

2018-19 CATALOG AMENDMENT

General Requirements for Graduation with a Baccalaureate Degree

For the 2018-19 academic year, each of the following introductory language courses are eligible options to fulfill the General Requirements for Graduation with a Baccalaureate Degree in the category of Language, Philosophy and Culture (040):

- FREN 1311
- FREN 1312
- SPAN 1313
- SPAN 1314

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UNDERGRADUATE COURSES AND PROGRAMS
ANNOUNCEMENTS FOR SESSION 2018-2019

Accreditations, Certifications and Approved Programs

Texas A&M University-Kingsville is accredited by the Southern Association of Colleges and Schools Commission on Colleges to award baccalaureate, master's and doctorate degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, Georgia 30033-4097 or call 404-679-4500 for questions about the accreditation of Texas A&M University-Kingsville.

Undergraduate Program in Veterinary Technology accredited by the American Veterinary Medical Association's Committee on Veterinary Technician Education and Activities

Department of Human Sciences' Didactic Program in Dietetics and Dietetic Internship by the Accreditation Council for Education in Nutrition and Dietetics (ACEND) (120 South Riverside Plaza, Suite 2000, Chicago, IL 60606-6995, 312-899-5400)

Chemistry Program by the American Chemical Society (certified program)

Graduate Program in Communication Sciences and Disorders accredited by the Council on Academic Accreditation in Audiology and Speech-Language Pathology of the American Speech-Language-Hearing Association

Department of Music by National Association of Schools of Music

Program in Social Work by the Commission on Accreditation of the Council on Social Work Education

College of Business Administration by Association to Advance Collegiate Schools of Business and Association of Collegiate Business Schools and Programs

Teacher/Educator Certification Accredited by the Texas State Board of Educator Certification

Programs Accredited by the Engineering Accreditation Commission of ABET: Architectural, Chemical, Civil, Computer Science, Electrical, Environmental, Mechanical Engineering. (415 North Charles Street, Baltimore, MD 21201; Telephone number 410-347-7700)

Industrial Management and Technology by Association of Technology, Management and Applied Engineering (ATMAE) accredited program

Memberships:

American Association of Colleges for Teacher Education
American Association of Family and Consumer Sciences
American Association of Hispanics in Higher Education
American Association of State Colleges and Universities
American Association of University Women
American College Personnel Association
American Council on Education
American Kinesiology Association
American Library Association
American Society of Engineering Education
Association for the Advancement of Collegiate Schools of Business
Association for Computing Machinery
Association of Institutional Research
Association of Texas Colleges and Universities
Association of Texas Graduate Schools

Conference of Southern Graduate Schools
Council for Opportunity in Education
Council for Undergraduate Research
Council of Higher Education Accreditation
Council of Public University Presidents
Hispanic Association of Colleges and Universities
International Association of University Presidents
National Association for Bilingual Education
National Association of Schools of Music
National Association of Student Financial Aid Administration
National Collegiate Athletic Association
National Intramural Recreational Sport Association
Texas Association of Chicanos in Higher Education
The College Board

Kingsville, Texas 78363-8202
361-593-2111

A Member of The Texas A&M University System

GENERAL INFORMATION

Purpose of the Catalog

This catalog is the official bulletin of Texas A&M University-Kingsville for the years 2018-2019. It includes descriptions of academic programs and courses as well as regulations, fees, and policies in effect for those years. Fees and policies (except standards and requirements for degrees) are, however, subject to change. This catalog may be viewed via the Internet at <http://www.tamuk.edu/academics/catalog/>.

The courses of instruction announced herein are those that are available for offering during the sessions of 2018-2019. Courses to be offered during any one semester or summer term are posted in the *Blue and Gold Connection (Web for Students/Faculty)* prior to registration for a particular semester or term. To meet evolving needs, the university does reserve the right to make changes in courses and to offer only those for which a sufficient number of students register.

The provisions of this catalog do not constitute a contract, express or implied, between any applicant, student, faculty or staff member of Texas A&M University-Kingsville or The Texas A&M University System. This catalog is for informational purposes only. The university reserves the right to change or alter any statement herein without prior notice. This catalog should not be interpreted to allow a student that begins his or her education under the catalog to continue the program under the provisions in the catalog.

Student Responsibility

Each student is responsible for knowing the academic regulations in the **Catalog**. Unfamiliarity with these regulations does not constitute a valid reason for failure to fulfill them.

Equal Opportunity Policy

In compliance with Title VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, Section 504 of the Rehabilitation Act of 1973 and Executive Order 11246, Texas A&M University-Kingsville is open to all persons regardless of race, color, religion, sex, national origin, age, disability, sexual orientation, gender identity, or veteran's status who are otherwise eligible for admission as students. Texas A&M University-Kingsville does not discriminate on the basis of disability in admission or access to its programs.

Texas A&M University-Kingsville is an Equal Opportunity/Affirmative Action Employer and no applicant or employee will be discriminated against because of race, color, age, religion, sex, national origin, disability, sexual orientation, gender identity or veteran's status in any personnel action. This university will not knowingly enter into contractual agreements for services or supplies with any firm failing to follow fair employment practices.

Contact the Compliance Office, Lewis Hall, Room 130 - (361) 593-4758 for additional information.

Family Educational Rights and Privacy Act of 1974 and Amendments Thereto

This act is designated to protect the privacy of education records, to establish the right of students to inspect and review their education records and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA) concerning alleged failures by the institution to comply with the act.

Texas A&M University-Kingsville accords all rights under the law to all students. No one outside the institution shall have access to nor will the institution disclose any information, other than directory information, from a student's education records without the written consent of the student, except to personnel within the institution, to officials of other institutions in which the student seeks to enroll, to persons or organizations providing student financial aid, to accrediting agencies carrying out their accreditation function, to persons in compliance with judicial order and to persons in an emergency in order to protect the health or safety of students or other persons. All these exceptions are permitted under the Act.

In compliance with the Family Educational Rights and Privacy Act of 1974, information classified as "Directory Information" may be released to the general public without the consent of the student. The following is designated as directory information:

Student's name, a local and home address, telephone number, major or minor, enrollment status (e.g., undergraduate or graduate, full-time or part-time), classification, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees, honors, and awards received, and most recent educational agencies or institutions attended.

Students reserve the right to suppress any information from being released without their consent. Any student wishing to withhold any or all of this information should notify the Office of the Registrar. The university assumes that failure on the part of any student to specifically request the withholding of directory information indicates individual approval for disclosure.

Standards of Campus Conduct

Members of the university community assume full responsibility for compliance with Texas laws and for proper self-conduct. In addition to behaving according to the ordinary conventions of adult society, members of the university community are bound by university rules and regulations conducive to creating a positive campus atmosphere and general academic well-being.

The code for student conduct is set forth in the *Student Handbook*. Specific attention is given there to rules addressing academic misconduct, hazing, sexual harassment and substance abuse, including alcohol abuse and the illicit use of drugs. Grievance procedures and guidelines for sanctions are outlined.

Standards of conduct for university employees are detailed in the Texas A&M University *System Policies*. The Texas A&M University-Kingsville *Faculty Handbook* sets forth rules and regulations governing academic freedom and responsibility, sexual harassment, substance abuse, conflict of interests, research policies and other professional issues. Grievance procedures are set forth there.

In order to create a healthy and pleasant atmosphere, a campus-wide smoking policy designates only certain areas for smoking.

Hazing

The Education Code defines hazing as "any intentional, knowing, or reckless act occurring on or off the campus of an educational institution, by one person 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." The statute contains a list of conduct which constitutes hazing.

Hazing is a criminal violation under Texas law. A person may be found guilty of criminal conduct for hazing, encouraging hazing, permitting hazing, or having knowledge of the planning of hazing incidents and failing to report in writing his/her knowledge to the Dean of Students.

Both failing to report hazing and hazing that does not result in serious bodily injury are Class B misdemeanors. Hazing that results in serious bodily injury is a Class A misdemeanor. Hazing resulting in a death is a state jail felony. An organization found guilty of hazing may be fined \$5,000 to \$10,000 or, for incidents causing personal injury or property damage, an amount double the loss or expenses incurred because of the hazing incident.

It is not a defense to prosecution that the person hazed consented to the hazing activity.

Any person reporting a specific hazing incident to the Dean of Students or other appropriate institutional official is immune from civil and criminal liability unless the report is in bad faith or malicious.

This state law does not limit or affect the right of an educational institution's right to enforce its own penalties against hazing.

Student Right-to-Know and Campus Security Act, Public Law 101-542 and Amendments Thereto

This act is designed to provide prospective or entering students with information concerning (a) campus security policies and procedures, security services available, campus crime statistics and alcohol and drug use policies; (b) completion or graduation rate of full time certification-seeking or degree-seeking undergraduate students; and (c) graduation rate of student athletes who receive athletic scholarships. This information is contained in an annual report available in the library.

University Assessment

Students enrolled at Texas A&M University-Kingsville are required to participate in university assessment activities for the evaluation and improvement of university programs and curricula.

Supplementary University Publications

Faculty Handbook (published by the Academic Affairs Office)

Student Handbook (published by the Student Affairs Office)

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ACADEMIC CALENDAR

Academic Year 2018-2019

Dates and Times Subject to Change.
([Academic Calendar Webpage](#))

Fall Semester 2018

Apr. 2	8 a.m.	Priority Registration begins for Fall 2018 Semester.
Aug. 1	5 p.m.	<u>Graduate and Undergraduate Students</u> - Deadline to file Application for Degree Candidacy in December with Academic College Dean.
Aug. 1		Tuition Payment Plans open for enrollment.
Aug. 6		Late Registration begins. A \$35 Late Registration Fee will be assessed to students registering late.
Aug. 13	4 p.m.	Payment Deadline. A \$35 Late Payment Fee will be assessed for registering and/or paying after this date.
Aug. 13		Employee Tuition Assistance Scholarship Deadline.
Aug. 17		General Faculty/Staff Meeting, Jones Auditorium.
Aug. 17		Meetings of deans with departmental chairs and departmental meetings.
Aug. 18	9 a.m.	Residence Halls open.
Aug. 20		First Class Day of all regular students.
Aug. 24		Fifth Class Day. Students will be dropped from classes if they have not paid or made payment arrangements.
Aug. 24		Meal Plan Payment Deadline.
Aug. 25		First Class Day of all Saturday students.
Aug. 27		A \$100 Reinstatement Fee will be assessed to students requesting reinstatement.
Aug. 27		Permission to register or change classes is required from the adviser and professor.
Sept. 3		Labor Day Holiday.
Sept. 4		Last day for Graduation Candidacy Period for students planning for December graduation to apply for Application Candidacy forms on line with deans of their colleges.
Sept. 5	5 p.m.	NO REGISTRATION AFTER THIS DATE. Twelfth Class Day. Census Date. Student will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes. A \$100 Reinstatement Fee will be assessed to students requesting reinstatement.
Sept. 6		Three-peat charges are added to student account
Sept. 17		20 th Class Day.
Sept. 17		Final Day to submit Non-Funded Late Registration for Fall 2018.
Sept. 18		Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
Sept. 25		A listing of students who will complete graduation requirements in December will be submitted by Academic Deans to the Office of the Provost and Vice President for Academic Affairs.
Oct. 16		Midsemester Point.
Oct. 22	8 a.m.	Registration begins for all students for Winter 2018 Intersession.
Oct. 22	8 a.m.	Priority Registration begins for Spring 2019 Semester.
Oct. 22	Noon	Midsemester grades due for all students via Blue and Gold Connection.
Oct. 28		Title IV 60% of semester.
Oct. 29	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
Nov. 21		Classes will be held.
Nov. 21	6 p.m.	Residence Halls close for the Thanksgiving Holidays.
Nov. 22-23		Thanksgiving Holidays.
Nov. 25	2 p.m.	Residence Halls re-open after the Thanksgiving Holidays.

Dec. 3		<u>Graduate and Undergraduate Students</u> - Deadline to file Application for Degree Candidacy in May with Academic College Dean.
Dec. 5		Last Class Day.
Dec. 6		Study Day (no classes).
Dec. 7-13		Final examinations.
Dec. 14		Commencement.
Dec. 14	6 p.m.	Residence Halls close.
Dec. 17	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Fall Semester 2018 – First Eight-Week Session

Aug. 1	5 p.m.	<u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in December with Academic College Dean.
Aug. 20		First Class Day.
Aug. 20		Permission to register or change classes is required from the adviser and professor.
Aug. 27	5 p.m.	NO REGISTRATION AFTER THIS DATE. Sixth Class Day. Census Date. Student will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes.
Aug. 31		Final Day to submit Non-Funded Late Registration for Fall 2017 (1 st 8-weeks).
Sept. 4		Last day for Graduation Candidacy Period for students planning for December graduation to apply for Application Candidacy forms on line with deans of their colleges.
Sept. 15		Midsemester Point.
Sept. 18		Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
Sept. 19	Noon	Midsemester grades due for all students via Blue and Gold Connection.
Sept. 21		Title IV 60% of semester.
Sept. 24	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
Oct. 11		Last Class Day.
Oct. 12		Final examinations.
Oct. 17	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Fall Semester 2018 – Second Eight-Week Session

Oct. 15		First Class Day.
Oct. 15		Permission to register or change classes is required from the adviser and professor.
Oct. 22	5 p.m.	NO REGISTRATION AFTER THIS DATE. Census Date. Student will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes.
Oct. 26		Final Day to submit Non-Funded Late Registration for Fall 2018 (2 nd 8-weeks).
Nov. 10		Midsemester Point.
Nov. 14	9 a.m.	Midsemester grades due for all students via Blue and Gold Connection.
Nov. 16		Title IV 60% of semester.
Nov. 19	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
Dec. 3		<u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in May with Academic College Dean.
Dec. 6		Last Class Day.
Dec. 7		Final examinations.
Dec. 10	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Winter Intersession 2018

(Classes held December 17-21, 2018; January 2-9, 2019)

Oct. 22	8 a.m.	Registration begins for all students for Winter 2018 Intersession.
Dec. 3		Tuition Payment Plans open for enrollment.
Dec. 10		Payment Deadline. A \$35 Late Payment Fee will be assessed for registering and/or paying after this date.
Dec. 10		Employee Tuition Assistance Scholarship Deadline.
Dec. 17		First Class Day.
Dec. 17		Permission to register or change classes is required from the adviser and professor.
Dec. 18	5 p.m.	NO REGISTRATION AFTER THIS DATE. Census Date. Students will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes.
Dec. 20	5 p.m.	Final Day to submit Non-Funded Late Registration for Winter Intersession 2018.
Jan. 2		Midsemester Point.
Jan. 4	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of <u>Q</u> . Last day for faculty to drop for non-attendance.
Jan. 9		Last Class Day.
Jan. 10		Final examinations.
Jan. 14	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Spring Semester 2019

Oct. 22	8 a.m.	Priority Registration begins for Spring 2019 Semester.
Dec. 3		<u>Graduate and Undergraduate Students</u> - Deadline to file Application for Degree Candidacy in May with Academic College Dean.
Jan. 3		Tuition Payment Plans open for enrollment.
Jan. 3		Late Registration begins. A \$35 Late Registration Fee will be assessed to students registering late.
Jan. 7	4 p.m.	Payment Deadline. A \$35 Late Payment Fee will be assessed for registering and/or paying after this date.
Jan. 7		Employee Tuition Assistance Scholarship Deadline.
Jan. 10		General Faculty Meeting, Peacock Auditorium (BESB 100).
Jan. 11		Meetings of deans with departmental chairs and departmental meetings.
Jan. 12	9 a.m.	Residence Halls open.
Jan. 14		First Class Day of all regular students.
Jan. 18		Fifth Class Day. Students will be dropped from classes if they have not paid or made payment arrangements by this date.
Jan. 18		Meal Plan Payment Deadline.
Jan. 19		First Class Day of all Saturday students.
Jan. 21		Martin Luther King, Jr. Day Holiday.
Jan. 22		A \$100 Reinstatement Fee will be assessed to students requesting reinstatement.
Jan. 22		Permission to register or changes classes is required from the adviser and professor.
Jan. 30	5 p.m.	NO REGISTRATION AFTER THIS DATE. Twelfth class day. Census Date. Students will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes. A \$100 Reinstatement Fee will be assessed to students requesting reinstatement.
Jan. 31		Three-peat charges are added to student account.
Feb. 1		Last day for Graduation Candidacy Period for students planning for May graduation to apply for Application Candidacy forms on line with dean of their colleges.

Feb. 8		Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
Feb. 11		20 th Class Day.
Feb. 11		Final Day to submit Non-Funded Late Registration for Spring 2019.
Feb. 15		A listing of students who will complete graduation requirements in May will be submitted by the Academic Deans to the Office of the Provost and Vice President for Academic Affairs.
Mar. 18	6 p.m.	Residence Halls close for Spring Break.
Mar. 11-15		Spring Break.
Mar. 15		Midsemester Point.
Mar. 17	2 p.m.	Residence Halls re-open after Spring Break.
Mar. 18	8 a.m.	Classes resume.
Mar. 21	Noon	Midsemester grades due for all students via Blue and Gold Connection.
Apr. 1		Title IV 60% of semester
Apr. 1	8 a.m.	Priority Registration begins for Summer 2019 Sessions and Fall 2019 Semester.
Apr. 2	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of <i>Q</i> . Last day for faculty to drop for non-attendance.
Apr. 19		Good Friday – no classes held.
May 3		<u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in August with Academic College Dean.
May 8		Last Class Day.
May 9		Study Day (no classes).
May 10-16		Final examinations.
May 17		Commencement.
May 17	6 p.m.	Residence Halls close.
May 20	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Spring Semester 2019 – First Eight-Week Session

Jan. 14		First Class Day.
Jan. 14		Permission to register or change classes is required from the adviser and professor.
Jan. 21		Martin Luther King, Jr. Day Holiday.
Jan. 22		NO REGISTRATION AFTER THIS DATE. Sixth Class Day. Census Date. Student will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes.
Jan. 25		Final Day to submit Non-Funded Late Registration for Spring 2019 (1 st 8-weeks).
Feb. 1		Last day for Graduation Candidacy Period for students planning for May or August graduation to apply for Application Candidacy forms on line with deans of their colleges.
Feb. 8		Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
Feb. 9		Midsemester Point.
Feb. 13	Noon	Midsemester grades due for all students via Blue and Gold Connection.
Feb. 15		Title IV 60% point of semester.
Feb. 18	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of <i>Q</i> . Last day for faculty to drop for non-attendance.
Mar. 7		Last Class Day.
Mar. 8		Final examinations.
Mar. 18	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Spring Semester 2019 – Second Eight-Week Session

Mar. 18		First Class Day.
Mar. 18		Permission to register or change classes is required from the adviser and professor.
Mar. 25	5 p.m.	NO REGISTRATION AFTER THIS DATE. Census Date. Student will be dropped from classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes.
Mar. 28		Final Day to submit Non-Funded Late Registration for Spring 2019 (2 nd 8-weeks).
Apr. 13		Midsemester Point.
Apr. 17	Noon	Midsemester grades due for all student via Blue and Gold Connection.
Apr. 19		Title IV 60% of semester.
Apr. 22	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
May 3		<u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in August with Academic College Dean.
May 9		Last Class Day.
May 10		Final examinations.
May 13	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Summer Semester 2019 – Eight - Week Session

Apr. 1	8 a.m.	Priority Registration begins for Summer 2019 Sessions.
May 3		<u>Graduate and Undergraduate Students</u> - Deadline to file Application for Degree Candidacy in August with Academic College Dean.
May 20		Late Registration begins. A \$35 Late Registration Fee will be assessed to students registering late.
June 3		First Class Day.
June 3		Permission to register or change classes is required from adviser and professor.
June 3		Last day for Graduation Candidacy period for students planning for August graduation to apply for Application Candidacy forms on line with deans of their college.
June 10	5 p.m.	NO REGISTRATION AFTER THIS DATE. Twelfth Class Day. Census Date. Final Payment Deadline. Students will be dropped from Summer 10-Week classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes. No additional Emergency Loans beyond this date.
June 11		Three-peat charges are added to student account.
June 14		Final Day to submit Non-Funded Late Registration for Summer 2019 (8-weeks).
June 17		Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
June 24		A listing of students who will complete graduation requirements in August will be submitted by Academic Deans to the Office of the Provost and Vice President for Academic Affairs.
July 2		Midsemester Point.
July 8	Noon	Midsemester grades due for all students via Blue and Gold Connection.
July 9		Title IV 60% of semester.
July 10	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
Aug. 1		Last Class Day.
Aug. 2		Final examinations.
Aug. 2		<u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in December with Academic College Dean.
Aug. 5	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.

