tijerina, Sandra L., Associate Professor, Department of Health and Biomedical Sciences; Occupational Training and Development; M.L.S. (ASCP) SBB, and M.S., Texas A\&M University-Corpus Christi, 1992.
Timmer, Douglas H., Professor, Department of Manufacturing and Industrial Engineering; Applied Statistics, Statistical Process Control, Design of Experiments, Reliability, Total

Quality Management, Statistical Computing and Industrial Engineering; Ph.D., Texas A\&M University, 1994.
Tiwari, Ashwini, Assistant Professor, Department of Teaching and Learning; Educational Leadership; Ph.D., Pennsylvania State University, 2014.
Tomai, Emmett, Assistant Professor, Department of Computer Science; Computer Science; Ph.D., Northwestern University, 2009.
Torres-Avila, Mirayda, Lecturer I, Department of Biology; Agronomy; Ph.D., Purdue University, 2013.

Torres, J. Rene, Lecturer, Department of Mathematical and Statistical Science; Computer Science; M.S., Texas A\&I University, 1971.
Torres, Saul, Lecturer, School of Music; Wind Conducting, Music Education; D.M.A., University of Utah, 2012.
Touhami, Ahmed, Assistant Professor, Department of Physics; Biophysics; Ph.D., Pierre \& Marie Curie University, 1993.
Trad, Tarek, Associate Professor, Department of Chemistry; Chemistry; Ph.D., Oklahoma State University, 2006.
Trant, John, Professor, Department of Biology; Zoology; Ph.D., The University of Texas at Austin, 1987.

Trenfield, Sally, Lecturer I, School of Music; Music Education; M.M., University of North Texas, 1987.

Trinidad, Mary, Lecturer, Department of Health and Human Performance; Kinesiology; M.S., The University of Texas-Pan American, 2009.
Tsay, Jenq-Jong, Associate Professor, Department of Mathematical and Statistical Science; Mathematics Education; Ph.D., University of Northern Colorado, 2005.
Turner, D. Elizabeth, Assistant Professor, School of Accountancy; Accounting; Ph.D; Florida International University, 2013.
U Uddin, Mohammad, Visiting Associate Professor, Department of Chemistry; Ph.D., University of Texas School of Public Health at Houston, 1995.
Ulibarri, Billy, Lecturer I, Department of Sociology and Anthropology; Sociology; M.A., The University of New Mexico, 2004.
Umeasiegbu, Veronica, Assistant Professor, School of Rehabilitation Services and Counseling; Rehabilitation Counseling Education, Research and Policy; Ph.D., University of Kentucky, 2013.
Valadez, Paul, Lecturer, School of Art; Studio Art; M.F.A., The University of North Carolina at Chapel Hill, 2003.
Valdes-Corbeil, Maria, Associate Professor, Department of Teaching and Learning; Curriculum and Instruction; Ph.D., University of Houston, 2005.
Valencia, Gustavo, Assistant Professor in Practice, School of Mathematical and Statistical Science; Mathematics; M.S., The University of Texas at Brownsville and Texas Southmost College, 2012.
Varbelow, Sonja, Lecturer I, Department of Teaching and Learning; Education and English \& Russian Literature and Language; M.Ed., Humboldt University at Berlin, 1990.
Varlamova, Ludmila, Lecturer, School of Music; Music Education; Ph.D., Moscow Research Center of the Russian Academy of Education, 1994.
Vasquez, Arturo, Professor, Department of Marketing; Marketing, International Business; Ph.D., Texas Tech University, 1990.
Vasquez, Horacio, Associate Professor, Department of Mechanical Engineering; Mechanical Engineering; Ph.D., University of Alabama Tuscaloosa, 2003.