Aug. 17

Commencement.

Summer Semester 2019 – Ten -Week Session

Apr. 1 May 3	8 a.m.	Priority Registration begins for 2019 Summer Sessions. <u>Graduation and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in August with Academic College Dean.
May 20		Late Registration begins. A \$35 Late Registration Fee will be assessed to students registering late.
June 3		First Class Day.
June 3		Last day for Graduation Candidacy period for student planning for August graduation to apply for Application Candidacy forms on line with deans of their colleges.
June 10 June 17		Permission to register or change classes is required from adviser and professor. Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
July 18	5 p.m.	NO REGISTRATION AFTER THIS DATE. Fourth Class Day. Census Date. Final Payment Deadline. Students will be dropped from Summer 10-week classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes. No additional Emergency Loads beyond this date.
June 19 June 24		Three-peat charges are added to students account. A listing of students who will complete graduation requirements in December will be submitted by Academic Deans to the Office of the Provost and Vice President for Academic Affairs.
June 28 June 28		20 th Class Day. Final Day to submit Non-Funded Late Registration for Summer 2019 (10-weeks).
July 6		Midsemester point.
July 10 July 13 July 15	Noon 5 p.m.	Midsemester grades due for all students via Blue and Gold Connection. Title IV 60% of semester. Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
Aug. 2		<u>Graduate and Undergraduate Students</u> - Deadline to file Application for Degree Candidacy in December with Academic College Dean.
Aug. 8 Aug. 9		Last Class Day. Final examinations.
Aug. 12 Aug. 16 Aug. 17	Noon 6 p.m.	Grades due via the web at Blue and Gold Connection and I-Contracts due. Residence Halls close. Commencement.

First Summer Session 2019 – First Five - Week Session

Classes meet Monday-Friday Except Where Noted

Apr. 1 May 3	8 a.m.	Priority Registration begins for Summer 2019 Sessions. <u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in August with Academic College Dean.
May 15 May 20		Tuition Payment Plans open for enrollment Late Registration begins. A \$35 Late Registration Fee will be assessed to students registering late.
May 21	4 p.m.	Payment Deadline. A \$35 Late Registration Fee will be assessed for registering and/or paying after this date.
May 21 May 26 May 27	9 a.m.	Employee Tuition Assistance Scholarship Deadline. Residence Halls open. Memorial Day Holiday.

May 28		First Class Day.
May 28		Permission to register or change classes is required from adviser and professor.
May 31	5 p.m.	NO REGISTRATION AFTER THIS DATE. Fourth Class Day. Census Date. Final Payment Deadline. Students will be dropped from Summer I classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes. No additional Emergency Loans beyond this date.
May 31		Meal Plan Payment Deadline.
June 3		Three-peat charges are added to student account.
June 3		Last day for Graduation Candidacy period for students planning for August graduation to apply for Application Candidacy forms on line with deans of their college.
June 5		Final Day to submit Non-Funded Late Registration for Summer 2019 (1 st 5-weeks).
June 17		Deadline for students applying for graduation to complete the Change of Name Request form with the Office of the Registrar.
June 17		Midsemester Point.
June 21	Noon	Midsemester grades due for all students via Blue and Gold Connection.
June 22		Title IV 60% of semester.
June 24	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
June 24		A listing of students who will complete graduation requirements in December will be submitted by Academic Deans to the Office of the Provost and Vice President for Academic Affairs.
July 4-5		Independence Day Holiday – July 4 Holiday no classes held.
July 8		Last Class Day.
July 9		Final examinations.
July 9	6 p.m.	Residence Halls close.
July 11	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due.
Aug. 17		Commencement.

Second Summer Session 2019 – Second Five - Week Session

Classes meet Monday-Friday Except Where Noted

Apr. 1	8 a.m.	Registration begins for all students for Summer 2019 Sessions.
May 15		Tuition Payment Plans open for enrollment.
June 26		Late Registration begins. A \$35 Late Registration Fee will be assessed to students registering late.
July 3	4 p.m.	Payment Deadline. A \$35 Late Payment Fee will be assessed for registering and/or paying after this date.
July 3		Employee Tuition Assistance Scholarship Deadline.
July 9	9 a.m.	Residence Halls open.
July 10		First Class Day.
July 10		Permission to register or change classes is required from the adviser and professor.
July 15	5 p.m.	NO REGISTRATION AFTER THIS DATE. Fourth Class Day. Census Date. Final Payment Deadline. Students will be dropped from Summer II classes if they have not paid in full or made payment arrangements with the Business Office. No reinstatement of classes.
July 16		Three-peat charges are added to student account.
July 18	5 p.m.	Final Day to submit Non-Funded Late Registration for Summer 2019 (2 nd 5-weeks).
July 15		Meal Plan Payment Deadline.
July 28		Midsemester Point.
Aug. 1	Noon	Midsemester grades due for all students via Blue and Gold Connection.
Aug. 1		Title IV 60% of semester.

Aug. 2	5 p.m.	Last day to drop a course or withdraw from the university. Course dropped will receive a grade of Q. Last day for faculty to drop for non-attendance.
Aug. 2		<u>Graduate and Undergraduate Students</u> – Deadline to file Application for Degree Candidacy in December with Academic College Dean.
Aug. 15		Last Class Day.
Aug. 16		Final examinations.
Aug. 16	6 p.m.	Residence Halls close.
Aug. 17		Commencement.
Aug. 19	Noon	Grades due via the web at Blue and Gold Connection and I-Contracts due

TEXAS A&M UNIVERSITY-KINGSVILLE

The Texas A&M University System

John Sharp, *Chancellor*

Board of Regents

Charles W. Schwartz, Houston, *Chairman*
Elaine Mendoza, San Antonio, *Vice Chairman*
Phil Adams, Bryan/College Station
Robert L. Albritton, Fort Worth
Anthony G. Buzbee, Houston

Morris E. Foster, Austin
Tim Leach, Midland
Bill Mahomes, Dallas
Cliff Thomas, Victoria
Stephen F. Shuchart, Houston, *Student Regent*

Texas A&M University-Kingsville **University Administration**

Steven H. Tallant, *President*
College Hall 201. MSC 101. Extension 3207

J. Randy Hughes, *Chief of Staff*
College Hall 201. MSC 101. Extension 3207

George A. Rasmussen, *Provost and Vice President for Academic Affairs*
College Hall 250. MSC 102. Extension 3108

Terisa Riley, *Senior Vice President for Student Affairs and University Administration*
College Hall 201. MSC 103. Extension 3612

Richard L. Anderson, *Interim Vice President for Finance and Chief Financial Officer*
College Hall 206. MSC 144. Extension 2410

George A. Rasmussen, *Interim Vice President for Research and Graduate Studies*
College Hall 150. MSC 118. Extension 2809

Maureen Croft, *Vice President for Enrollment Management*
College Hall 234. MSC 227. Extension 4998

Bradley Walker, *Vice President for Advancement and External Relations*
Memorial Student Union Building. MSC 173. Extension 3918

Jaya Goswami, *Associate Vice President for Academic Affairs*
College Hall 250. MSC 102. Extension 3098

Maria L. Gonzalez, *Associate Vice President for Student Access*
College Hall 230. MSC 181. Extension 2129

Joanne Macias, *Interim Associate Vice President for Fiscal Affairs and Comptroller*
College Hall 122A. MSC 104. Extension 2897

Shannon Baker, *Interim Associate Vice President for Student Success*
College Hall 234. MSC 133. Extension 2157

Robert Paulson, *Associate Vice President for Information Technology/Chief Information Officer*
College Hall 230. MSC 185. Extension 5002

Ralph Stephens, *Associate Vice President for Support Services*
College Hall 121. MSC 212. Extension 3717

Adriana Garza-Flores, *Interim Associate Vice President of Marketing and Communications*
College Hall 130D. MSC 114. Extension 2138

Kirsten Compary, *Assistant Vice President of Student Affairs & Dean of Students*
Memorial Student Union. MSC 122. Extension 3606

Regents Professors

1997	Dr. James R. Norwine	2008	Dr. Scott Henke
1998	Dr. Leslie G. Hunter	2009	Dr. David Sabrio
1999	Dr. John C. Perez	2010	Dr. Mauro Castro
2000	Dr. Timothy E. Fulbright	2012	Dr. Kathleen Rees
2001	Dr. Jacqueline Thomas	2013	Dr. Nestor Sherman
2002	Dr. Jo Beran	2014	Dr. Karen Sue Bradley
2004	Dr. Steven Lukefahr	2016	Dr. Kim Jones
2005	Dr. Paul Hageman	2017	Dr. Gregory Sanders
2007	Dr. Michael Tewes		

Chancellor's Academy of Teacher Educators

2012	Dr. Karen Sue Bradley	2015	Dr. Randall Williams
2013	Dr. Jack Bradley	2016	Dr. Lorraine Killion
2014	Dr. Greta Schuster	2017	Dr. Marie Lassmann

Faculty Lecturers

1981	Dr. Robert B. Davidson	1998	Mr. Clark Magruder
1982	Dr. Jan Bogdan Drath	1999	Dr. Joseph O. Kuti
1983	Dr. Sandy Burton Hicks	2000	Dr. Gary R. Low
1984	Dr. Leo L. Bailey	2001	Dr. Ward Albro
1985	Mr. Maurice Schmidt	2002	Dr. Mark Walsh
1986	Dr. Mary Mattingly	2003	Dr. Steven D. Lukefahr
1987	Dr. David T. Deacon	2004	Dr. Cathy Downs
1988	Dr. Thomas C. Pierson	2005	Dr. Kim Jones
1989	Dr. Emil A. Mucchetti	2006	Dr. Nirmal Goswami
1990	Dr. Robert McLauchlan	2007	Dr. Brenda Melendy
1991	Dr. Rosario Torres Raines	2008	Dr. Jim Norwine
1992	Dr. Francisco Lopez	2009	Dr. Duane Gardiner
	Dr. Bill Chandler	2010	Dr. Dean Ferguson
	Dr. Ward Albro	2011	Dr. Anders Greenspan
1993	Dr. Charanjit Rai	2012	Dr. Stephen Oller
1994	Dr. David Sabrio	2013	Dr. Apu Bhattacharya
1995	Dr. Nicholas Beller	2014	Dr. Michelle R. Garcia
1996	Dr. Jacqueline Thomas	2016	Dr. Joachim Reinhuber
1997	Dr. Daniel J. Suson	2018	Dr. Steve Bain

Professors Emeriti

- 1982 Dr. Edwin R. Bogusch
Mr. John E. Conner
Dr. Frank H. Dotterweich
Dr. John W. Howe
Dr. J.R. Manning
Dr. George W. McCulley
Dr. Robert D. Rhode
Dr. Ralph C. Russell
- 1984 Mr. Emerson Korges
Dr. Robert D. Perry
Dr. John C. Rayburn
- 1986 Dr. John W. Glock
Mr. Ben J. South
Mr. Alfred E. Tellinghuisen
- 1987 Dr. James C. Jernigan
Dr. Hildegard Schmalenbeck
Dr. May Campbell
- 1988 Dr. Dennis B. Ford
Dr. D. Jack Stinebaugh
Mr. Mark Stupp
- 1989 Dr. George A. Cook
Mr. S. Burgin Dunn
Mr. C. Van Mooney
- 1990 Dr. Joseph L. Bellamah
Dr. Ruth Gauldin
Mrs. Johnnie Mae Haun
- 1991 Dr. Allan H. Chaney
Dr. David D. Neher
- 1993 Dr. Leo L. Bailey
Dr. George O. Coalson
Dr. William J. Hall
Dr. J. Talmer Peacock
Dr. Rosalina R. Rovira
- 1994 Dr. Richard A. Hensz
Dr. Olan E. Kruse
Dr. Gerald B. Robins
- 1995 Dr. Billy J. Chandler
Dr. Floyd W. Cokendolpher
Dr. Robert B. Davidson
- 1996 Dr. Jerry Bogener
Dr. Randall J. Buchanan
Dr. Virgil C. Kowalik
Dr. Thomas Pierson
- 1997 Dr. Ward S. Albro
Dr. Frederick G. Harvey
Dr. Edward V. Ruhnke
- 2000 Dr. Carl Wood
Dr. Julia Smith
- 2001 Dr. B. Stanley Bittinger
Dr. Janice C. Williams
Mr. Marc Cisneros
- 2002 Dr. Charles DeYoung
Mr. Homi Gorakhpurwalla
Dr. D. Wayne Gunn
- 2003 Dr. Donald A. Hegwood
Dr. Earl Herrick
- 2004 Dr. Robert O. Kirby
Mr. Maurice Schmidt
- 2006 Dr. David T. Deacon
Dr. Gustavo Gonzalez
Dr. Janis B. VanBuren
- 2009 Dr. Leslie Hunter
Dr. Gary Low
Dr. Donald Nixon
- 2010 Dr. Maria Morales
Mr. William Renfrow
Dr. Robert Scott
- 2011 Dr. Allen Ketcham
Dr. Alberto Olivares
Dr. John Perez
Dr. J.D. Phaup
- 2012 Dr. David Cecil
Dr. Grace Hopkins
Dr. James Norwine
- 2014 Ms. Livia Diaz
Dr. J. Victor French
Dr. Carol Tipton
- 2015 Dr. Robert Diersing
Dr. David Sabrio
- 2017 Dr. Mike L. Daniel
Dr. Sonny Davis
Dr. Richard Hartwig
Mr. Fred Nuesch

LOCATION

Texas A&M University-Kingsville is located in Kingsville, home of the legendary King Ranch. Kingsville is a city of approximately 25,000 that grew out of ranching, railroad and oil industry. The city is centrally located between the Rio Grande Valley to the south and Corpus Christi and San Antonio to the north. In addition to the university and King Ranch, the city also is home to Naval Air Station-Kingsville, one of the U.S. Navy's premier locations for jet aviation training.

Buildings and Grounds

Texas A&M University-Kingsville has more than 1,600 acres of land located at 13 different sites. The main campus occupies approximately 250 acres and the University Farm consists of 545 acres of land located about one-half mile north of the main campus. The university also operates sites specifically dedicated to research including the Citrus Center near Weslaco, Texas, a marine sciences ecology research area on Baffin Bay, a wildlife part on the north edge of the main campus and natural wildlife habitat about three miles south of the main campus. In addition to its research facility, the university offers classes for selected degree programs in Weslaco. The university also owns two commercial farms that are currently leased to private farmers providing a source of revenue to partially support scholarships.

HISTORY

Texas A&M University-Kingsville had its origin as a public institution in the teacher college movement that swept Texas in the early 1900s. Shortly after the institution's inception as South Texas State Teachers College in 1925, its role was expanded to embrace a wider array of programs typically authorized for comprehensive universities, including the graduate program that began in 1935. The historical expansion of the university's role was reflected in the change of its name to Texas College of Arts and Industries in 1929 and to Texas A&I University in 1967. The university became the nucleus of the University System of South Texas in 1972. In 1989, the university, along with other USST institutions, became a member of The Texas A&M University System. The System Board of Regents in 1993 voted to change the name of the university to Texas A&M University-Kingsville, effective September 1, 1993.

MISSION OF THE UNIVERSITY

The mission of Texas A&M University-Kingsville is to enrich lives through education, discovery and service in South Texas and beyond.

VISION

Texas A&M University-Kingsville is committed to being a renowned, diverse community of learners and innovators.

CORE VALUES

- Excellence: Continuous achievement of high standards
- Integrity: Ethical conduct in all endeavors
- Opportunity: Pursuit of personal and professional growth
- Discovery: Expansion and application of knowledge
- Service: Actions beneficial to others

ADMISSION TO THE UNIVERSITY

Shelly D. Key, *Executive Director of Admission*
Memorial Student Union 132. MSC 128. Extension 2315.

Texas A&M University-Kingsville adheres to high standards of academic excellence and admits students in accordance with their level of academic preparation without regard to race, color, sex, age, religious commitment or national origin. All inquiries about admission, application for admission, transcripts and other admissions documentation should be addressed to the Office of Admission, Texas A&M University-Kingsville, MSC 128, Kingsville, Texas 78363.

Admission to the university does not guarantee admission to a particular college or academic program.

Please refer to the University website to check for any changes or updated to the following information.

Admission Deadlines

Completed applications and required documentation must be in the Office of Admission by the following deadlines to ensure the application is processed prior to the beginning of the semester:

Fall Semester:	August 1
Spring Semester:	December 1
Summer I:	May 1

International students should refer to the International Admission section of this catalog for deadline information.

First-Year Student Admission Requirements

(Students with less than 12 college hours after high school)

(Documents 1-3 below comprise a complete admission application; include #4 if courses were taken for college credit prior to admission to Texas A&M University-Kingsville.)

1. Submit a completed application for admission, including the \$25 application fee by the stated deadline. The ApplyTexas Application is available online at <https://www.applytexas.org>.
2. Request that an official high school transcript showing at least six completed semesters be sent directly to the Office of Admission, Texas A&M University-Kingsville, MSC 128, Kingsville, TX 78363. Upon graduation from high school, a student must request a final high school transcript showing date of graduation and rank in the class be sent to the Office of Admission, Texas A&M University-Kingsville.
3. Notify the testing center to send official copies of ACT or SAT scores directly to the Office of Admission, Texas A&M University-Kingsville. Use ACT code 4212 or SAT code 6822.
4. Students attending colleges or universities while still in high school or prior to enrolling at Texas A&M University-Kingsville must request official college transcripts be sent directly to the Office of Admission, Texas A&M University-Kingsville from each college/university attended.