Vega-Sampayo, Elena, Associate Professor, Department of Literatures and Cultural Studies; Spanish Literature; Ph.D., University of Leon, Spain, 2008.
Vatchev, Vesselin, Associate Professor, School of Mathematical and Statistical Science; Mathematics; Ph.D., University of South Carolina, 2004.
Vidal, Jorge, Lecturer, Department of Economics and Finance; Finance; Ph.D., The University of Texas Pan American, 2012.
Villalobos, Maria Cristina, Professor, Department of Mathematical and Statistical Science; Computational and Applied Mathematics; Ph.D., Rice University, 2000.
Villarreal Jr., Elias, Clinical Associate Professor, Department of Physician Assistant; General Surgery, Orthopedics, Hematology and Oncology; M.A., Yale University School of Medicine Physician Associate Program, 1997.
Villarreal, Evert, Lecturer, Department of Literatures and Cultural Studies; English; Ph.D., Texas A\&M University, 2006.
Villarreal, Laura-Zelda Saenz, Lecturer I, Department of Health and Biomedical Sciences; Business Administration; M.B.A., University of Phoenix, 2008.
Villavert, John, Assistant Professor, School of Mathematical and Statistical Science; Applied Mathematics; Ph.D., University of Colorado at Boulder, 2013.
Viren, Vejoya, Associate Professor, Department of Human Development and School Services; Child Development; Ph.D., Virginia Polytechnic Institute and State University, 2003.
Vitek, Christopher J., Associate Professor, Department of Biology; Biology; Ph.D., Clark University, 2004.
Vivanco, Roseann Kay, Clinical Assistant Professor, School of Nursing; Nursing; M.S.N., Capital University, 2003.
Voss, Judy, Lecturer, School of Nursing; Critical Care Nursing; M.S.N., The University of Texas Health Science Center at Houston, 1991.
Vu, Thanh Thuy, Assistant Professor, Department of Civil Engineering; Geotechnical Engineering; Ph.D., University of Missouri-Columbia, 2013.
Waite, Charles V., Associate Professor, Department of History; History; Ph.D., Texas Tech University, 1999.
Walburn, Jacob A., Assistant Professor, School of Music; Trumpet Performance; D.M.A., University of Illinois, 2011.
Wallace, Edward F., Lecturer, Department of History; 20 ${ }^{\text {th }}$ Century American History; M.A., The University of Texas Pan American, 2008.
Wang, Bailey, Professor, Department of Communication Sciences; Audiology; Ph.D., University of Kansas, 1997.
Wang, Bin, Associate Professor, Department of Information Systems; Information Systems; Ph.D., University of Minnesota, 2004.
Wang, Lei, Associate Professor, Department of Management; Management; Ph.D., New Mexico State University, 2005.
Wang, Lin, Associate Professor, Department of Health and Human Performance; Physical Education; Ph.D., University of Virginia, 2007.
Wang, Xiaohui (Sophie), Associate Professor, School of Mathematical and Statistical Science; Statistics; Ph.D., Texas A\&M University, 2006.
Warren, Brian, Assistant Professor, Department of Theatre; Educational Theater; Ed.D., The University of Houston, 2008.
Wasike, Ben, Associate Professor, Department of Communication; Mass Communication; Ph.D., Louisiana State University, 2005.