Note: Applicants from Puerto Rico, where Spanish is the primary language, are required to submit a TOEFL or equivalent. See the *Proof of English Proficiency* section in this catalog.

Note: The process to become a U.S. Permanent Resident does not involve English proficiency training or verification. Therefore, U.S. Permanent Residents who were educated outside the U.S., are required to meet our English proficiency requirements, unless they were educated in one of the following countries:

American Samoa, Australia, Bahamas, Barbados, Belize, Canada (except Quebec), Cayman Islands, Dominica, Federated State of Micronesia, Grenada, Guam, Guyana, Ireland, Jamaica, Liberia, New Zealand, United Kingdom (all), Trinidad-Tobago and Virgin Islands.

Admission for First-Year Students

A first-year student is an applicant who has graduated, or will soon graduate, from a Texas public high school accredited by the Texas Education Agency or a Texas non-public school accredited by the Texas Private School Accreditation Commission or who has completed home schooling or who has received a GED. A first-year student has not enrolled in another college or university after graduating from high school or earning a GED. (Dual enrollment credit is not considered in this determination.)

First-year applicants may obtain automatic admission to the University by meeting the Regular Admission Requirements listed below. Those applicants who do not meet one of the three automatic admission standards listed below may be considered under the Alternative Admission policy. Refer to the *Alternate Admission Review Process*.

Regular Admission Requirements

1. Students graduating in the **top 10%** of their high school class and completing a college preparatory high school program meet regular admission requirements. Top 10% students must also submit ACT or SAT scores to complete their admission file.
2. Students completing the State of Texas **Distinguished Level of Achievement Program**, the **International Baccalaureate Diploma Program**, the **Texas Recommended High School Program**, the **Texas Foundation High School Program with Endorsement(s)** or a high school program of equivalent rigor meet the following criteria. (For information about transfer credit granted for IB Diploma holders, see the Transfer Credit section of this catalog.)

Class Rank and Required Test Scores

Class Rank	SAT Total	ACT Composite Score
Top 10%	No minimum required but must submit test scores	No minimum required but must submit test scores
11-25% 1 st Quarter	830	15
26-50% 2 nd Quarter	910	17
51-75% 3 rd Quarter	1030	20
76-100% 4 th Quarter	1140	23

Note: To be admitted as a first-year student to the Frank H. Dotterweich **College of Engineering** at Texas A&M University-Kingsville applicants are required to have a minimum composite score of 21 on the ACT (with a minimum mathematics score of 22) or a 1050 on the SAT (with a minimum math score of 560). Applicants whose test scores fall below the minimum scores for full admission to the College of Engineering but have an 18 or above on the ACT (with a mathematics score of 19 or above) or an 890 on the SAT (with a minimum math score of 530) will be admitted to the Pre-Engineering (PPEN) program in order to complete preparatory coursework. Students who do not meet either of these requirements may be admitted to the Alternate Pre-Engineering (APEN) program.

3. 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 on the ACT assessment or satisfy the College Readiness Benchmark on the SAT assessment.

ACT College Readiness Benchmarks

English 18
Math 22
Reading 22
Science 23

New SAT College Readiness Benchmarks

ERW* 480
Math 530

**Evidence based on Reading and Writing*

The Texas Education Code (TEC) 51.803-51.809 requires that all students meet one of the following college readiness standards in order to be eligible to be considered for admission to a Texas Four-Year Public Institution.

1. Successfully complete the recommended or advanced high school program or complete the portion of the program that was available to them; or
2. Successfully complete a curriculum that is equivalent in content and rigor to the recommended or advanced high school program at a high school that is exempt from offering such programs; or
3. Satisfy the College Readiness Benchmarks on the ACT or SAT assessment.

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 old SAT (including the writing component), by meeting the new SAT College Readiness Benchmarks of the ERW 480 and Math 530 or by meeting the College Readiness Benchmarks on the ACT Assessment. Students who earned a GED must also submit their GED certificate of completion.

Alternate Admission Review Process

First-year applicants who do not meet the Regular Admission Requirements outlined above will be reviewed by an Admission Committee using a holistic review that includes the applicant's rank in class, standardized entrance test scores, performance in specific high school courses, extracurricular activities, community service, talents and awards, leadership skills, employment and other factors that support a student's ability to succeed at the university. *Applicants who score below a 15 on the ACT or an 830 on the SAT are not eligible for alternate admission review.*

Alternate Admission Requirements:

Students admitted under Alternate Admission will be subject to the following requirements, in addition to the requirements for students admitted under general admission ([Accepted Students Webpage](#)):

1. Attend New Student Orientation for academic advising for class registration and academic planning; introduction to the campus and campus resources, and other activities.
2. Complete the requirements of the Academic Success Program, offered by the Center for Student Success, during the first semester.
3. Pass the First Year Seminar during the first year.

Admission Appeal Process

Upon formal request to the Office of Admission by phone or e-mail, first-year applicants who are denied admission and wish to appeal will be sent to an Admission Committee for review. In addition to the formal request, applicants must submit the following items prior to being sent to the Committee:

1. Personal Statement or Letter of Appeal.
2. Two (2) Letters of Recommendation from Core Subject Teachers, high school administrators or supervisors/employers.

Admission for Freshman-Transfer Students

Freshman-Transfer Students are those applicants who are applying with less than 12 transferable semester credits (1-11 transferable semester hours) taken after high school graduation. (For a list of required documents, see the above section titled *First-Year Admission Requirements*.)

An applicant submitting a completed application to Texas A&M University-Kingsville as a freshman-transfer applicant will be granted admission to the university if they:

1. meet one of the first-year admission options under First-Year Admission section above **and**

2. have a cumulative grade point average of at least a 2.0 on a 4.0 scale (or a 2.5 on a 4.0 scale for the College of Engineering) from all other institutions that are fully approved by the appropriate regional accrediting agency **and**
3. are in good standing with their previous college or university.

Transfer Admission Requirements

1. Submit a completed application for admission, including the \$25 application fee by the stated deadline (see Admission Deadlines). The ApplyTexas Application is available online at <https://www.applytexas.org>.
2. Request that official copies of transcripts from other universities and colleges attended be sent directly to the Office of Admission, Texas A&M University-Kingsville, MSC 128, Kingsville, Texas 78363. Course work taken at other colleges and/or universities will be converted into Texas A&M University-Kingsville equivalents where appropriate. Applications will not be evaluated until all official transcripts from previous colleges and/or universities are received.

Note: Applicants from Puerto Rico, where Spanish is the primary language, are required to submit a TOEFL or equivalent. See the *Proof of English Proficiency* section of this catalog.

Admission for Transfer Students

(College credits earned during high school (dual-credit) and courses taken immediately following high school graduation during the summer do not classify a student as a transfer student.)

Students applying with 12 or more transferable semester credits taken after high school graduation must satisfy the following requirements:

1. have a cumulative grade point average of at least 2.0 on a 4.0 scale from all the other institutions that are fully approved by the appropriate regional accrediting agency **and**
2. be in good standing with their most recent previous college or university.

Note: To be accepted into the College of Engineering, the overall grade point average from all college work must be 2.5/4.0 or greater. (Applicants to the College of Engineering with less than 60 transferrable credits will be admitted to a Pre-Engineering program if their overall GPA falls between 2.0 to 2.49. For more information about admission to an Engineering program at TAMUK, please see the *College of Engineering* section of this catalog.)

Transfer students who do not meet published admission criteria do not qualify for automatic admission to Texas A&M University-Kingsville. Transfer students in this category who wish to receive further review must contact the dean of their academic college for consideration. If their academic dean recommends admission, students will be admitted with an academic status of Scholastic Probation and must maintain a 2.0 grade point average during their first semester of enrollment at Texas A&M University-Kingsville. Failure to maintain a 2.0 grade point average during the first term of enrollment may result in dismissal from the institution.

Applicants who have questions regarding what are considered transferrable courses may refer to the *Transfer Credit Calculation and Evaluation* section of this catalog.

Admission for Adult Learners

For the purpose of admitting students to Texas A&M University-Kingsville, an adult learner is defined as an entering undergraduate student who is 25 years or older and has not attended a university or college since completing their high school diploma or GED. Adult learners are given the option to submit ACT or SAT scores to the Office of Admission. Unless exempt, all admitted students will be required to take a Texas Success Initiative (TSI) exam prior to enrolling. (For TSI requirements, refer to the Texas Success Initiative section of this catalog.) This exam is administered on campus on a regular basis. See the appropriate section in this catalog for information concerning submission of application, supporting documentation (e.g. high school and/or college transcripts) and admission deadlines.

Available College Programs

Two opportunities to earn college credit exist for students in high school who want to get ahead or experience college early. Students may earn credit through either Concurrent Enrollment or Dual Credit Enrollment. Students will receive the whole experience of taking one or more college courses, preparing them even more for their college career after high school. Students admitted under one of these programs, who wish to continue in the summer or fall semester immediately following graduation from high school must apply for admission as a freshman and submit updated official documentation required to gain admission into their chosen undergraduate course of study at Texas A&M University-Kingsville. Students must maintain a 2.0 GPA at Texas A&M University-Kingsville to continue participating in these programs.

High School Dual Enrollment Admission/Criteria

The Texas A&M University-Kingsville Dual Enrollment Program allows a high school student to earn college credit(s) while fulfilling high school requirements. To be eligible, a student must meet the following criteria:

1. High school Freshman-Senior Classification students are eligible for Dual Enrollment Program.
2. The student with the assistance of their high school counselor must submit the online Dual Enrollment Application, an official high school transcript, test scores, and the Dual Enrollment registration form.
3. The student must meet the criteria required by the Texas Administrative Code, Title 19, Part 1, Chapter 4, Subchapter D, Rule §4.85(b). The student must achieve or exceed the minimum college readiness standards on a state approved assessment.

Eligible high school students should first contact their high school counselor. School officials may request more information from the Dual Enrollment Office, Texas A&M-Kingsville.

Javelina Jumpstart Program

The Javelina Jumpstart Program is designed for high school students who wish to enroll in the University during the fall and/spring semester of their senior year and **who are not planning to use the courses completed at the university are part of their high school program.** *Students cannot participate in the High School Dual Enrollment Program and the Javelina Jumpstart Program simultaneously.* The following requirements for admission to the Javelina Jumpstart Program must be met.

1. The student must be enrolled in high school, pursuing a college prep curriculum at the senior level.
2. A 3.0 GPA or higher (on a 4.0 scale) overall high school average is required.
3. Minimum test score of at least 1030 on the SAT, 950 on the old SAT or 20 Composite on the ACT.
4. A parent or guardian and the high school principal must recommend the student by signing the Javelina Jumpstart Program approval form.
5. The student must qualify for college level courses by being exempt from TSI assessment through ACT, SAT, TAKS or STAAR or by passing all sections of the TSI Assessment.
6. Enrollment will be limited to a maximum of seven (7) hours each long term (fall or spring) or four (4) hours each summer session.

Students can apply for admission online at ApplyTexas.org. The student must also complete the Javelina Jumpstart Program Approval form and submit it along with a copy of their official high school transcript, ACT or SAT scores, and \$25.00 application fee to the Office of Admission, Texas A&M University-Kingsville, MSC 128, 700 University Blvd., Kingsville, TX 78363.

Javelina Jumpstart students must be advised by academic advisors in their intended major. Students participating in this program will register for classes and pay all regular tuition and fees during the regular registration period.

Visiting Student Admission

A Visiting Student (also referred to as a Transient Student) is a student seeking admission to classes for only one semester with plans to continue their studies at another institution. A Visiting Student is not eligible for financial aid. To be considered for Visiting Student admission, applicants must submit the following:

1. A completed Application for Admission, including the \$25 application fee. The ApplyTexas Transient Application is available online at <https://www.applytexas.org>.
2. An official copy of most recent college or university transcript indicating student is in good standing.

Visiting students are admitted for one semester only. If a Visiting Student wishes to pursue a degree at Texas A&M University-Kingsville, he/she must follow the appropriate admission application procedures. Refer to the appropriate section above for this information.

Readmission

Former students who have had a break in enrollment of more than two years at this university must update their records by submitting a readmission application to Texas A&M University-Kingsville, available online at the ApplyTexas.org website. Those who have taken college work at another institution must request that official transcripts be sent to the Office of Admission. Readmission will be granted if a student is in good standing (a 2.0 overall grade point average or 2.50 for the College of Engineering) and does not have more than three (3) Enforced Withdrawals at Texas A&M University-Kingsville.

Students who do not meet published readmission criteria do not qualify for automatic readmission to Texas A&M University-Kingsville. Readmission students in this category who wish to receive further review must contact the dean of their academic college for consideration. If their academic dean recommends admission, students will be admitted with an academic status of Scholastic Probation and must maintain a 2.0 grade point average during their first semester of reenrollment at Texas A&M University-Kingsville. Failure to maintain a 2.0 grade point average during the first term of reenrollment will result in dismissal from the institution.

Academic Fresh Start

Pursuant to Senate Bill No. 1321 enacted by the 73rd Texas Legislature, Texas residents seeking admission to Texas A&M University-Kingsville who have previous college course work more than 10 years old at the time of application may elect to have the University disregard that course work when considering the applicant for admission. An applicant who makes this election and is admitted may not receive any course credit for courses undertaken 10 or more years prior to the date of the election. The Academic Fresh Start Option can be exercised only once and must be requested prior to admission to the university.

Students electing to use the Academic Fresh Start Option and who are receiving financial aid should contact the Office of Student Financial Aid and the Veteran Affairs Office (if applicable). Students electing to participate in the Academic Fresh Start program will maintain their current TSI status.

Note: Failure to attend the university during the initial semester of the Academic Fresh Start election will negate the agreement and the student will have to reapply for Academic Fresh Start in a future semester.

International Admission Procedures

Application Deadlines

A complete file must be submitted prior to the following deadlines:

Fall Semester:	June 1
Spring Semester:	October 1
Summer:	April 1

Applications received after these dates will automatically be deferred to the next semester or term.

International Admission Requirements

To be fully admitted, all international applicants must submit the following items before established deadline dates:

1. A completed application for International Admission. The ApplyTexas application is available online at Applytexas.org.
2. Official secondary school transcripts showing subjects and marks received and graduation date. If an applicant has not yet graduated from secondary school, a transcript showing all completed work may be accepted for early admission. External examination reports should be provided when applicable.
3. Official transcripts showing subjects and marks received and diplomas and/or certificates earned from any colleges or universities attended.
4. Certified, literal translations, in English, of all credentials issued in any language other than English.
5. Proof of English proficiency (see below).
6. Official SAT or ACT scores. Required for all Engineering majors (see below).
7. Proof of ability to meet personal and academic expenses. Valid financial support documents (less than four months from the issue date) must indicate the minimum U.S. dollar amount required by the university. The required minimum is subject to change without notice. Please visit the University website for specific information about the cost of attendance.
8. A \$50 non-refundable application fee must accompany the application. Without receipt of the fee your application packet will not be processed. Bank money orders must be issued in U.S. dollars by a U.S. bank or credit card with authorization letter.

Note: If submitted by any applicant, SAT or ACT scores will be used for placement purposes in English and math courses.

Note: To be admitted as a first year student to the Frank H. Dotterweich **College of Engineering** at Texas A&M University-Kingsville applicants are required to have a minimum composite score of 21 on the ACT (with a minimum mathematics score of 22) or a 1050 on the SAT (with a minimum math score of 560). Applicants whose test scores fall below the minimum scores for full admission to the College of Engineering but have an 18 or above on the ACT (with a mathematics score of 19 or above) or an 890 on the SAT (with a minimum math score of 530) will be admitted to the Pre-Engineering (PPEN) program in order to complete preparatory coursework. Students who do not meet either of these requirements will be admitted to the Alternative Pre-Engineering (APEN) program.

Texas A&M University-Kingsville will evaluate a student's academic documents and determine institutional accreditation/recognition, whether the GPA requirements are met and whether any degree/diploma earned is equivalent to a U.S. bachelor's degree.

International Freshman Admission

Undergraduate applicants who have no previous work at the postsecondary level must have at least a 2.5 grade point average (on a 4.0 scale) from a secondary school and must also meet the criteria for admission to a postsecondary school in the applicant's home country.

International students who are graduating from a recognized U.S. high school, either in the U.S. or abroad, are required to meet the Regular Admission Requirements list on a previous page of this catalog.

International Transfer Admission

Undergraduate applicants who have attended a postsecondary level institution and have completed less than 12 transferable semester credits at an accredited/recognized institution must satisfy the following criteria:

1. Meet or exceed the freshman admission requirements listed above **and**

2. Post a minimum cumulative grade point average of 2.0 on a 4.0 scale for all post-secondary work attempted.

Undergraduate applicants who have attended a postsecondary level institution and have completed *12 or more transferable semester credits* at an accredited/recognized institution must satisfy the following criteria:

1. Post a minimum cumulative grade point average of 2.0 on a 4.0 scale for all post-secondary work attempted
and
2. Be in good standing with the college or university last attended.

Note: Applicants to the College of Engineering with less than 60 transferrable credits will be admitted to a Pre-Engineering program if the overall GPA fall between 2.0 to 2.49. For more information about admission to an engineering program at Texas A&M University-Kingsville, please see the College of Engineering section of this catalog.

Transfer students who do not meet published admission criteria do not qualify for automatic admission to Texas A&M University-Kingsville. Transfer students in this category who wish to receive further review must contact the dean of their academic college for consideration. If their academic dean recommends admission, students will be admitted with an academic status of Scholastic Probation and must maintain a 2.0 grade point average during their first semester of enrollment at Texas A&M University-Kingsville. Failure to maintain a 2.0 grade point average during the first term of enrollment will result in dismissal from the institution.

International Visiting Student

A Visiting Student (also known as a Transient Student) is a student seeking admission to classes for only one semester with plans to continue their studies at another institution.

To be considered for Visiting Student admission, international applicants must submit the following items:

1. A completed Application for Admission, including the \$25 application fee. The ApplyTexas Transient Application is available online at ApplyTexas.org website.
2. Proof of English proficiency (see below).
3. Official transcript from the most recent institution attended, in English and the native language of the country in which it was issued. This transcript must indicate that the student is in Good Standing.

Once admitted, Visiting Students will coordinate with the Office of International Student & Scholar Services (OISSS) for the appropriate immigration paperwork.

Visiting Students are admitted for one semester only. If a Visiting Student wishes to pursue a degree at Texas A&M University-Kingsville, they must follow the appropriate admission application procedures. Please refer to the appropriate section above for this information.

International Exchange Student

Before applying as an Exchange Student at Texas A&M University-Kingsville, you must check with our Office of International Student & Scholar Services (OISSS).

International Exchange student applicants are required to submit the following items for admission purposes:

1. A completed Application for Admission, including the \$50 application fee. The ApplyTexas International Transfer Application is available online at ApplyTexas.org website
2. Proof of English proficiency (see below).
3. Official transcript from the most recent institution attended, in English and the native language of the country in which it was issued.

Once admitted, Exchange Students will coordinate with the OISSS for the appropriate immigration paperwork.

Exchange Students are admitted for one year only, or for the length of time approved through the official Exchange Agreement. If an Exchange Student wishes to pursue a degree at Texas A&M University-Kingsville, they must follow the appropriate admission application procedures. Please refer to the appropriate section above for this information.

Proof of English Proficiency

A minimum TOEFL score of 61 (Internet-based) or 500 (paper-based) is required for most undergraduate programs at Texas A&M University-Kingsville. Students seeking admission to the Frank H. Dotterweich College of Engineering or programs in the College of Arts and Sciences are required to present a minimum TOEFL score of 79 (Internet-based) or 550 (paper-based).

The following are considered equivalencies to the TOEFL scores of 61/500:

1. SAT* 27 Reading (earned March 2016 or later), ACT* 21 English; TAKS 2200 English/3 writing; PTE overall 44, or IELTS 6.0 overall band score.
2. Completion of Texas A&M University-Kingsville's Intensive English Program with an average of 85% in either the Intermediate or Advanced level. Students must have the program send their letter of completion with scores to the Office of Admission.
3. Completion of the advanced-level Texas Intensive English Program (TIEP) offered by the Texas International Education Consortium (TIEC).
4. Students who have completed their entire formal education at the secondary or postsecondary level in the following countries are exempt from the TOEFL requirement: American Samoa, Australia, Bahamas, Barbados, Belize, Canada (except Quebec), Cayman Islands, Dominica, Federated States of Micronesia, Grenada, Guam, Guyana, Ireland, Jamaica, Liberia, New Zealand, United Kingdom (all), Trinidad-Tobago and Virgin Islands. Note: Applicants from Puerto Rico, where Spanish is the primary language, are required to submit a TOEFL or equivalent.
5. Students who have earned at least 12 transferrable semester credits and completed English composition 1 and 2, with grades of *C* or better in each, in university-level courses from an accredited U.S. college or university, or an institution of higher education in one of the countries listed above, may be exempt from TOEFL. English as a Second Language (ESL) courses will not count as transferrable courses. No online English courses are accepted for English proficiency.
6. TSI Assessment scores of 351 Reading/340 Writing/4 Essay are required by all students to place into freshman level English classes and will be used as a TOEFL exemption.

*With the exception of application to the College of Engineering, SAT or ACT is not required for admission but will be used for placement purposes in English and math courses as well as a TOEFL alternative.

The following are considered equivalencies to the TOEFL scores of 79/550:

1. PTE overall 53 or IELTS 6.5 overall band score.
2. Students who have completed their entire formal education at the secondary or postsecondary level in the following countries are exempt from the TOEFL requirement: American Samoa, Australia, Bahamas, Barbados, Belize, Canada (except Quebec), Cayman Islands, Dominica, Federated States of Micronesia, Grenada, Guam, Guyana, Ireland, Jamaica, Liberia, New Zealand, United Kingdom (all), Trinidad-Tobago and Virgin Islands. Note: Applicants from Puerto Rico, where Spanish is the primary language, are required to submit a TOEFL or equivalent.
3. Students who have earned at least 12 transferrable semester credits and completed English composition 1 and 2 with grades of *C* or better in each, in university-level courses from an accredited U.S. college or university, or an institution of higher education in one of the countries listed above, may be exempt from TOEFL. English as a Second Language (ESL) courses will not count as transferrable courses. No online English courses are acceptable for English proficiency.

Graduate Admission

The admission requirements for graduate students, both domestic and international, may be found in the Texas A&M University-Kingsville Graduate Catalog.

Texas Success Initiative (TSI)

The Texas Success Initiative (TSI) requires students to be assessed in reading, writing and mathematical skills before enrolling in a Texas public college or university. Texas Education Code, section 51.3334, provides institutions of higher education a means of determining students' readiness to enroll in freshman-level course work. Students are required to complete the TSI Assessment before enrolling at Texas A&M University-Kingsville unless they meet one of the exemptions listed below.

The TSI Assessment is an examination designed to help determine if you are ready for college-level course work in the general areas of reading, writing and mathematics. This examination will also help determine what type of course or intervention will best meet your needs to help you become better prepared for college-level course work if you are not ready. Based on how you perform, you may either be enrolled in a college-level course that matches your skill level or be placed in the appropriate transitional course to improve your skills and prepare you for success in college level courses.

Exemptions

Students are exempt from the TSIA if a qualifying score has been made on the ACT, the SAT, specified STAAR EOC exams or the 11th grade exit-level TAKS. It is the responsibility of the student to provide official ACT, SAT, STAAR EOC or TAKS scores to Texas A&M University-Kingsville to qualify for an exemption before enrollment in college level courses.

These exemptions are effective for five years from the date of testing. Students enrolling for the first time in a Texas public institution of higher education after those periods have elapsed must be treated as though they had not been tested.

ACT, SAT, TAAS/TAKS and Military Exemption standards:

ACT

Obtain a composite score of 23 with a minimum of 19 on the English and/or the mathematics tests.

SAT (prior to March 2016)

A combined score of 1070 with a 500 on the math and/or critical reading (formerly verbal) sections.

SAT (beginning in March 2016)

A minimum score of 480 on the Evidence Based Reading and Writing test shall be exempt for both reading and writing; a minimum score of 530 on the Mathematics test shall be exempt for mathematics

STAAR EOC

Obtain a score of at least 4000 (Level 2) on the Algebra II and/or a score of at least 4000 (Level 2) on English III

TAKS (11th grade, exit-level)

2200 in Math and/or 2200 in English/Language Arts with a writing sub-score of at least 3.

Military

Students who are serving on active duty as a member of the armed forces of the United States, Texas National Guard or reserves of the armed forces of the United States (and have served for the previous three years). Students who were honorably discharged, retired or released from active duty in the armed forces, the Texas National Guard or any reserve component of the armed forces, on or after August 1, 1990 may be exempt. A DD214 form showing honorable discharge status is required and submitted to the Office of Admission.

Transfer Credit Calculation and Evaluation

All undergraduate transfer course work for new, continuing, returning, post baccalaureate and international students is processed by the Office of Admission. Students may review evaluated credits by logging into the Blue & Gold Connection from the Texas A&M University-Kingsville home page. (This section does not apply to graduate-level transfer work.)

1. For a timely evaluation, all credentials should be sent directly to the Office of Admission not later than three weeks prior to the opening of the term or semester for which the applicant is seeking admission.

2. Former course work taken at other universities will be translated into Texas A&M University-Kingsville equivalents based on whether it is equal in character and content. Transitional or developmental courses are brought in as credit only and will not be counted towards the transfer GPA.
3. Students that completed the Core Curriculum at a previous institution in Texas, and it is clearly indicated on the official transcript from that institution, will be Core Complete at Texas A&M University-Kingsville.
4. Even though general credit may be granted, not all course work will necessarily be used for graduation requirements in degree plans.
5. When processing transfer credit for repeated courses, Texas A&M University-Kingsville will take the most recent credit and grade, not the highest grade earned.
6. The university permits students to transfer lower division (freshman and sophomore) courses from a community college as long as the coursework is academic in nature, not technical or workforce. No work taken at a community college can be transferred as an upper-division (junior or senior) level course.
7. The transfer course work grade point average is based on all transferred course and will be counted toward the overall GPA. Transfer grades cannot be used to raise institutional the grade point average at Texas A&M University-Kingsville.
8. Work brought in after the initial enrollment will not be used to replace previously completed Texas A&M University-Kingsville courses.
9. Courses that are vocational or technical in nature are not automatically accepted by Texas A&M University-Kingsville. These courses must be approved by the appropriate academic departments and resubmitted to the Office of Admission for articulation.
10. Students who are seeking a second baccalaureate degree are not automatically articulated. The student will need to meet with an academic advisor to determine which previous courses will be applicable in the student's new degree plan. These courses must be approved by the appropriate academic departments and resubmitted to the Office of Admissions for articulation.
11. International students must submit course descriptions with an official copy of their transcript. All international transfer course work will be articulated with no Texas A&M University-Kingsville equivalencies until course descriptions are provided and have been reviewed by either the Office of Admissions or by the academic departments.

Military Credit

The Office of Admission evaluates and articulates military credit with the following methods:

1. Credit for Physical Education with a DD-214 and Honorable Discharge.
2. Evaluation of SMAART, AARTS, Coast Guard and Community College of the Air Force transcripts during the admission process:
 - a. Credit awarded based on ACE recommendations and nature of course.
 - b. Where possible, ACE recommended credits transfer as direct matches to Texas A&M University-Kingsville courses.

Resolution of Transfer Disputes for Lower Division Courses

The following procedures shall be followed by Texas A&M University-Kingsville in the resolution of credit transfer disputes involving lower division courses:

1. If Texas A&M University-Kingsville does not accept course credit earned by a student at another institution of higher education, the university shall give written notice to the student and to the sending institution that transfer of the course credit is denied. Texas A&M University-Kingsville shall provide written notice of the

reasons for denying credit for a particular course or set of courses at the request of the sending institution.

2. A student who receives notice as specified in number one above may dispute the denial of credit by contacting a designated official at either the sending institution or Texas A&M University-Kingsville.
3. Texas A&M University-Kingsville, the sending institution and the student shall attempt to resolve the transfer of the course credit in accordance with Coordinating Board rules and guidelines.
4. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, Texas A&M University-Kingsville shall notify the Commissioner of its denial and the reasons for the denial.
5. The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about a dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

The Coordinating Board shall collect data on the types of transfer disputes that are reported and the disposition of each case that is considered by the Commissioner or the Commissioner's designee.

If Texas A&M University-Kingsville has cause to believe that a course being presented by a student for transfer from another school is not of an acceptable level of quality, it will first contact the sending institution and attempt to resolve the problem. In the event that Texas A&M University-Kingsville and the sending institution are unable to come to a satisfactory resolution, Texas A&M University-Kingsville may notify the Commissioner of Higher Education, who may investigate the course. If its quality is found to be unacceptable, the Board may discontinue funding for the course.

Undergraduate Students Subject to Senate Bill (SB) 1231

Undergraduate students who completed a high school program, or the equivalent, and entered a Texas public institution of higher education for the first time on or after the fall semester of 2007 are *subject* to the requirements of SB 1231. Students subject to SB 1231 will be permitted only six (6) non-punitive drops during their undergraduate studies. Therefore, drops falling under SB 1231 annotated on official transcripts received from other colleges and/or universities, will be transferred to Texas A&M University-Kingsville for the purpose of maintaining the number of drops accumulated by the student. For additional information on drops subject to SB 1231, refer to the section of the catalog titled "Academic Regulations" under the sub-title of "Dropping a Course."

ADVANCED CREDIT

Please refer to the University website to check for any changes or updates to the following information.

Entrance Examination Credit-Entering First-Time Freshmen

Credit will only be granted to first-time entering freshmen. Students who have college course work after high school graduation will only receive credit for entrance examinations if this credit is clearly indicated on the transcript from a previous college or university.

English Credit

Based on the scores listed below:

- *American College Testing (ACT)* based on the English section:
25 or 26 - ENGL 1301
27 or above - ENGL 1302

Math Credit

The following courses will be awarded for math credit:

1. MATH 1314 - three semester hours will be awarded provided the student has satisfactorily completed three units or three years of high school mathematics including one unit or one year of algebra and one unit or one year of geometry.
2. MATH 1316 - three semester hours will be awarded provided the student has completed the three units or three years of high school mathematics described in #1 (above) plus one-half unit or one-half year of high school trigonometry.
3. MATH 1348 - three semester hours of credit will be awarded provided the student has completed the three units or three years of mathematics described in #1 (above) plus one unit or one year of high school precalculus.

Based on the scores listed below:

- *American College Testing (ACT)*
28 or above

Credit by Advanced Placement (AP) Examination

Entering first-year students (those who have less than 12 transferrable semester credits taken after high school graduation) who have satisfactorily passed one or more of the AP Examinations of the College Board are eligible for university credit in appropriate courses.

The examinations may be taken at approved high school testing centers, usually in May, by arrangement with the [College Board](#). Submission of examination scores and requests for credit in these courses should be directed to the Office of Admission. Credit in the following courses at this university may be gained through the AP Examinations:

Texas A&M-Kingsville Equivalent	Subject Examinations	Minimum Score
ARTS 1303, ARTS 1304 (6 Cr)	Art-History	3
ARTS 1316 (3 Cr)	Art – Studio Art: Drawing	3
ARTS 1311 (3 Cr)	Art – Studio Art: Art 2-D	3
ARTS 1312 (3 Cr)	Art – Studio Art: Art 3-D	3
BIOL 1306/BIOL 1106 (4 Cr)	Biology	3

Texas A&M-Kingsville Equivalent	Subject Examinations	Minimum Score
BIOL 1307/BIOL 1107(4 Cr)	Biology	4
CHEM 1311 (3 Cr)	Chemistry	3
CHEM 1312 (6 Cr)	Chemistry	5
ECON 2301 (3 Cr)	Economics-Macroeconomics	3
ECON 2302 (3 Cr)	Economics-Microeconomics	3
ENGL 1301 (3 Cr)	English-Language & Composition	3
ENGL 1302 (3 Cr)	English – Language & Composition	4
FREN 1311 (3 Cr)	French-French Language & Culture	3
FREN 1312 (3 Cr)	French-French Language & Culture	4
FREN 2311, FREN 2312 (6 Cr)	French-French Language & Culture	5
HIST 1301, HIST 1302 (6 Cr)	History-United States History	3
MATH 2413 (4 Cr)	Mathematics-Calculus AB	3
MATH 2414 (4 Cr)	Mathematics-Calculus BC	3
MUSI 1316, MUSI 1317 MUSI 1116, MUSI 1117 (8 Cr)	Music-Theory	3
PHYS 1301 (3 Cr)	Physics 1	3
PHYS 1302 (3 Cr)	Physics 2	3
PHYS 2325 (3 Cr)	Physics C: Mechanics	3
PHYS 2326 (3 Cr)	Physics C: Electricity and Magnetism	3
POLS 2301 (3 Cr)	United States Government & Politics	3
PSYC 2301 (3 Cr)	Psychology	3
SPAN 1313 (3 Cr)	Spanish Language & Culture	3
SPAN 1314 (3 Cr)	Spanish Language & Culture	4
SPAN 2311 (3 Cr)	Spanish Language & Culture	5
STAT 1342 (3 Cr)	Statistics	3

CLEP College Level Examination Program

CLEP is a national testing program of credit by examination by the College Board that offers you the opportunity to obtain recognition for college level achievement. The CLEP is a computer-based exam and examinees will receive immediate score reports for all exams except English Composition with Essay. Credit by CLEP examinations is available in the courses listed below to any Texas A&M University-Kingsville students at any time during their college career. The exception is that students will not be eligible for credit in a course for which they have received credit in a more advanced course unless otherwise designated by the chair of the department in which the subject is offered. Both general and subject examinations are offered through the Academic Testing Office. Information on time, examination fees and location for these tests may be obtained from the Academic Testing Office at 361-593-3303 or testing@tamuk.edu.

Texas A&M-Kingsville Equivalent	Subject Examinations	Minimum Score
ACCT 2301 (3 Cr)	Financial Accounting	50
BIOL 1306*, BIOL 1307* (8 Cr)	Biology	50
CHEM 1311**, CHEM 1312** (6 Cr)	Chemistry	50
ECON 2301 (3 Cr)	Principles of Macroeconomics	50
HIST 1301 (3 Cr)	History of the United States I	56
HIST 1302 (3 Cr)	History of the United States II	57
MKTG 3324 (3 Cr)	Principles of Marketing	50
MATH 2413 (4 Cr)	Calculus	50
MATH 1314 (3 Cr)	College Algebra	50
MATH 1334 (3 Cr)	College Mathematics	50
MATH 1348 (3 Cr)	Precalculus	50
MGMT 3322 (3 Cr)	Principles of Management	50
POLS 2301 (3 Cr)	American Government	63
PSYC 2301 (3 Cr)	Intro Psychology	50
SOCI 1301 (3 Cr)	Intro Sociology	50
SPAN 1313, SPAN 1314 (6 Cr)	Spanish	50

*Students must take BIOL 1106 and BIOL 1107 to receive lab credit.

**Students must take CHEM 1111 and CHEM 1112 to receive lab credit.

Entrance Examination Credit – Transfer Students

Credit by examination secured through another college or university must be clearly indicated on the official transcript from that institution for credit to be accepted by Texas A&M University-Kingsville.

Credit by Local Examination (Departmental)

Local examinations are available to students for organized class courses not designated for credit by the College Level Examination Program (CLEP). The student should contact the department in which the course is offered for information about the examinations. Eligibility will be determined by the department and will be dependent on a student's particular qualifications due to study or work experience. The department will also determine whether or not the student's performance on the local examination merits university credit and whether any further requirements for credit are to be met. Students may not receive credit by local examination in a subject in which they have already received a grade in the same course or in a more advanced course. **No fee is charged for these examinations.**

International Baccalaureate (IB) Diploma Program Credit Policy

Texas A&M University-Kingsville will grant a minimum of 24 undergraduate credit hours or equivalent course credit in appropriate subject areas to an entering first-year student who has successfully completed the International Baccalaureate (IB) Diploma Program with a minimum test score of four on each examination administered as part of the diploma program. If a student receives a score of less than a four on an examination, he/she may receive less than 24 credit hours as an IB Diploma student. Non-IB Diploma holders will be granted credit for IB exams with a score of five or higher based on the table below. The student must have the International Baccalaureate Organization submit to the Office of Admission the student's Transcript of Grades for the credit to be assessed.

IB Exam	Level	TAMU-K Equivalency	Credits Awarded
Anthropology	SL or HL	ANTH 2301	3
Chemistry	SL	CHEM 1311	3
Chemistry	HL	CHEM 1311, CHEM 1312	6
Computer Science	SL or HL	ISYS 1301	3
Economics	SL or HL	ECON 2301, ECON 2302	6
English A1 or A2	SL or HL	ENGL 1301, ENGL 1302	6
History of the Americas	SL or HL	HIST 1301, HIST 1302	6
History: Other	SL or HL	elective credit to be determined by dept	6
Language: French A1, A2 or B	SL or HL	FREN 1311, FREN 1312 OR FREN 2311, FREN 2312 to be determined by dept	6
Language: Other A1, A2 or B	SL or HL	elective credit to be determined by dept	6
Language: Spanish A1, A2 or B	SL or HL	SPAN 1313, SPAN 1314 OR SPAN 2311, SPAN 2312 to be determined by dept	6
Mathematics	SL	MATH 1314	3
Mathematics	HL	MATH 1314, MATH 2413	7
Music	SL or HL	elective credit to be determined by dept	3
Philosophy	SL or HL	PHIL 1301	3
Physics	SL	PHYS 1301/PHYS 1101	4
Physics	HL	PHYS 1301/PHYS 1101, PHYS 1302/PHYS 1102	4
Psychology	SL or HL	PSYC 2301	3
Theater Arts	SL or HL	elective credit to be determined by dept	3
Visual Arts	SL or HL	elective credit to be determined by dept	3

SL = Standard Level, HL = Higher Level

Bacterial Meningitis (Senate Bill 1107)

Beginning January 1, 2012 in accordance with Texas Senate Bill 1107 (SB 1107), it is required that all new students, transfer students and returning students (who have had a fall or spring semester break in their attendance at an institution of higher education) provide proof of a bacterial meningitis vaccination or booster 10 days prior to the first class day of the entering semester. Without the evidence of vaccination, a student cannot attend classes on campus.