Watt, Karen, Professor, Department of Organization and School Leadership, Educational Leadership; Ph.D., The University of Texas at Austin, 1999.
Weaver, Michael K., Associate Professor, Department of History; British Modern European History; Ph.D., University of North Carolina at Chapel Hill, 1989.
Weber, Guillermo, Lecturer I, Department of Mechanical Engineering; Mechanical Engineering; Ph.D, Massachusetts Institute of Technology, 1988.
Wedig, Cindy M., Lecturer, Department of Biology; Dairy Science, Nutritional Biochemistry; Ph.D., University of Illinois, 1987.
Wei, Yong-Kang, Associate Professor, Department of Writing and Language Studies; Rhetoric and Professional Communication; Ph.D., 2004.
Weimer, Amy A., Associate Professor, Department of Psychological Science; Developmental Psychology; Ph.D., Arizona State University, 2006.
Weiss, Matthew, Assistant Professor, Department of Public Affairs and Security Studies; Political Science, International Relations; Ph.D., University of California, Davis, 2011.
Welbourne, Jennifer, Assistant Professor, Department of Management; Management; Ph.D., Ohio State University, 1999.
Wells, Lori, Lecturer I, Department of Bilingual and Literacy Studies; Bilingual Education and Educational Research; Ed.D., The University of Texas at Brownsville and Texas Southmost College, 2012.
Wells, Shirley, Associate Professor, Department of Occupational Therapy; Ph.D., University of Texas Health Science Center, 2009.
Welty, Kyle, Lecturer I, Department of History; History; Ph.D., Baylor University, 2012.
Wenzel, James P., Associate Professor, Department of Political Science; Public Law, Methods; Ph.D., University of Houston, 1993.
Werkheiser, Ian, Assistant Professor, Department of Philosophy; Philosophy; Ph.D., Michigan State Univesity, 2015.
Whitacre, Michael, Associate Professor, Department of Bilingual and Literacy Studies; Ph.D., Texas A\&M University Kingsville, 2007.
White, Jack, Lecturer I, Department of Social Work; Social Work; M.S.W., Washington State University, 1970.
White, Jacob, Assistant Professor, School of Mathematical and Statistical Science; Mathematics; Ph.D., Arizona State University, 2010.
White, Thomas G., Assistant Professor, Department of Criminal Justice; Political Science; Ph.D., Texas A\&M University, 2003.
Whittenberg, James, Assistant Professor, Department of Counseling and Guidance; Counseling Studies; Ph.D., Capella University, 2012.
Wiener, Bella, Lecturer, Department of Mathematical and Statistical Science; Mathematics; M.S., Vitebsk State University, USSR, 1968.

Wiley, Eric, Professor, Department of Theatre; Theatre/ TV/Film; Ph.D., Louisiana State University, 1999.
Wilkerson, Dale Allen, Lecturer I, Department of Philosophy; Philosophy; Ph.D., University of Texas-Dallas, 2002.
Williamson, Eric M., Professor, Creative Writing Program; English and American Literature, Creative Writing; Ph.D., New York University, 1998.
Wilson, Aaron, Assistant Professor, School of Mathematical and Statistical Science; Mathematics Education; Ph.D., Texas State University, 2013.
Wilson, Steve, Associate Professor, Department of Criminal Justice; Criminal Justice; Ph.D., The University of Nebraska-Omaha, 2005.

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Wimberly, Cynthia, Associate Professor, Department of Counseling and Guidance; Counselor Education; Ph.D., Texas Tech University, 2006.
Winkel, Mark, Associate Professor, Department of Psychological Science; Social Psychology; Ph.D., Oklahoma State University, 1982.
Wirts, Kristine, Associate Professor, Department of History; European History; Ph.D., Auburn University, 2003.
Wladyka, Dawid, Lecturer I, Department of Sociology and Anthropology; Interdisciplinary Studies; M.A, The University of Texas at Brownsville and Texas Southmost College, 2013.

Wongkasem, Nantakan, Associate Professor, Department of Electrical Engineering; Electrical Engineering; D.Eng., University of Massachusetts.
Writer, Justin Edward, Assistant Professor, School of Music; Composition; D.M.A., University of Oklahoma, 2007.
Wu, Sibin, Associate Professor, Department of Management; Strategic Management and Organizational Theory; Ph.D., University of Wisconsin-Madison, 2004.
Wylie, Timothy, Assistant Professor, Department of Computer Science; Computer Science; Ph.D., Montana State University, 2013.
Xiao, Nan, Assistant Professor, Department of Information Systems; Information Systems; Ph.D., The State University of New York at Buffalo, 2012.
Xu, Ping, Lecturer I, School of Art; Visual Communications; M.F.A., Kansas State University, 2005.

Yagdjian, Karen, Professor, School of Mathematical and Statistical Science; Mathematics; Ph.D., Moscow State University, 1990.
Yan, Yun-Chia, Assistant Professor, School of Accountancy; Accounting; Ph.D., Temple University, 2003.
Yanev, George P., Associate Professor, School of Mathematical and Statistical Science; Statistics; Ph.D., University of South Florida, 2001.
Yang, Yingchen, Assistant Professor, Department of Mechanical Engineering; Mechanical Engineering; Ph.D., 2005.
Yaworsky, William, Associate Professor, Department of Sociology and Anthropology; Anthropology; Ph.D., University of Oklahoma, 2002.
Yi, Taeil, Associate Professor, Department of Mathematical and Statistical Science; Mathematics; Ph.D., University of Florida, 2000.
Yoo, Soojin, Assistant Professor, Department of Health and Human Performance; Sports Pedagogy; Ph. D., University of Nevada, 2009.
Yoon, Ann Eun Mee, Lecturer, School of Mathematical and Statistical Science; Applied Mathematics; M.S., Iowa State University, 2006.
Yoon, Jasang, Associate Professor, School of Mathematical and Statistical Science; Mathematics, Ph.D., Iowa State University, 2003.
Yust, Brian, Assistant Professor, Department of Physics; Physics; Ph.D., The University of Texas at San Antonio, 2012.
Yznaga, Selma, Associate Professor, Department of Counseling and Guidance; Counselor Education and Supervision; Ph.D., St. Mary's University, 2000.
Z Zaidan III, Frederic, Associate Professor, Department of Biology; Biological Sciences; Ph.D., University of Arkansas, 2001.

Zamfir, Liliana, Lecturer I, School of Mathematical and Statistical Science; Mathematics; M.S., The University of Texas at Brownsville and Texas Southmost College, 2012.
Zamora, Roberto, Assistant Professor, Department of Organization and School Leadership; Educational Administration; Ph.D., The University of Texas at Austin, 1979.
Zamora, Zaena, Lecturer I, School of Mathematical and Statistical Science; Mathematics; M.Sc., The University of Texas-Pan American, 2014.
Zarei, Masoud, Associate Professor, Department of Health and Biomedical Sciences; Neuroscience; Ph.D., Baylor College of Medicine, 1994.
Zavaleta, Anthony, Lecturer I, Department of Sociology and Anthropology; Anthropology; Ph.D., The University of Texas, 1976.
Zemrani, Aziza, Assistant Professor, Department of Public Affairs \& Security Studies; Public Policy and Urban Affairs; Ph.D., Southern University and A\&M College, 2004.
Zeng, Liang, Associate Professor, Department of Physics; Theoretical Physics; Ph.D., Zhejiang University, 1998.
Zeng, Qing, Lecturer I, Department of Psychological Science; Psychology; Ph.D., Brigham Young University, 1998.
Zhang, Liyu, Associate Professor, Department of Computer Science; Computer Science; Ph.D., The State University of New York at Buffalo, 2007.
Zhang, Xin, Lecturer I, Department of Literatures and Cultural Studies; Linguistics and Applied Linguistics; Ph.D., Beijing Language University, 2009.
Zhang, Younghong, Assistant Professor, Department of Chemistry; Radiophysics; Ph.D., Chinese Academy of Sciences, 2002.
Zhang, Zhidong, Assistant Professor, Department of Teaching and Learning; Quantitative Methods, Psychometrics and Statistics Methods; Ph.D., McGill University, 2011.
Zhou, Haiyan, Associate Professor, School of Accountancy; Accounting; Ph.D., Temple University, 2003.
Zhou, Zong, Associate Professor, Department of Electrical Engineering; Electrical Engineering; Ph.D, The University of Texas, 2005.
Zieschang, Paul-Hermann, Professor, School of Mathematical and Statistical Science; Ph.D., University of Kiel, 1983.
Zolfagharian, Mohammadali, Associate Professor, Department of Marketing; Marketing; Ph.D., University of North Texas, 2007.
Zwerling, Philip, Associate Professor, Creative Writing Program; Dramatic Art; Ph.D., University of California, 2003.

## Emeritus Faculty

Allison, Terry C., Department of Biology, UTPA<br>Anzaldua, Hermila, Department of Social Work, UTPA<br>Artibise, Ala, Provost Emeritus, UTB/TSC<br>Baca, Ernest J., Department of Biology, UTPA<br>Berg, William, Department of Engineering, UTB/TSC<br>Bokina, John, Department of Political Science, UTPA<br>Brewerton, Francis, Department of Management, UTPA<br>Brogdon, Gale, College of Education, UTB/TSC<br>Brumley, Dianne, Director Emeritus of Choral Studies. UTB/TSC<br>Cararas, Sandra, Department of English, UTPA<br>Clark, Theodore, Department of History and Philosophy, UTPA