Students who do not provide the evidence of vaccination will not be allowed to attend classes and will be dropped from all classes on the first class day.

For more information, students and families may contact the Student Health & Wellness Health Care Clinic at (361) 593-2904.

Other Immunization

It is recommended that students entering Texas A&M University-Kingsville be vaccinated prior to enrollment and that preventive vaccinations be taken when required.

The following vaccinations are recommended:

- Two (2) doses MMR (Measles, Mumps, Rubella) vaccine
- Tetanus-Diphtheria booster within the past 10 years
- Polio (if under the age of 18)
- Tuberculosis (TB) skin test, (within one year prior to enrollment)
- Hepatitis A vaccine
- Hepatitis B vaccine

Immunization records should be sent to Health Care Clinic, Texas A&M University-Kingsville, MSC 112, Kingsville, TX 78363. Questions regarding these vaccinations should be addressed to student Health Care Clinic at 361-593-2904, a family physician, the county health department or the Immunization Division of the Texas Department of Health.

Please refer to the University website to check for any changes or updates to the previous information.

UNIVERSITY HOUSING AND RESIDENCE LIFE AND DINING SERVICES

Thomas D. Martin, *Executive Director of University Housing and Residence Life*
Lucio Hall, Room 119. MSC 108. Extension 2300.

REQUIRED ON CAMPUS RESIDENCE POLICY

The University requires all students with less than 30 completed semester credits hours or under 20 years of age to reside in university residence halls. Students under the required residence policy, however, will be automatically exempted if they live with a parent or legal guardian within a 40 mile radius of Kingsville which will be verified by the Department of Housing and Residence Life. All other students wishing to reside off campus who live outside the 40 mile radius must complete a Housing Exception Request Form which is available at the Department of University Housing and Residence Life or the [University Housing and Residence Life](#) webpage. Submission of an exemption form does not guarantee approval, so students are advised not to make housing arrangements until approval is received. Registered students required to live on campus who do not receive approval for exemptions will be billed for on-campus housing. A specific residence hall and meal plan can be requested by completing the housing agreement/deposit application form which can be obtained from the Department of University Housing and Residence Life, MSC 108, Texas A&M University-Kingsville, Kingsville, TX 78363-8202; 361-593-3419, or go online at [University Housing and Residence Life Webpage](#). This application, \$150 Room Reservation and Damage Deposit and a verification of your bacterial meningitis vaccination record by Student Health and Wellness should be completed by all hall residents prior to being assigned to a specific hall or roommate.

Request to Live Off Campus

In order to be considered for an exception to the required residency policy, the student must contact the University Housing and Residence Life Office or go online at the [Undergraduate Housing](#) webpage for the necessary form and send completed form to the office by July 1 for the fall semester and December 1 for the spring semester. All commuting students (outside the 40 mile radius) must complete this form. A committee will review the request. Simply turning in a request does not mean an exemption is given. Applicants should not make other housing arrangements until they are notified in writing as to the status of their request. Exceptions to the policy may be granted to those students who are (a) living with a parent or legal guardian and commuting within 40 miles, (b) transferring in with 30 or more acceptable credit hours, (c) 20 years of age or older or (d) married.

Applying for University Housing

Students applying for housing must first be admitted to the University. Housing applications are available online at: Blue and Gold Connection. A \$150 deposit must be submitted at least two week before move-in. Applications are processed in the order of the date they are received and/or by the date of verification of their Bacterial Meningitis vaccination. Contact the Department of University Housing and Residence Life Office at (361) 593-3419 for more Housing information. Students are encouraged to read the agreement along with the terms and conditions carefully before signing and submitting it to the university. **Once the agreement is submitted online or signed and submitted to our office, it becomes a binding agreement between the student and the university for the entire academic year (both fall and spring semesters) and while the student is enrolled at Texas A&M University-Kingsville.**

Room Reservation and Damage Deposit

The \$150 deposit that accompanies the Room Reservation/Damage Deposit Application serves as a combination of reservation/damage/room clearance deposit. The deposit is not applied to housing rent. The deposit will be refunded to the student upon written request when all debts owed by the resident to the university are paid and the housing agreement is fulfilled.

The deposit is automatically forfeited if the student cancels after the deadline, does not check into his/her assigned room during the check-in period, moves out of the hall before the end of the semester or fails to properly check out of the hall at the end of each semester. The student will also be billed any remaining housing charges as applicable under the terms of the agreement. The previous charges, plus other damages or assessments left unpaid at the time

the student leaves Texas A&M University-Kingsville Department of University Housing and Residence Life will be deducted from the \$150 deposit. Failing to submit a deposit will result in a hold being placed on the student's school account.

Cancellation Dates

Should there be a change in plans to attend Texas A&M University-Kingsville, written notice of cancellation must be received by the Department of University Housing and Residence Life on or before the following deadlines in order to receive a refund of \$100 of the Housing Deposit.

July 1 – Fall Semester December 1 – Spring Semester May 1 – Summer 1 June 1 – Summer II

Written cancellation requests may be received in person, by mail, or email to the Department of University Housing and Residence Life, 700 University Blvd., MSC 108, Kingsville, TX 78363-8202. Notification submitted to other departments other than the Department of University Housing and Residence Life does not comply with this requirement; and thus requested action cannot be assured.

Termination/Cancellation after the Semester Deadline for 1st Time Applicants and Returning Residents: A Housing Exception Request Form must be submitted and if approved, the \$150 housing deposit will be forfeited.

<u>Effective Date of Cancellation</u>	<u>Cancellation Charge</u>
1. On or Before Semester Deadline	\$50 *
2. After Semester Deadline (Between 1-30 Days)	\$550**
3. After Semester Deadline (After 30+ Days)	\$650***

**\$50 of your Housing Deposit will be forfeited.*

***A Housing Exception Form must be submitted and if Approved the housing deposit will be forfeited and your Blue and Gold Student Account will be charged \$400 for Liquidated Damages.*

****A Housing Exception Form must be submitted and if Approved the housing deposit will be forfeited and your Blue and Gold Student Account will be charged \$500 for Liquidated Damages.*

Traditional-Style Residence Halls

Rooms in each residence hall accommodate two students. Each hall has a laundry room, vending area, small kitchen and common lobby available for student use. Cable television service is available in each student room. Housing rates are listed at the end of this section. Rules governing residence hall living and dining room conduct are set forth in the *Student Hand-book* and *Residence Life Guidebook*.

J. C. Martin Jr. Hall (B Side) is a three-story, air-conditioned residence hall for 204 men. Martin Hall is located across the parking lot from Turner-Bishop Hall on the west side of campus. The hall has a large lounge/TV area and a study room. Room furnishings include two beds and a chest of drawers, a built-in desk and bookcase, two closets and two Ethernet ports. Central bathroom facilities are located on each wing. **(A Side)** can house up to 190 male students and up to 64 upperclassmen male students (21 years of age or have 60 credit hours). Martin Hall **(A Side)** has a computer lab, workout room and study room. Martin Hall has an outdoor courtyard which includes a basketball half court and a sand volleyball court.

James E. Turner-Carrie Lee Bishop Hall is a three-story, air-conditioned complex accommodating 368 women and 392 men. The complex is located on the west end of the campus. Men live in Turner Hall and women live in Bishop Hall. Each side of the complex has its own study room, lounge and television room. Central bathroom facilities are located on each floor. Turner Hall has a courtyard equipped with a barbecue pit, picnic table and basketball half court. Bishop Hall has two courtyards, one of which features a volleyball court. Room furnishings in both halls include pull-out beds, built-in desks and bookshelves. Also provided are two bulletin boards, two chairs, two chest-of-drawers, two closets and two Ethernet ports.

John F. Lynch Hall is a two-story, air-conditioned hall for 200 women. It is located across the street from the Memorial Student Union. The hall has a large lounge/TV area and a study room. Room furnishings include two height adjustable twin beds with lofting capabilities, desks and bookshelves, two chairs, a chest-of-drawers, two

closets and two Ethernet ports. Lynch Hall features suite style restrooms. It has a sundeck available for its residents.

Suite-Style Residence Halls

Suite-style design consists of a two or four bedroom unit; while rooms are private, residents share a living room, kitchenette and one or two bathroom(s). In addition, cable television is provided in each bedroom and living room. Residents also have access to wireless Internet, study labs, a large lounge and meeting rooms, on-site mailboxes and conveniently located administrative offices.

Mesquite Villages West – Home of the Honors College opened in the Fall of 2011. Mesquite Village West is a four-story, 98,000 square feet co-ed residence hall, housing 300 beds, with a two and four bedroom unit suite-style design with first priority assigned to students who have been accepted into the Honors Program. Mesquite Village West is located across from Lucio Hall.

Eduardo and Josefa Lucio Hall opened in the Fall of 2009. It is a four-story, 210,00 square feet co-ed residence hall, housing 600 beds, with a two and four bedroom suite-style design. Lucio Hall is located across from Martin Hall.

Meal Plans

Students who are under 21 years old are required to purchase a meal plan in addition to housing. During the fall and spring semesters, the student may select from a variety of meal plans on the housing agreement. Any changes to the student's initial meal plan selection must be made within seven days after check-in. (This does not include the block plan, which cannot be changed.) Requests for changes to the meal plan are handled at the University Housing and Residence Life Office.

Room and Meal Plan Payment Procedures

Upon being assigned to a residence hall, the room and meal plan fees will be added to the student's account (which includes tuition and other student fees). It shall be the student's responsibility to make prompt arrangements for payment by one of the following two options:

PAYMENT OPTION 1. The student may choose to pay and/or use financial aid to pay student account balance in FULL on or before the payment due date.

PAYMENT OPTION 2. TUITION, FEES, ROOM & BOARD - FALL and SPRING SEMESTERS ONLY (excluding mini intersession terms) – The student may choose to pay balance on the Installment Payment Option by the payment deadline. TAMUK offers a Deferred (4–Payment) Installment Plan that covers the cost of all outstanding tuition, room, board, and mandatory fees.

- The student can enroll for this option online through [MoneyConnect](#) and \$100.00 down payment must be made at the time of enrollment in the plan. The student can pay and/or use financial aid award to cover the first installment of 25% of balance.
- The non-refundable payment plan setup fee of \$30.00 will be calculated into the installment payments.
- The student will pay the remaining installment payments on or before the due date specified for each installment.
- A \$15.00 late fee will be assessed for each installment payment that is late.
- **INSTALLMENT AMOUNTS MAY CHANGE** over time to account for any new charges, payments, or financial aid adjustments.

If a scheduled payment becomes delinquent, notification will be forwarded to stop meals. **The student will still be responsible for paying for meals that have been stopped because of non-payment.** Students who have their meals stopped for non-payment are encouraged to meet with the business services manager, whose office is located in the Business Office at College Hall, to discuss payment arrangements. No credit will be allowed for nights spent in the hall or meals missed. Meal plans are not transferrable from one person to another. Students who purchase a meal plan will be issued meal privileges on their student ID card. It is the student's responsibility to promptly make arrangements to pay room and board fees in order to obtain and maintain meal privileges. Failure to obtain an ID card/meal privileges does not exempt the student from the obligation to pay the full amount for room and board fees due. The student will be charged a replacement fee for the loss of the ID card. Replacements are

obtained at the ID Center located in the Memorial Student Union.

A "hold" will be placed on the student's records for delinquent payments. A student will not receive his/her grades, transcript or be allowed to register for future semesters until such hold is cleared. Non-payment will also result in loss of future housing privileges. Failure to pay account in full by the end of each contracted semester or session will result in the student's account being referred to the University Collection Department to begin collection procedures. The student will be responsible for all collection fees and enforcement, in addition to the original student account balance due that is sent to collections.

Miscellaneous Housing Information

- a. The university will make all residence hall and room assignments and reassignments as necessary. The university cannot guarantee assignment to a particular hall or a specific roommate. First priority of residence hall assignment is given to students who have resided in university housing the preceding long semester and contracted to return to the halls. Second priority of residence hall assignment is given to new applicants based on the date that the housing agreement, housing deposit and bacterial meningitis record are received in the University Housing and Residence Life Office. All applicants must be accepted to the university before a housing assignment can be made. In the event that hall reservations reach capacity, overflow students will be assigned to temporary assignments in other areas as long as space is available. Students will be reassigned as regular housing becomes available. Not placing a deposit or submitting incomplete agreement forms can also delay the assignment process.
- b. All students are initially assigned a roommate at the beginning of the semester. Should a student's roommate not check-in to the hall, that student will be requested to consolidate with another person.
- c. Specific roommate requests are accommodated as possible. Students with roommate preferences must mutually request each other on the housing agreement, request the same hall and include their prospective roommate's ID number. Both agreements must also be received by the May 1 priority deadline (for fall semester assignment). Not being admitted to the university, not placing a deposit or submitting incomplete forms can also delay assignment.
- d. Due to space limitations, private rooms cannot be reserved in advance. Private rooms are assigned from a waiting list after the 12th class day if space is available. There is an additional charge for a private room. The university does reserve the right to place two people in a room that has been assigned as a private room if space is needed. A refund will be made to the person who has paid for a private room (prorated from date the private room is relinquished).
- e. In signing a housing agreement, the student agrees to reside in that room for the time specified in the agreement. This agreement is personal and may not be transferred or assigned to another person. If the student fails to enroll at the university, advance notice of residence hall cancellation must be provided in writing. Under the terms of the housing agreement, moving from the residence hall without an authorized release from the agreement will not terminate the student's fiscal obligations.
- f. Residence halls and dining halls are closed between the fall and spring semesters and during university holidays. The residence hall calendar and the housing and food service contract show the specific times that the residence halls are open and when meals are served. During periods when classes are not in session, housing may be made available if the university determines there is sufficient demand. In such instances, additional rent may be required of each student desiring accommodations. The amount will be determined by the University Housing and Residence Life Office, and students will be consolidated into one hall.

Residence Hall Association

Composed of student representatives from each residence hall, the association represents the entire residence hall population. Its purpose is to provide effective lines of communication among the house councils and with the University Housing and Residence Life Office; to coordinate the programs, activities and government of the individual residence halls; to arbitrate any disputes pertaining to house council operating procedures; and to recommend policies affecting all residence halls. Each residence hall has its own house council.

ARAMARK DINING SERVICES

Jackie Flores, *Interim Food Service Director*

Memorial Student Union 212. MSC 124. Extension 3096.

Aramark Food Service is the sole provider of food services on campus. Javelina Dining Hall, located on the corner of Engineering Avenue and Retama Street is an all you care to eat for one price facility and the servicing location for the multiple board plans available, including continuous meal service. It is open daily when school is in session. Additionally, there are retail operations including a Pizza Hut Express, Chick-fil-A Express, Starbucks, Subway and Taco Taco Cafe in the Memorial Student Union. Most meal plans include specific dollar allocations for retail purchases as well as regular meals. You can also purchase Aramark Dollars put on your ID that can be used at any Aramark location. Aramark also operates a full-service catering operation that can handle everything from coffee service to full service dinner banquets to large wedding receptions and even special events off campus. Aramark is also the concessions provider for any games at Javelina Stadium. There are many opportunities for student employment in food services.

SUMMARY OF HOUSING RATES 2018-2019 Fall and Spring Semesters

The university reserves the right to change housing rates with 30 days' notice.

Room and Board Rates: Cost is per semester/Full payment plan

Residence Hall	Room Only (must be 21+)	Room & Carte Blanche w/\$75	Room & 14 Meal Plan w/\$100	Room & 10 Meal Plan w/\$250	Room & 10 Meal Plan w/\$100	Room & 10 Meal Plan
Bishop Hall (Women's Hall)	\$2,096.00	\$3,966.98	\$3,870.72	\$3,875.35	\$3,684.46	\$3,594.22
Turner Hall (Men's Hall)	\$2,096.00	\$3,966.98	\$3,870.72	\$3,875.35	\$3,684.46	\$3,594.22
Martin Hall (B Side) (Men's Hall)	\$2,096.00	\$4,181.98	\$3,870.72	\$3,875.35	\$3,684.46	\$3,594.22
Lynch Hall (Suite Plan) (Women's Hall)	\$2,311.00	\$5,474.98	\$4,085.72	\$4,090.35	\$3,899.46	\$3,809.22
Lucio Hall (2 Bedroom) (Co-ed Hall)	\$3,604.00	\$5,264.98	\$5,378.72	\$5,383.35	\$5,192.46	\$5,102.22
Lucio Hall (4 Bedroom) (Co-ed Hall)	\$3,394.00	\$5,474.98	\$5,168.72	\$5,173.35	\$4,982.46	\$4,892.22
Mesquite Village West (2 Bedroom) (Co-ed Hall)	\$3,604.00	\$5,264.98	\$5,378.72	\$5,383.35	\$5,192.46	\$5,102.22
Mesquite Village West (4 Bedroom) (Co-ed Hall)	\$3,394.00	\$5,201.71	\$5,168.72	\$5,173.35	\$4,928.46	\$4,892.22

Private rooms are not awarded unless space is available after the 12th class day from a waiting list. \$400 additional charge for private room.

Room Only Options/Cost Per Semester

Lucio Hall 4th Floor Only (Co-ed Hall)	(2 Bedroom) \$3,604.00 (4 Bedroom) \$3,394.00	Must be 22 years of age or have 90 semester hours; meal plan is optional.
Martin Hall (A Side) (Men Only)	\$2,096.00	Must be 21 years of age or have 60 semester hours; meal plan is optional; private room is \$400 extra if space is available.
Bishop Hall (1-S) (Women Only)	\$2,096.00	Must be 21 years of age or have 60 semester hours; meal plan is optional; private room is \$400 extra if space is available.