Dameron, Charles, Department of English, UTB/TSC
De Hoyas, Librado, R., Department of Social Work, UTPA
De Los Santos, Gilberto, Department of Marketing, UTPA
Dominguez, Sylvia, Department of Modern Languages and Literature, UTPA
Ellard, Charles J., Department of Economics and Finance, UTPA
Elliott, J. Lell, Department of Chemistry, UTPA
Escotet, Miguel, former Dean of the College of Education, UTB/TSC
Evans, James, Department of English, UTPA
Foltz, Virginia, Department of Biology, UTPA
Freeman, David, Department of Language, Literacy and Intercultural Studies, UTB/TSC
Garcia, Lino, Department of Modern Languages and Literature, UTPA
Garza-Escobedo, Edna, Department of Nursing, UTB/TSC
Glazer, Mark, Department of Psychological Science, UTPA
Grantz, Carl, Department of English, UTPA
Gratz, Elizabeth, Department of Curriculum and Instruction, UTPA
Guinn, Robert K., Department of Health and Human Services, UTPA
Haule, James M., Department of English, UTPA
James, Pauline, Department of Biology, UTPA
Judd, Frank W., Department of Biology, UTPA
Kearney, Milo, Department of History, UTB/TSC
Knopp, Anthony, Department of History, UTB/TSC
LeMaster, Edwin, Department of Electrical Engineering, UTPA
Levine, Bert, Department of Psychological Science, UTPA
Lof, Lawrence, Department of Biology, UTB/TSC
Lonard, Robert I., Department of Biology, UTPA
Manuella, Frank, School of Art, UTPA
Martin, Jose, Provost Emeritus, UTB/TSC
Martin, Wilbert Raymond, School of Art, UTPA
McBride, John W., Department of Curriculum and Instruction, UTPA
Miller, Hubert, Department of History and Philosophy, UTPA
Mitchell, Paul L., Department of English, UTPA
Monta, Marian Frances, Department of Communication, UTPA
Moore, Wayne, Department of English, UTB/TSC
Moyer, Nancy, School of Art, UTPA
Nelson, Eldon, former Dean of the School of Health Sciences, UTB/TSC
Nevarez, Miguel A., President, The University of Texas-Pan American, UTPA
Nichols, Edward E., School of Art, UTPA
Noyes, Lilian, Department of Political Science, UTPA
Ogletree, AI, Athletics, Baseball Coach, UTPA
Parkinson, Charles, J., Department of Health and Human Performance, UTPA
Pennington, Ralph, Department of Business Administration, UTPA
Perez, Ricardo J., Department of Curriculum and Instruction, UTPA
Phillips, Phyllis, Department of Curriculum and Instruction, UTPA
Raimo, John, School of Music, UTPA

Richardson, Alfred, Department of Biological Sciences, UTB/TSC
Richardson, Chad, Department of Sociology, UTPA
Schaefer, Geralda, Department of Mathematics
Seale, Carl, Department of Music and Dance, UTPA
Stanley, Jack R., Department of Communication, UTPA
Stratton, Porter, Department of History and Philosophy, UTPA
Thomas, Amilda, Department of Health and Kinesiology, UTPA
Tomlin, Terry, Department of Music, UTB/TSC
Tucker, Barbara, Department of Nursing, UTPA
Urbis, Richard, Department of Music, UTB/TSC
Urbis, Sue Zanne, Department of Music, UTB/TSC
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Vassberg, David, Department of History and Philosophy, UTPA
Vassberg, Lilliane, Department of Modern Languages and Literature, UTPA
Vincent, Vern, Department of Computer Information Systems and Quantitative Methods, UTPA
Walter, Louis, Pan American at Brownsville
Walton, Judith D., Health and Human Performance Department, UTB/TSC
Ware, William S., Department of Biology, UTPA


[^0]:    ${ }^{1}$ The Master of Science in Communication Sciences and Disorders program at The University of Texas Rio Grande Valley has been placed on probation by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association, 2200 Research Boulevard, \#310, Rockville, MD 20850, 800-498-2071 or 301-296-5700. A program on probation is not currently in full compliance with the accreditation standards. Programs on probation remain accredited but must demonstrate compliance with the standards within one year.