Optional Meal Plan

Carte Blanche w/\$75	14 Meal Plan w/\$100	10 Meal Plan w/\$250	10 Meal Plan w/\$100	10 Meal Plan	Block Plan 60 meals w/\$75
\$1,870.98	\$1,774.72	\$1,779.35	\$1,588.46	\$1,498.22	\$529.87 Must be 21 years

Cancellation Policy and Deadlines

If your plans about attending school change, you must cancel your housing reservation in writing by the following deadline in order to get a \$100 refund of the deposit. Written cancellation requests may be received in person, by mail to the Residence Life Office, 700 University Boulevard, MSC 108, Kingsville, Texas 78363-8202 or by fax (361) 593-2417. Contact our office at (361) 593-3419 if you have any questions.

Fall Semester – July 1	Spring Semester – December 1	Summer Session I – May 1	Summer Session II – June 1
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The University reserves the right to change the housing rates with 30 day notice.

EDUCATIONAL EXPENSES

Carlos Martinez, Jr., *Executive Director of Budgets & Student Business Services*
College Hall 102. MSC 104. Extension 2616.

Financial Obligations

Students are expected to pay all financial obligations to the university when due. Failure to meet such obligations will result in a student's record being placed on a hold status and may result in the student not being able to receive official transcripts or enroll for another semester. Failure to make room and board payments on time may result in the loss of meal privileges and eviction from the university residence hall. In all cases, the student will be duly notified and given a reasonable length of time to clear the obligation before the enforcement of disciplinary action. If account is not paid when due, the institution has the right to forward past due accounts to a collection agency and referral to the State of Texas to be put on State Hold. The student will be responsible for any and collection costs necessary for the collection of any amounts not paid when due.

Students receiving university sponsored financial aid are expected to pay all financial obligations owed the university at the time they receive the financial aid.

NOTE: Census day of the semester is the day that all tuition and mandatory fees must be paid in full. If all tuition and mandatory fees are not paid in full, a class or classes will be dropped for non-payment. The census day of the long semesters (fall and spring) is the 12th class day. The census day for the summer terms is the 4th class day. Census day is a drop day, if all tuition and mandatory fees are not paid in full.

Mandatory Tuition and Fees

Students who do not pay mandatory tuition and fees in full by established deadlines will be dropped from one or more classes, according to the unpaid balance due. Students who establish and make the required initial payment of the installment payment plan will not be dropped.

Installment Payment of Tuition and Fees

Students selecting the installment payment plan may pay tuition and fees in four payments. There is a \$15/\$30 processing fee for choosing the installment payment plan. Students who select a installment payment plan need to be absolutely sure of all the classes/expenses, as only one plan is allowed. They are subject to the following provisions:

- a. Students receiving university sponsored financial aid equal to or greater than their tuition and fees **must** pay in one payment. All financial aid funds received after selection of deferred payment plan will be applied to account balance until paid in full.
- b. A late payment penalty of \$25/\$50 will be assessed for each installment payment not made on or before the due date.
- c. A student who fails to make full payment of tuition and fees, including any incidental fees, by the due date may be prohibited from registering for classes and receiving future financial aid until full payment is made. A student who fails to pay in full prior to the end of the semester may be denied access to see semester grades.

Charge Card Privilege

Students may pay tuition and fees, including room and board, with an American Express, MasterCard, Discover and VISA. Credit card payments may be made over the web using the Money Connect PayPath service and are charged a 2% (or \$3.00 minimum) convenience fee.

Concurrent Enrollment at Another Public Institution of Higher Education

Students must present to the Registrar on the day they register evidence of previous enrollment for the same semester, number of hours enrolled and receipt showing the total tuition and other registration fees paid at another public institution in order to be eligible for provisions of Senate Bill 250 "Tuition Limit in Cases of Concurrent Enrollment."

Dual Enrollment

(High School Students Enrolled at an Institution of Higher Education)

Students from contracted high schools dually enrolled at perspective high school and at Texas A&M University-Kingsville are assessed at a reduced fee structure. This Dual Enrolled student fee table is available through the Dual Enrollment Office, Texas A&M University-Kingsville.

Returned Item Policy

When a bank returns an unpaid item (i.e., check, credit card, money order), for any reason, which has been submitted to the university, the following procedure will apply:

1. The Business Office will mail a notification by certified mail within 3 business days to the individual who submitted the returned item to the university. This notice will indicate the amount of the item, the \$30 returned item charge, and the reason the item was rejected by the student's bank or credit card company. The individual is given 10 days from receipt of notification to clear the returned item using cash, cashier's check or money order. Only payment in full will be accepted. The university will not accept a personal check or a credit card in payment for a returned item. In the event the certified mail is unaccepted and returned to the university, the university will attempt to deliver the notification to the student through one of his/her classes. The university will also attempt to reach the individual by phone. The individual will be given 10 days from this contact to clear the item.
2. A registration and transcript hold will be placed on the individual's record. After an individual has one items returned to the university, checks will no longer be accepted as payment for that individual. If an individual stops payment on a check presented to the university, the university reserves the right to refuse acceptance of future checks for payment of university charges.
3. In those instances where the returned check and charge have not been redeemed after two notification attempts, the university may take the check to the district attorney (or county attorney) and file a complaint with that office. Any further action on the matter will follow the legal process as prescribed by the respective attorney's office.

Resident vs. Nonresident Student Status

All students attending Texas A&M University-Kingsville who are nonresidents of Texas will be charged additional tuition in accordance with state law. The responsibility of registering under the proper residence is placed upon the student. If there is any possible question of the right to legal residence in Texas under state law and university rules, the student must raise the question with the Office of Admission and have such question settled prior to registration. There can be no change of residence unless authorized by the Registrar. Students must pay the correct fee at the beginning of each semester or term for which they register. An attempt on the part of a nonresident to evade the nonresident fee may lead to expulsion from the university. Legal resident information forms to assist students in determining their proper legal status are available in the Registrar's Office.

Military Residence

Military persons stationed in Texas who wish to avail themselves or their dependents of military residence provisions of state law must submit during their first semester of enrollment in which they will be using the waiver program, a statement from an appropriately authorized officer in the service certifying that they (or a parent) will be assigned to duty in Texas on the census date of the term they plan to enroll, and that they are not in Texas only to attend training with Texas units. Such persons shall pay resident tuition so long as they reside continuously in Texas or remain continuously enrolled in the same degree or certificate program (enrollment in summer semester is not required to remain continuously enrolled).

TEXAS A&M UNIVERSITY-KINGSVILLE
TEXAS RESIDENT FEES
FALL, SPRING, & SUMMER (8 & 10 WEEK OR MULTIPLE SESSIONS)
APPROVED BY BOARD OF REGENTS
JPAK 2018-2019
Undergraduate

Hour	Tuition	Designated Tuition	Student Service Fee	Athletic Fee	Hospital Fee	Student Center Fee	Rec Sports Fee	University Services Fee	Total
1	120.00	117.53	16.94	20.00	57.00	80.00	150.00	238.30	799.77
2	120.00	235.06	33.88	40.00	57.00	80.00	150.00	306.73	1,022.67
3	150.00	352.59	50.82	60.00	57.00	80.00	150.00	380.01	1,280.42
4	200.00	470.12	67.76	80.00	57.00	80.00	150.00	456.52	1,561.40
5	250.00	587.65	84.70	100.00	57.00	80.00	150.00	533.04	1,842.39
6	300.00	705.18	101.64	120.00	57.00	80.00	150.00	609.55	2,123.37
7	350.00	822.71	118.58	140.00	57.00	80.00	150.00	686.06	2,404.35
8	400.00	940.24	135.52	160.00	57.00	80.00	150.00	762.57	2,685.33
9	450.00	1,057.77	152.46	180.00	57.00	80.00	150.00	839.09	2,966.32
10	500.00	1,175.30	169.40	200.00	57.00	80.00	150.00	915.60	3,247.30
11	550.00	1,292.83	186.34	220.00	57.00	80.00	150.00	992.11	3,528.28
12	600.00	1,645.42	203.28	240.00	57.00	80.00	150.00	1,114.91	4,090.61
13	650.00	1,645.42	220.22	260.00	57.00	80.00	150.00	1,167.73	4,230.37
14	700.00	1,645.42	237.16	260.00	57.00	80.00	150.00	1,218.42	4,348.00
15	750.00	1,645.42	250.00	260.00	57.00	80.00	150.00	1,268.69	4,461.11
16	800.00	1,645.42	250.00	260.00	57.00	80.00	150.00	1,317.70	4,560.12
17	850.00	1,645.42	250.00	260.00	57.00	80.00	150.00	1,366.70	4,659.12
18	900.00	1,645.42	250.00	260.00	57.00	80.00	150.00	1,415.70	4,758.12
19	950.00	1,645.42	250.00	260.00	57.00	80.00	150.00	1,464.71	4,857.13
20	1,000.00	1,645.42	250.00	260.00	57.00	80.00	150.00	1,513.70	4,956.12

Add \$50.00 tuition & \$37.00 University Service Fee for each hour over 20.
All other fees remain the same

Non-refundable Fees: Late Registration Fee, Late Payment Fee, Reinstatement Fee, and Payment Plan Processing Fee

MINIMUM TUITION: Total for 1 Credit Hour

3-Peat Fee:

A \$100 per semester credit hour fee will be assessed after the 20th class day (15th for summer sessions) of the semester for attempting a class for the third and subsequent times.

Excessive Hour Fee:

A \$100 per semester credit hour fee will be assessed for the number for hours exceeding the minimum required to complete the degree plan above the set allowance

NOTE: Total does not include miscellaneous fees that vary per course. Examples can include, but are not limited to, Lab fees, Field Trip fees, or Distance Learning fees. See the Catalog course description for details.

TEXAS A&M UNIVERSITY-KINGSVILLE
TEXAS RESIDENT FEES
FALL, SPRING, & SUMMER (8 & 10 WEEK OR MULTIPLE SESSIONS)
APPROVED BY BOARD OF REGENTS
VARIABLE RATE 2018-2019
Undergraduate

Hour	Tuition	Designated Tuition	Student Service Fee	Athletic Fee	Hospital Fee	Student Center Fee	Rec Sports Fee	University Services Fee	Total
1	120.00	102.36	16.94	20.00	57.00	80.00	150.00	238.30	784.60
2	120.00	204.72	33.88	40.00	57.00	80.00	150.00	306.73	992.33
3	150.00	307.08	50.82	60.00	57.00	80.00	150.00	380.01	1,234.91
4	200.00	409.44	67.76	80.00	57.00	80.00	150.00	456.52	1,500.72
5	250.00	511.80	84.70	100.00	57.00	80.00	150.00	533.04	1,766.54
6	300.00	614.16	101.64	120.00	57.00	80.00	150.00	609.55	2,032.35
7	350.00	716.52	118.58	140.00	57.00	80.00	150.00	686.06	2,298.16
8	400.00	818.88	135.52	160.00	57.00	80.00	150.00	762.57	2,563.97
9	450.00	921.24	152.46	180.00	57.00	80.00	150.00	839.09	2,829.79
10	500.00	1,023.60	169.40	200.00	57.00	80.00	150.00	915.60	3,095.60
11	550.00	1,125.96	186.34	220.00	57.00	80.00	150.00	992.11	3,361.41
12	600.00	1,433.04	203.28	240.00	57.00	80.00	150.00	1,114.91	3,878.23
13	650.00	1,433.04	220.22	260.00	57.00	80.00	150.00	1,167.73	4,017.99
14	700.00	1,433.04	237.16	260.00	57.00	80.00	150.00	1,218.42	4,135.62
15	750.00	1,433.04	250.00	260.00	57.00	80.00	150.00	1,268.69	4,248.73
16	800.00	1,433.04	250.00	260.00	57.00	80.00	150.00	1,317.70	4,347.74
17	850.00	1,433.04	250.00	260.00	57.00	80.00	150.00	1,366.70	4,446.74
18	900.00	1,433.04	250.00	260.00	57.00	80.00	150.00	1,415.70	4,545.74
19	950.00	1,433.04	250.00	260.00	57.00	80.00	150.00	1,464.71	4,644.75
20	1,000.00	1,433.04	250.00	260.00	57.00	80.00	150.00	1,513.70	4,743.74

Add \$50.00 tuition & \$37.00 University Service Fee for each hour over 20.
All other fees remain the same

Non-refundable Fees: Late Registration Fee, Late Payment Fee, Reinstatement Fee, and Payment Plan Processing Fee

MINIMUM TUITION: Total for 1 Credit Hour

3-Peat Fee:

A \$100 per semester credit hour fee will be assessed after the 20th class day (15th for summer sessions) of the semester for attempting a class for the third and subsequent times.

Excessive Hour Fee:

A \$100 per semester credit hour fee will be assessed for the number for hours exceeding the minimum required to complete the degree plan above the set allowance

NOTE: Total does not include miscellaneous fees that vary per course. Examples can include, but are not limited to, Lab fees, Field Trip fees, or Distance Learning fees. See the Catalog course description for details.

TEXAS A&M UNIVERSITY-KINGSVILLE
NON-RESIDENT – U.S. & FOREIGN FEES
FALL, SPRING, & SUMMER (8 & 10 WEEK OR MULTIPLE SESSIONS)
APPROVED BY BOARD OF REGENTS
VARIABLE RATE 2018-2019
Undergraduate

Hour	Tuition	Designated Tuition	Student Service Fee	Athletic Fee	Hospital Fee	Student Center Fee	Rec Sports Fee	University Services Fee	Total
1	465.00	102.36	16.94	20.00	57.00	80.00	150.00	288.94	1,180.24
2	930.00	204.72	33.88	40.00	57.00	80.00	150.00	427.40	1,923.00
3	1,395.00	307.08	50.82	60.00	57.00	80.00	150.00	565.86	2,665.76
4	1,860.00	409.44	67.76	80.00	57.00	80.00	150.00	704.32	3,408.52
5	2,325.00	511.80	84.70	100.00	57.00	80.00	150.00	842.78	4,151.28
6	2,790.00	614.16	101.64	120.00	57.00	80.00	150.00	981.24	4,894.04
7	3,255.00	716.52	118.58	140.00	57.00	80.00	150.00	1,119.70	5,636.80
8	3,720.00	818.88	135.52	160.00	57.00	80.00	150.00	1,258.16	6,379.56
9	4,185.00	921.24	152.46	180.00	57.00	80.00	150.00	1,396.62	7,122.32
10	4,650.00	1,023.60	169.40	200.00	57.00	80.00	150.00	1,535.08	7,865.08
11	5,115.00	1,125.96	186.34	220.00	57.00	80.00	150.00	1,673.54	8,607.84
12	5,580.00	1,433.04	203.28	240.00	57.00	80.00	150.00	1,903.06	9,646.38
13	6,045.00	1,433.04	220.22	260.00	57.00	80.00	150.00	1,995.44	10,240.70
14	6,510.00	1,433.04	237.16	260.00	57.00	80.00	150.00	2,085.70	10,812.90
15	7,440.00	1,433.04	250.00	260.00	57.00	80.00	150.00	2,175.54	11,380.58
16	7,905.00	1,433.04	250.00	260.00	57.00	80.00	150.00	2,264.11	11,934.15
17	8,370.00	1,433.04	250.00	260.00	57.00	80.00	150.00	2,352.68	12,487.72
18	8,835.00	1,433.04	250.00	260.00	57.00	80.00	150.00	2,441.25	13,041.29
19	9,300.00	1,433.04	250.00	260.00	57.00	80.00	150.00	2,529.81	13,594.85
20	1,000.00	1,433.04	250.00	260.00	57.00	80.00	150.00	2,618.38	14,148.42

Add \$50.00 tuition & \$37.00 University Service Fee for each hour over 20.
All other fees remain the same

Non-refundable Fees: Late Registration Fee, Late Payment Fee, Reinstatement Fee, and Payment Plan Processing Fee

MINIMUM TUITION: Total for 1 Credit Hour

3-Peat Fee:

A \$100 per semester credit hour fee will be assessed after the 20th class day (15th for summer sessions) of the semester for attempting a class for the third and subsequent times.

Excessive Hour Fee:

A \$100 per semester credit hour fee will be assessed for the number for hours exceeding the minimum required to complete the degree plan above the set allowance

NOTE: Total does not include miscellaneous fees that vary per course. Examples can include, but are not limited to, Lab fees, Field Trip fees, or Distance Learning fees. See the Catalog course description for details.

MANDATORY FEES

(All fees are payable at registration.)

Athletic Fee

Funds are used to support the Athletic Department and entitle free admission to all varsity and recreational sports, athletic contests and other special activities.

Hospital Fee

Funds are used to support the Student Health Center, supplies and all operational needs of that center.

Orientation Fee

Funds are used to support the operation expenses involved with hosting orientation sessions for new students.

Recreational Sports Fee

Funds are used to support the operations of the Recreational Sports and entitles free membership to the facility.

Student Center Fee

Funds are used to support special activities for the students. In addition, a portion has been used for the renovation of the Memorial Student Union.

Student Service Fee

Funds are used to support student activities such as the Student Government Association, student musical organizations, *The South Texan*, the New Student Orientation and numerous other student activities.

University Services Fee

Funds are used to cover expenses for the following items: academic advising, library services, transcripts, student IDs, distance learning, campus safety and security, transportation, information technology and other university services as required.

MISCELLANEOUS FEES

Parking Permit Fee

All persons who operate a vehicle on university property, regularly or occasionally, are required to register those vehicles online in the JNET portal at the [University Website](#) under the Campus Resources tab and then Parking Spot. The Business Office located in College Hall, will issue a parking permit for designated area or areas. All student vehicles operated on the university campus must be registered within one week after classes begin. No refunds will be issued after one week from the date classes begin. Detailed information on parking and traffic regulations, penalties for failing to register a vehicle and other traffic and parking violations, methods of obtaining refunds, procedures to follow when changing automobiles, location where vehicle may be parked, and a specific breakdown of fees to be paid will be available at the time of registration. Information may also be found on the TAMU-K's University Police Department website.

Kinesiology Fee

For each kinesiology service course, EDKN 1105 through EDKN 1149, the student will be charged a special fee of \$4 for towel service. In specified courses, an additional fee may be charged.

Laboratory Fee

For each laboratory course a fee of \$2 to \$30 is charged depending upon cost of materials used in the course.

Applied Music Fees

For personal lessons on keyboard, wind, string or percussion instrument or voice lessons, a fee of \$75 per semester credit hour is charged.

Music Fees

Instrument Rental Fee.....\$3 per semester
Marching Band members for three uniform cleanings\$10 per semester

Three-Repeat Fee

A \$100 per semester credit hour fee assessed after the 12th class day (15th for summer sessions) of the semester for attempting a class for the third and subsequent times.

Excessive Hours Fee

A \$100 per semester credit hour fee assessed for the number of hours exceeding the minimum required to complete the degree plan above the set allowance.

Visitor's Fee

The fee for visiting a course for a person other than a full-time student is the same as that required for registration for credit. A full-time student pays no additional fee for visiting a course.

Other Fees

Late Payment Fee	\$35
Undergraduate (domestic) Application Fee	\$35
Graduate (domestic) Application Fee	\$50
International Application Fee	\$75
R.O.T.C. Special Service Fee, Per Semester	\$5
Thesis-Binding Fee for extra copy.....	\$10.09

Fines and Breakage Loss

Students are expected to exercise reasonable care of university property; an assessment will be made for any deliberate misuse. Students must pay all fines before they can receive a transcript of their credits or can register in the university.

Students registered for courses in chemistry will be notified at the end of a semester of breakage or loss of equipment and will be required to pay the amount due at the Business Office.

REFUND OF FEES

The Higher Education Amendments of 1998 (HEA98) represent a major shift in the return of Title IV Federal Financial Aid when a student withdraws from the university. The policy governs all federal grant and loan programs (Pell, SEOG, Direct Loans, Perkins and PLUS loans), but does not include the Federal Work-Study program.

In general, the law assumes that a student “earns” **approved (verified)** federal financial aid awards in proportion to the number of days in the term prior to the student’s complete withdrawal. If a student completely withdraws from school during a term, the school must calculate, according to a specific formula, the portion of the total scheduled financial assistance that the student has earned and is therefore entitled to retain, until the time that the student withdrew. If a student receives (or the university receives on the student’s behalf) more assistance than he/she earns, the unearned funds must be returned to the Department of Education or to the Federal Direct Loans or parent’s Federal PLUS loan lenders. If a student’s charges are less than the amount earned, and a refund is due, the student may be able to receive those additional funds. **Students who have not completed the verification process are ineligible to receive any financial aid.**

The portion of the federal grants and loans that the student is entitled to receive is calculated on a percentage basis by comparing the total number of days in the semester to the number of days that the student completed before he/she withdrew. The policy governs the earned and unearned portions of the student’s Federal Title IV Financial Aid only. It determines how much, if any, the student and/or the school may need to return. This policy does not affect the student’s charges. The university’s withdrawal policy will be used to determine the reduction, if any, in the student’s tuition and fee or room and board charges. **The student is responsible for paying any outstanding charges to the university.**

Withdrawal Policy

When a student withdraws from the university, he/she is authorized a refund of tuition and fees based on the date of the withdrawal and the number of weeks of the enrolled semester/term/session. The refund policy is based on legislative law found under the Texas Education Code, Chapter 54, Article 54.006. The code outlines the following refund policy:

All Semesters/Terms/Sessions

Prior to the 1st Class Day, the refund percentage – 100%

Semesters/terms of 10-weeks or Longer (i.e., Fall/Spring Semesters; 10-week Summer Term)

- a. 1st, 2nd, 3rd, 4th and 5th class day, the refund percentage - 80%
- b. 6th, 7th, 8th, 9th and 10th class day, the refund percentage - 70%
- c. 11th, 12th, 13th, 14th and 15th class day, the refund percentage - 50%
- d. 16th, 17th, 18th, 19th and 20th class day, the refund percentage - 25%
- e. after the 20th class day, the refund percentage – 0%

Terms/Sessions of More Than 5-weeks but Less Than 10-weeks (i.e., 8-week Session During Fall/Spring Semesters)

- a. 1st, 2nd and 3rd class day, the refund percentage - 80%
- b. 4th, 5th and 6th class day, the refund percentage - 50%
- c. after the 6th class day, the refund percentage – 0%

Terms/Sessions of 5 weeks or Less (i.e., Fall/Spring or Summer Intersessions; 5-week Summer Session)

- a. 1st class day, the refund percentage - 80%
- b. 2nd class day, the refund percentage - 50%
- c. after the 2nd class day, the refund percentage – 0%

The “first class day” is determined by the beginning of a semester, summer session or intersession. The “first class day” is not defined by individual courses. Please refer to the academic calendar for the first class day date.

The refund will be wholly returned to the student only if he/she did not receive financial assistance from Federal Title IV programs. A Return to Title IV calculation must be performed to determine if the student is eligible to retain any of the Federal funds received. [Return of Title IV Funds Webpage](#)

If the student receives less Federal Student Aid than the amount earned, the university will make a disbursement of the earned aid that was not received (Post-withdrawal disbursement.)

If it is determined that the university must return to the Title IV programs monies in excess of any tuition and fees or room and board, the student will be responsible for those monies.

Any grant funds that the student is required to return to the federal programs are considered an overpayment. The student must either repay the amount in full to the university within 45 days of notification of the overpayment or make satisfactory payment arrangements with the Department of Education Collections that the student owes an overpayment. At that point, until the student pays the amount in full to the Department of Education or makes repayment arrangements with the Department of Education, **the student will lose his/her eligibility to receive future federal financial aid at any institution.**

Upon Dropping a Course or Courses

A 100% refund difference of applicable tuition and fees collected will be made for courses from which students drop (not withdraw) within the first 12 days of a semester or within the first four days of a summer term. There will be no refunds for courses dropped after the first 12 days of a semester or after the first four days of a summer term.

Refund Policies

The following policies are used for refunds:

- a. Refunds are processed through Bank Mobile. Students receive their My One Card in the mail. Once

received, student must activate the card to select their refund preference; they will have three options to select from (1) direct deposit to their personal bank account (2) direct deposit to their One Account (3) paper check.

- b. Any financial obligations owed the university will be deducted from the refund before it is processed.
- c. Fees paid for correspondence and/or extension courses will not be refunded after the student receives the lesson outline in correspondence courses or after the first meeting of the extension center course.
- d. No refunds will be made on visitors' fees.

More information may be viewed by following the Tuition and Fees Quicklink on the TAMU-K Homepage.

TUITION REBATE FOR CERTAIN UNDERGRADUATES

The purpose of this program is to provide tuition rebates that will provide a financial incentive for students to prepare for university studies while completing their high school work, avail themselves of academic counseling, make early career decisions and complete their baccalaureate studies with as few courses outside the degree plan as possible. Minimizing the number of courses taken by students results in financial savings to students, parents and the state. To be eligible for rebates under this program, a student must: (1) have enrolled for the first time in an institution of higher education in the fall 1997 semester or later; (2) request a rebate for course work related to a first baccalaureate degree received from a general academic teaching institution, (3) have been a resident of Texas as set forth under Chapter 21, Subchapter B of this title (relating to Determining Residence Status) and have been entitled to pay resident tuition at all times while pursuing the degree, (4) if enrolled for the first time in fall 2005 or later, graduate within four calendar years for a four-year degree or within five calendar years for a five-year degree if the degree is in architecture, engineering or any other program determined by the Board to require more than four years to complete, and (5) have attempted no more than three hours in excess of the minimum number of semester credit hours required to complete the degree under the catalog under which they were graduated. Hours attempted include transfer credit, course credit earned exclusively by examination (except that, for the purposes of this program, only the number of semester credit hours earned exclusively by examination in excess of nine semester credit hours is treated as hours attempted), courses that are dropped after the official census date, optional internship and cooperative education courses and repeated courses. For students concurrently earning a baccalaureate degree and a Texas teaching certificate, required teacher education courses shall not be counted to the extent that they are over and above the free electives allowed in the baccalaureate degree program.

The rebate for eligible students is a maximum of \$1,000. Eligibility requirements and application forms are available in the offices of the academic deans.

STUDENT FINANCIAL AID PROGRAMS

Arnold Trejo, *Executive Director*
Memorial Student Union 132. MSC 115. Extension 3911.

The Office of Student Financial Aid assists students in obtaining financial assistance through a variety of federal, state, institutional and private sources in order to supplement their own contribution to a college education. The financial gap between the cost of an education and monies available from the family can be complemented by grants, loans, scholarships and/or student employment. The office updates the types of aid available annually.

Please visit the [Financial Aid Webpage](#) for current policies, procedures, and requirements.

FINANCIAL AID APPLICATION DEADLINES

Time is a very critical part when applying for financial aid. The following institutional priority deadlines indicate the date financial aid applications must be completed to insure maximum grant eligibility:

Fall/Spring – March 15
Spring only – November 1
Summer Sessions – May 1

Steps in Applying for Financial Aid

Application Process

1. A student must be admitted into a degree-seeking program to be eligible for financial aid. An application for admission to Texas A&M University-Kingsville can be completed online at: ApplyTexas.org website.
2. Apply for a student and parent FSA PIN number online at [The FSA ID](#) webpage. Your FSA ID will allow you to electronically sign your Free Application for Federal Student Aid (FAFSA) and access your application.
3. Complete the Free Application for Federal Student Aid (FAFSA). Students must list Texas A&M University-Kingsville as one of the college/university choices in the FAFSA to be considered for financial aid at this university. Our School Code is 003639. Completion of the FAFSA requires certain financial information including the student's and/or parent's income tax return. Those who do not file a tax return must use proper income or benefit sources to complete it. These include child support and other untaxed income or benefits. It is recommended that the FAFSA be completed at [FASFA Website](#).
4. The Processing Center will return an acknowledgment to the student that a Student Aid Report (SAR) has been produced and is ready for review. This acknowledgment should be kept for personal records.
5. The Office of Student Financial Aid will retrieve an electronic version of the Student Aid Report. If any additional information is required, an email notification will be sent to students outlining the requested documents.

Financial Aid Process

1. Once the application process is completed, the Office of Student Financial Aid Services will prepare a financial aid package to help meet the student's financial need. The amount of the financial aid awarded is dependent on the student's enrollment status. The aid award will be disbursed each semester.
2. The school will first use the aid to pay tuition and fee charges and room and board. Any remainder will be disbursed to the student either through BankMobile.
3. Funds from grants and scholarships will be readily available, but loans require an additional steps to be completed at Studentloans.gov.

4. Work-study is awarded to those students who meet the priority deadline, but the individual student must find a position in order to receive the funds. Work-study funds are disbursed as they are earned.
5. It is the responsibility of the student to have other resources available should the financial assistance not cover the total educational expenses.

General Information

Applicants must be accepted for admission, pre-registered for classes and have all financial aid documents completed and on file before financial aid funds can be disbursed.

Students must reapply each year for financial aid and scholarships. Applicants must maintain satisfactory academic progress to be eligible for financial aid. Students must complete a separate Summer Application to be considered for summer financial aid.

Awards are subject to revision based on academic or enrollment status.

For more information, please contact the Office of Student Financial Aid Services at (361) 593-3911; Office of Student Financial Aid, MSC 115, Kingsville, Texas 78363, email: financial.aid@tamuk.edu; [Financial Aid Webpage](#).

SATISFACTORY ACADEMIC PROGRESS POLICY

To receive funds administered by the Office of Student Financial Aid (OSFA) at Texas A&M University-Kingsville (TAMUK), students must be making measurable academic progress toward completion of an eligible degree program. Accordingly, the following Satisfactory Academic Progress (SAP) Policy for students who receive financial aid is in place. These standards require that a student make academic progress during all periods of enrollment, including periods when a student did not receive financial aid. TAMUK will be **consistent in applying the SAP policies to full & part time, independent and dependent students.**

Students enrolling at TAMUK for the first time (including transfers) are initially considered to be meeting SAP. The measurement of academic progress will be made at the conclusion of the first enrollment term and will include all acceptable transfer credits that the TAMUK academic record contains.

Minimum Financial Aid Satisfactory Academic Progress Standards

- Maintain required cumulative Grade Point Average(GPA) based on matrix below, or higher (a qualitative measure) **and**

Student Type	Required Cumulative GPA
Undergraduate Students	2.0 GPA for all coursework completed at TAMUK

- Successfully complete at least 67% of the cumulative attempted credit hours (a quantitative measure) and
- Make positive progress toward a program of study within 150 percent of the average published program length (credits needed to earn a degree).

Financial Aid Eligibility Statuses

- **Eligible** – Student is meeting the minimum academic standards or has no academic history. **Fully Eligible** for financial aid.
- **Warning** – Student did not meet the minimum standards for cumulative GPA and/or 67% completion rate in the previous evaluation period. Student is still **Eligible** for financial aid, but must reach all minimum standards by the end of the next evaluation period to maintain eligibility.
- **Ineligible** – Student has failed to meet minimum standards for cumulative GPA and/or 67% completion rate SAP at the end of the evaluation period. Student is **Ineligible** for financial aid.
- **Timeframe** – Student has attempted more than 150% of the published program length toward a Bachelor’s Degree. For example, majors requiring 120 credit hours will be allowed up to 180 attempted hours (120 x 1.5 = 180).

How is the 67% completion rate calculated? The calculation is made as follows: earned credit hours divided by attempted credit hours = completion rate (result will be rounded to closest whole number).

Successful completion of a class is defined as earning a grade of A, B, C, D, or Pass (plus and minus grades may be attached to letter grades) and will be used to determine cumulative GPA, Completion Rate and Timeframe.

Non-Passing Grades: Unsuccessful grades of E, F, W, WD, WF, WP, NG, X or I will be used in determining completion rate and timeframe. Letter grades of E and F are used toward the completion rate and cumulative GPA. Courses with grades of S are included as both hours attempted and earned but will not factor into the GPA. **In the case of X and I grades, students are responsible for notifying the OSFA if these grades changes so that SAP can be recalculated.**

Withdrawals: All institutional withdrawals are factored into the completion rate and the maximum timeframe.

When is Academic Progress Evaluated? A student's satisfactory academic progress will be evaluated at the end of each semester (Fall, Spring and Summer). Students will not be eligible for federal funding during this time if in an **ineligible** SAP status.

New Financial Aid Students with prior academic history: TAMUK students with prior academic history will be evaluated at the time they apply for financial aid. They will receive one of three financial aid statuses.

- **Eligible** – Student is meeting the minimum academic standards or has no academic history. **Fully Eligible** for financial aid.
- **Warning** – Student is below minimum standards in his/her previous academic history. Student is still **Eligible** for financial aid, but must reach the minimum standards at the end of the next evaluation period to maintain eligibility.
- **Maximum Timeframe** – Student has attempted more than 150% of the published program length toward a Bachelor's Degree. For example, majors requiring 120 credit hours will be allowed up to 180 attempted hours ($120 \times 1.5 = 180$). Student is **Ineligible** for financial aid.

Transfer Students and Transfer credit hours: Students transferring to TAMUK are required to have all prior college transcripts evaluated for transfer credits. All credit hours accepted by TAMUK will be used to determine 67% completion rate and maximum timeframe of 150%.

Repeat Courses: Students repeating courses, for the first time only, can receive aid for that repeated course. All repeat courses will be used in determining completion rate and timeframe. Actual letter grades are included in the cumulative GPA.

Audited Credit Hours: Courses taken on an audit basis are not counted when determining the completion percentage or for purposes of determining your cumulative GPA.

Second Degree/Double Majors: Undergraduate students seeking second degrees and students with double majors are monitored like any other students under this policy. If the OSFA determines that the student will exceed maximum timeframe or when the students exceed the maximum timeframe allowed for their respective programs, the student will not be eligible for additional aid. Students can appeal for additional time as outlined below.

Likewise, when determining eligibility for graduate and doctoral students who complete one graduate degree program at TAMUK and begin another graduate degree program, hours from the prior degree are calculated toward maximum time frame. If the OSFA determines that the student will exceed maximum timeframe or when the students exceed the maximum timeframe allowed for their respective programs, the student will not be eligible for additional aid. Students can appeal for additional time as outlined below. If the appeal is approved, the hours from the prior graduate degree will be removed from the maximum timeframe calculation.

How to Re-establish Eligibility?

- A student must bring his/her GPA and completion rate up to the minimum standards of the required cumulative GPA, and 67% completion rate. A student will be Ineligible for financial aid and cannot be reimbursed during this time.

- **Mitigating Circumstances:** If a student has experienced mitigating circumstances (illness, family illness, change of major) during the most recent evaluation period, they may submit an Appeal to reinstate financial aid eligibility. A deadline for appeal submission will be published each semester. Appeals received after the deadline will not be reviewed until the next semester.

The student must explain, in the appeal, what has changed that will now allow them to meet the SAP requirements. The student must also submit supporting documentation with the appeal. The following may be considered acceptable documentation to support reason for appeal:

- Statement from physician or health professional reflecting condition, dates of occurrence, treatment and resolution
- Copy of death certificate, obituary or statement from physician
- Other documentation that support circumstances and resolution

Appeals that are incomplete, and/or lack supporting documentation are not reviewed and the student is notified. If the request is granted, the student will be placed on one of two Financial Aid Eligibility Statuses:

- **Probation** – The student is expected to improve to minimum standards by the end of the next evaluation period. The student is Eligible for financial aid, but must meet minimum standards by the next evaluation period. A student cannot be on probation for two consecutive semesters.
- **Academic Plan** – The student cannot be expected to improve to minimum standards by the next evaluation period. The student and TAMUK have agreed to an academic plan to allow the student to meet minimum standards within a fixed number of evaluation periods. The student is fully **Eligible** for financial aid as long as they are strictly following the academic plan. If at any time the student stops following the plan and they are not meeting minimum standards they will become **Ineligible** for financial aid. If a student meets minimum standards at any time while on an academic plan their Financial Aid Eligibility Status will be updated to **Eligible**.

If the request is not granted, the student will remain **Ineligible** for financial aid until they meet all minimum standards.

- **Maximum Timeframe Mitigating Circumstances:** If a student has not completed their program of study within the 150% timeframe and there are mitigating circumstances (illness, job related, family illness, change of major), they may submit an Appeal to reinstate financial aid eligibility. If this application is granted, the student will be placed on the following Academic Eligibility Status:
- **Maximum Timeframe Academic Plan** – The student and TAMUK have agreed to an academic plan. The student is fully Eligible for financial aid, as long as they are strictly following the success plan. If at any time the student stops following the academic plan, they will become **Permanently Ineligible** for financial aid.

If the request is not granted, the student will be **Ineligible** for financial aid. All students are limited to one Timeframe Academic Plan.

- All appeals are reviewed by the Financial Aid Appeals Committee. All committee decisions are final.

Availability of SAP Policy: The SAP policy is available to students on the OSFA website. Office staff may also print copies of the policy in the office if a request is made. The policy is updated as needed or whenever changes in federal regulations occur.

STUDENTS WILL BE NOTIFIED BY EMAIL OF THEIR SAP STATUS, AT THE END OF EACH SEMESTER.

GRANTS

Various grant programs are funded by the federal and state governments, the university or a combination of these agencies. Grant awards may be limited due to availability of funds. Grants DO NOT have to be repaid. *General requirements for grant programs stipulate that the student must be in good standing (a 2.0 overall grade point average), must be maintaining academic satisfactory progress, must not be in default on any loan made from a student loan fund at any institution and must not owe a refund on any grant previously received.*

Federal Pell Grant: The Pell Grant is a federal program designed to provide financial assistance to undergraduate students who demonstrate financial need. The amount of the grant is based on the computed expected family contribution, the level of funding and the cost of education. Students enrolled for less than full-time will receive a reduced grant award. Pell Grant eligibility is limited to undergraduate students. Eligibility must be re-established each year by completing the FAFSA.

Federal Supplemental Educational Opportunity Grant (FSEOG): FSEOG provides grants to students who demonstrate the greatest financial need. Eligible students must be citizens or permanent residents of the U.S. who are accepted for admission or are enrolled at least half-time as undergraduate students.