[^1]:    ${ }^{2}$ No class.
    ${ }^{3}$ The mini-term will be limited to special learning experiences such as study abroad/away, internships, research initiatives, service learning, etc. No lecture courses will be offered during the mini-term.

[^2]:    ${ }^{4}$ While Top 10 percent or IB admission is automatic, the documents described above must be submitted by the admission deadline in order to take advantage of the automatic admission.

[^3]:    ${ }^{5}$ Academic average is based on grades in academic courses such as English, mathematics, foreign languages, natural sciences and social sciences. Non-academic courses such as physical education, music and vocational courses are not considered.

[^4]:    ${ }^{6}$ Coursework attempted at UT Brownsville, UT Brownsville in partnership with Texas Southmost College, and UT Pan American will be included in the repeated course calculation.

[^5]:    ${ }^{7}$ College coursework includes Concurrent Enrollment at UTRGV only, not elsewhere, and does not include credit by examination (AP, CLEP, IB, etc.).

[^6]:    ${ }^{8}$ For 1302 credit, student must submit work to the Rhetoric/Composition committee coordinator for Freshman Writing Programs in UTRGV

[^7]:    D - COMPUTER SCIENCE ELECTIVES - 27 HOURS (27 advanced)
    Choose 27 advanced hours of Computer Science courses.

[^8]:    1 - Theatre Core - 9 hours ( $\mathbf{3}$ advanced)
    THTF 1351 Acting I
    THTF 1310 Theatre Appreciation THTF 4311 Directing I
    2 - Theatre Electives - 9 hours (6 advanced)
    Choose from any THTF classes, with the exception of THTF 2120 Practicum Theatre Television Film and THTF 4120 Practicum Theatre Television Film.

[^9]:    B - MAJOR REQUIREMENTS - 60 HOURS ( 39 advanced minimum)
    COMM 1307 Introduction to Mass Communication
    COMM 1315 Public Speaking
    COMM 1336 Television Production
    COMM 3303 Writing for Mass Media
    COMM 3333 Theories of Communication

    # 1 - Mass Communication Core - 27 hours (18 advanced) 

[^10]:    World History
    Choose only one:
    HIST 3301 World History Studies
    HIST 3302 Geography and Environment in History HIST 3303 Classical and Post-Classical World 500 BCE to 1450 HIST 3304 First Globalization, 1450-1750
    HIST 3305 The Modern World, 1750-present
    HIST 3306 Great Discoveries in Archaeology and History
    HIST 3307 Women in History
    HIST 4300 The Atlantic World
    HIST 4301 Maritime Archaeology and History
    HIST 4302 Comparative Colonialism
    HIST 4303 Public Health in the Americas
    HIST 4304 U.S.-Latin American Relations HIST 4305 History of World Wars I and II HIST 4306 History of the Cold War
    Asian/Middle Eastern History Choose only one:

    HIST 3370 Early Middle East History HIST 3371 Modern Middle Eastern History HIST 3372 Introduction to East Asian History I HIST 3373 Introduction to East Asian History II HIST 3374 History of the Ottoman Empire HIST 3375 History of Modern Japan HIST 3376 History of Modern China
    c - Advanced History Electives - 18 hours (18 advanced) Choose 18 advanced hours of History.

    ## C - TEACHER CERTIFICATON - 27 HOURS (24 advanced)

    Area of Certification: History (7-12)
    EDFR 2301 Intercultural Context of Schooling
    EDUC 3301 The Teaching Profession and Student Learning in Contemporary Schools
    EDUC 3302 Human Development, Learning Theories, and Student Learning
    EDUC 3303 Teaching in Today's Diverse Classrooms
    EDUC 3304 Instructional Planning, Classroom Management, and Assessment to Promote Student Learning
    EDUC 4306 Implementing and Assessing Effective Secondary Content Pedagogy
    READ 4305 Content Area Literacy
    EDUC 4611 Student Teaching Secondary or All-Level

    TOTAL CREDIT HOURS FOR GRADUATION - 120 HOURS
    TOTAL ADVANCED HOURS - 63 HOURS