Aid for Dependent Children (AFDC-TANF) Grant: Exemption program provides an exemption from the payment of tuition and fees for up to one year for eligible college students.

Texas Excellence Access and Success (TEXAS) Grant Program: This program was established to provide need-based grants to eligible persons to enable them to attend an institution of higher education. Students who have completed the recommended or distinguished high school curriculum may be eligible for this program. More information is available at [College of Texans Webpage](#).

INSTITUTIONAL GRANTS

These grants are awarded to undergraduate students who meet the priority deadlines, complete a Free Application for Federal Student Aid (FAFSA) every year and demonstrate financial need.

Resident Public Educational Incentive Grant (RPEG)

This grant is available to Texas residents. Grant awards range from \$400 to \$2000 per academic year.

Non-resident Public Educational Incentive Grant (NPEG)

This grant is available to students who are not considered Texas residents. Grant awards range from \$400 to \$4000 per academic year.

Undergraduate Tuition Grant

Grant awards range from \$400 to \$2500 per academic year.

TASFA

As specified by Senate Bill 1528, state law permits students that are neither US citizens, nor permanent residents to be classified as Texas residents for admissions and financial aid purposes, thus making them eligible for state aid. *Since funding is limited, not all eligible students who apply will be awarded State Grants. We encourage all students to apply and complete their financial aid paperwork as soon as possible in order to maximize their chances of receiving an award.*

LOANS

General Requirements

The Office of Student Financial Aid administers a number of loan programs for students whose needs cannot be fulfilled in any other manner. The university participates in several low-interest, long-term loans sponsored by the federal and state governments. Applicants for all loans must complete the Free Application for Federal Student Aid (FAFSA) as part of the application process. Instructions for completing and submitting the FAFSA are included with the form. The loans are administered in adherence with accepted business practices in an effort to provide borrowers with an educational experience in personal finances as well as to ensure the continuance of existing loan funds through prompt repayment. Loan funds administered by the university vary somewhat in qualifications required, amounts that may be borrowed and terms of repayment. Specific details concerning each loan fund, including the rights and responsibilities of a borrower and the repayment schedule, may be obtained from the Office of Student Financial Aid.

The personnel in the Office of Student Financial Aid are available as financial advisers to **all** students whether or not they are qualified to borrow from one of the university's student loan funds. Through interviews and realistic

examination of expenses and income, students often discover that borrowing is only one of the possible solutions to financial problems.

General requirements stipulate that the student must be accepted for enrollment or, if a continuing student, must be maintaining satisfactory academic progress, must not be in default on any loan made from a student loan fund at any institution, must not owe a refund on any grant previously received and **must** attend a Loan Entrance Counseling session before receiving the first disbursement and **must** attend a Loan Exit Counseling session whenever the student’s enrollment status falls below half-time, the student withdraws or graduates from the university. Loan funds will not be disbursed until a student is registered for at least half-time status. Late registration will result in delayed financial aid disbursement.

Federal Direct Student Loan Program (Subsidized/Unsubsidized)

The Federal Direct Loan is designed to assist students who are maintaining Satisfactory Academic Progress toward a degree. Federal Direct Loans are a major form of self-help aid.

There are two types of Student Loans: Subsidized and Unsubsidized. Subsidized loans are when the government pays the interest during the time in which the student is attending school. Unsubsidized loans are when the student is responsible for paying the interest for the duration of his or her college career. The student also has the option to have the interest capitalized or added on to the total amount of the loan. The payments on the Federal Direct loans must be started six months after you graduate, leave school or drop below half-time enrollment. **Currently, the interest rate is 4.45% on these loans. Listed below are the maximum annual loan limits by grade level.** However, students may not qualify for the entire yearly loan amount.

Dependent Students	Annual Borrowing Limits (undergraduate students)		Total
	Subsidized	Unsubsidized	
Freshmen	\$3,500	\$2,000	\$5,500
Sophomores	\$4,500	\$2,000	\$6,500
Juniors and Seniors	\$5,500	\$2,000	\$7,500
Maximum Aggregate Loan Limit	\$23,000	\$8,000	\$31,000

Independent Students	Annual Borrowing Limits (undergraduate students)		Total
	Subsidized	Unsubsidized	
Freshmen	\$3,500	\$6,000	\$9,500
Sophomores	\$4,500	\$6,000	\$10,500
Juniors and Seniors	\$5,500	\$7,000	\$12,500
Maximum Aggregate Loan Limit	\$23,000	\$34,500	\$57,500

Federal PLUS Program for Parent Borrowers

A Federal PLUS (Parent loan for undergraduate dependent students) is a low interest rate loan for parent borrowers to assist them in paying for a dependent student's education. The amount a parent may borrow will be determined by the Office of Student Financial Aid. The loan may not exceed the student’s cost of education minus other financial aid awarded. Presently, the interest rate is 7.00%

As with the Unsubsidized Stafford loan, there are no interest benefits paid by the federal government. The parent borrower must submit for a credit check as part of the application process. More information on PLUS and other federal loans is available at StudentLoans.gov.

Texas B-On-Time Loan Program

The Texas B-On-Time Loan Program was established by the 78th Texas Legislature. The purpose of this state-funded program is to provide non-need based, non-interest bearing loans to eligible Texas students to attend

colleges/universities in Texas. **At this time, the State has authorized Renewal Awards only.** More information is available at: [Texas Higher Education Coordinating Board Student Loan Program](#).

RETURN OF FEDERAL TITLE IV FUNDS

The Higher Education Amendments of 1998 (HEA98) represent a major shift in the return of Title IV Federal Financial Aid when a student withdraws from the university. The policy governs all federal grant and loan programs (Pell, SEOG, Stafford Loans, Perkins and PLUS loans), but does not include the Federal Work-Study program.

In general, the law assumes that a student “earns” **approved (verified)** federal financial aid awards in proportion to the number of days in the term prior to the student’s complete withdrawal. If a student completely withdraws from school during a term, the school must calculate, according to a specific formula, the portion of the total scheduled financial assistance that the student has earned and is therefore entitled to retain, until the time that the student withdrew. If a student receives (or the university receives on the student’s behalf) more assistance than he/she earns, the unearned funds must be returned to the Department of Education or to the Federal Stafford or parent’s Federal PLUS loan lenders. If a student’s charges are less than the amount earned, and a refund is due, the student may be able to receive those additional funds. **Students who have not completed the verification process are ineligible to receive any financial aid.**

The portion of the federal grants and loans that the student is entitled to receive is calculated on a percentage basis by comparing the total number of days in the semester to the number of days that the student completed before he/she withdrew. The policy governs the earned and unearned portions of the student’s Federal Title IV Financial Aid only. It determines how much, if any, the student and/or the school may need to return. This policy does not affect the student’s charges. The university’s withdrawal policy will be used to determine the reduction, if any, in the student’s tuition and fee or room and board charges. **The student is responsible for paying any outstanding charges to the university.**

If it is determined that funds must be returned to Title IV programs, funds will be returned in the following order: Unsubsidized Loan, Subsidized Loan, Perkins Loan, PLUS Loan, Pell Grant, ACG Grant, SMART Grant and FSEOG Grant.

The refund will be returned to the student only if the student **did not** receive financial aid assistance from either Title IV programs or state programs. In the cases where the student did receive assistance from these programs, the refund will be returned to the programs in the following order: Unsubsidized Loan, Subsidized Loan, Perkins Loan, PLUS Loan, Pell Grant, FSEOG Grant, TPEG Grant, RPEG Grant, NPEG Grant and Texas Grant.

The student’s official withdrawal date will be determined by the university as:

- the date the student began the university’s withdrawal process.
- the midpoint of the semester if the student withdraws without notifying the university.
- the student’s last day of attendance at an academically-related activity as documented by the university.

If the student receives less Federal Student Aid than the amount earned, the university will make a disbursement of the earned aid that was not received (Post-withdrawal disbursement.)

If it is determined that the university must return to the Title IV programs monies in excess of any tuition and fees or room and board, the student will be responsible for those monies.

Any grant funds that the student is required to return to the federal programs are considered an overpayment. The student must either repay the amount in full to the university within 45 days of notification of the overpayment or make satisfactory payment arrangements with the Department of Education Collections that the student owes an overpayment. At that point, until the student pays the amount in full to the Department of Education or makes repayment arrangements with the Department of Education, **the student will lose his/her eligibility to receive future federal financial aid at any institution.**

STUDENT EMPLOYMENT

Student employment is available for students who want to supplement their educational resources through part-time employment; two types of services are offered. The Federal/State College Work-Study program is for those students who qualify for financial aid and is administered through the Office of Student Financial Aid. The Part-Time program is for students who do not qualify or apply for financial aid. The Part-Time program is administered through the Career Services Center.

Federal/State College Work-Study

Texas A&M-Kingsville receives allocations from the federal government and the State of Texas to provide employment opportunities on campus. Work-study students work anywhere between 12-15 hours per week depending on their awarded allocation. Students who request work study on their FAFSA and meet the established deadlines are given priority to receive the award. Students who are enrolled at least half-time status, are citizens or permanent residents of the United States, have demonstrated financial need, are maintaining satisfactory progress, are not in default on any student loan made through or approved by an institution and who do not owe a refund on any grant previously received are eligible to receive. When the semester term begins and during the school year, jobs are posted on the Career Services Center website (javelinacareers.com). Students will be able to register as a job seeker and search the available job postings to find work-study employment. Texas A&M-Kingsville recommends that students secure a job which will compliment and reinforces their student's professional and personal maturity goals. Students must have been awarded and accepted the Work-Study award before being referred for an interview. Acceptance of the Work-Study award is not a promise of a job; it establishes eligibility. Once students provide a copy of their financial aid award letter and meet the job requirements (if any), can apply for the job. At that time the department will contact the student for an interview. Continuation in the job depends on funds available and the student's job performance. Previous work-study employment does not guarantee continued employment in the program.

Part-Time Student Employment

The university offers part-time employment to a number of students in various offices and departments. Student employment on a part-time basis is limited to 19 hours per week. At this time, part-time employment is administered through the Career Services Center, where students register as a job seeker to be able to search for available jobs on/off campus.

**Please note that information in the preceding section on Financial Aid is subject to change. For current information, please refer to the [Financial Aid Webpage](#).

OTHER UNIVERSITY SUPPORT SYSTEMS

A university consists of more than classrooms. In addition to teaching, faculty members are engaged in research, publication, professional growth and development activities, university service and advisement. Students grow through participation in the extracurricular activities the university sponsors. The following sections offer some indication of campus life at Texas A&M University-Kingsville. More detail can be found in the *Student Handbook* and the *Faculty Handbook*.

This survey omits a number of very important components of the university whose work, nevertheless, contributes to campus comfort and the smooth functioning of university operations including such divisions as accounting, bursar, development, facility management, human resources, payroll, physical plant, procurement and general services, among others.

CAMPUS GOVERNING BODIES

The Student Government Association is the highest governing body for students at Texas A&M University-Kingsville. It makes recommendations to the university administration for improving student life. The student government is composed of the executive, legislative and judicial branches. The student body elects the President, Vice-President and the Senators during a general student election held each spring. The Dean of Students or his/her designee advises the SGA.

The Faculty Senate, established by the Constitution of the General Faculty, is a body of faculty members elected from the undergraduate colleges and the library. The Faculty Senate is an advisory body to the President regarding educational policies and noncurriculum matters of the university.

In 1990, the Staff Council was created to address the various specific concerns of four groups of personnel: secretarial-clerical, nonfaculty professional, and technical. Consisting of 24 members elected for two-year terms, the council provides a means for this important group of campus employees to voice those concerns to the administration.

EXTRACURRICULAR ACTIVITIES

Although the focus of the university is intellectual, it also fosters the broad mental, physical and spiritual well-being of the campus community. To this end, a variety of non-academic programs are offered to enhance student learning and personal development.

Dean of Students

Kirsten Compary, *Assistant Vice President of Student Affairs & Dean of Students*
Memorial Student Union 306. MSC 122. Extension 3606.

The Dean of Students (DOS) exercises broad responsibility for the student services of the university. The office is responsible for improving the quality of life for students and assisting them in attaining their educational goals; for promoting an environment which aids in the students' emotional, social, cultural and ethical development; and working with all academic colleges and departments as an advocate for students' rights. The Dean of Students assists the Senior Vice President for Student Affairs, Enrollment Management and University Administration in creating and implementing programs, services and activities which are consistent with the university's mission. The Dean of Students oversees the Associate Dean of Student, Memorial Student Union, Student Activities, Student Health and Wellness, B&G Express shuttle program, Welcome Week, the Student Government Association, the ID Center, the Post Office, student discipline, shuttle and specific retention programs. In addition, the office has a liaison relationship with Javelina Dining Services (operated by Aramark) and Javelina Bookstore (operated by Barnes & Noble College). The Dean of Students also has oversight of certain councils and committees that are charged with student programming, disciplinary issues and in providing cultural and enrichment programs to the University community.

Memorial Student Union

Crispin Trevino, *Director, Auxiliary Services*
Memorial Student Union 301. MSC 133. Extension 2769.

The Memorial Student Union (MSU) is the center of social life on the campus. It includes multiple dining areas, student lounges, the CueShack Game Room, two large ballrooms, meeting areas, ID Center and student related offices. The Memorial Student Union hosts games and tournaments, welcome and hospitality programs and campus food service. Recognized student organizations may schedule use of the facilities at no charge for normal use. Outside organizations must pay a fee. The Office of the Dean of Students is located in the Memorial Student Union, along with the Javelina Enrollment Services, Javelina Bookstore (operated by Barnes and Noble College), the Post Office, Student Government Association and Javelina Dining (operated by Aramark).

Student Activities

Erin McClure, *Director, Student Activities*
Student Activities Building. MSC 133. Extension 2760.

The Department of Student Activities serves as the resource hub for all student organizations. Student Activities provides many services to the Texas A&M University-Kingsville student organizations, such as registering organizations, producing directories, providing advising services and helping student groups with operational assistance. The department provides many cultural, educational, recreational and social programs for the campus community. Some examples are Homecoming, Family Fiesta, Fall Carnival, Spring Fling, Windows on the World and the Miss Texas A&M University-Kingsville Scholarship Pageant. In addition to serving over 125 student organizations, Student Activities also provides a variety of specialized leadership programs such as Leadership Month, Student Retreats and Conferences and an annual Student Leadership Conference. The department provides full-time support to Greek Life, International and Multicultural programming and the Campus Activities Board. The department also includes activities related to Community Services. Believing campus involvement is essential to student success, the Texas A&M University-Kingsville Department of Student Activities completes a student's education.

Orientation Programs

Erin McClure, *Director, Student Activities*
SUB 301. MSC 133. Extension 2760.

Javelina Camp is a high-intensity three-day experience designed specifically for incoming Freshmen. Students who participate in Javelina Camp will learn about the spirited traditions of TAMU-Kingsville, spend time in small "packs" centered on bonding and connecting with student in an interactive setting, participate in team competitions, reflect on their personal college goals and most importantly have fun with other future students.

Javelina Welcome, the University's official orientation program, begins two days prior to each fall semester's first day of class. During this program, students will move into their residence halls, attend study skill seminars and information sessions, as well as participate in the University's Matriculation Ceremony. Families are encouraged to attend; participation by new students is encouraged.

International Student Orientation (ISO) is a program for all incoming international students in F-1 or J-1 student status, including freshman, graduate, professional, transfer, returning students from leave and exchange students. ISO is designed to help students learn about and understand important immigration regulations and procedures required of F-1 and J-1 students, confirm their arrival for required government reporting purposes, and to assist new students in adjusting to Texas A&M University-Kingsville.

The South Texan

The South Texan, a weekly print newspaper with a web edition that is updated daily. It offers a means to bring student concerns to the academic community, to ascertain and express student opinion, to train future professional journalists, to publish official announcements and policies and to provide the campus with a general interest newspaper from the student perspective. The editor is selected by the Student Publications/Media Committee, and must have taken basic journalism classes and have an overall grade point average of 2.5 or better. A paid staff,

chosen by the editor with the advice and consent of the faculty adviser, is chiefly responsible for newspaper production. Volunteer help from throughout the student body is always welcome.

Campus Recreation and Fitness

Anthony Kreitzer, *Director*

Student Recreation Center. MSC 208. Ext. 3059.

The Department of Campus Recreation and Fitness is housed in the new \$12 million, 30,000 square foot Student Recreation Center (SRC). Completed in spring 2010, the SRC provides unlimited opportunities for Texas A&M University-Kingsville students to partake in indoor recreational, intramural sports and fitness activities. The SRC includes two full size multipurpose basketball courts, a 6,100 square foot cardio fitness and free weight room and a 1/8 mile elevated indoor jogging track. Activities such as volleyball, badminton and soccer and played in the gymnasium. The SRC also offers an adjacent outdoor basketball court. The SRC is available to all full-time students with a validated Texas A&M University-Kingsville ID.

SRC Cardio Fitness and Free Weight Room

The Fitness Center is housed in the Student Recreation Center (SRC). The area has a wide range of the latest cardio fitness exercise equipment treadmills, elliptical trainers, stationary bikes, weight machines and a full selection of free weights. A full cardio theater and individual monitors on machines are also available to make workout routines more enjoyable. The Cardio Fitness and Free Weight Room also provides programs in wellness, fitness, personal training, aerobics and nutrition.

Intramural Sports

A wide variety of individual, dual and team sports are offered each semester. Individuals are provided the opportunity to socialize, learn leadership skills and exercise. Championship T-shirts are awarded in every sport. In a select number of sports, opportunities are available to compete at regional and national extramural sport tournaments. All outdoor intramural team sports are scheduled on the department's lighted turf fields located in the northwest campus.

Cheerleading

Javelina team spirit and tradition is a vital part of any college atmosphere. The Texas A&M University-Kingsville cheerleading program offers students the opportunity to get involved, learn leadership skills, provide community service and promote support for the Javelinas. The cheerleaders perform at all intercollegiate basketball and football games, serve on campus spirit activities and offer community cheerleading campus in the summer. Tryouts for the cheer team are held in the spring semester in late March each year.

Informal Recreation

The Student Recreation Center (SRC) is available to all students, faculty and staff for recreational free-time use. The SRC facilities offers informal recreation opportunities in basketball, volleyball, indoor soccer, cardio fitness and weight training, indoor jogging and outdoor basketball. Racquetball, swimming and bowling facilities are available in the Steinke Physical Education Center (SPEC).

Intercollegiate Athletics

Scott Gines, *Vice President for Intercollegiate Athletics and Campus Recreation*

McCulley Hall 112. MSC 136. Extension 2800.

NCAA II nationally ranked athletic teams for men and women are a tradition at the university. Athletic teams for women include volleyball, basketball, cross country, indoor and outdoor track and field, softball, tennis and golf. Athletic teams for men include football, basketball, baseball, cross country and indoor and outdoor track and field. Each enrolled student may attend all scheduled regular-season home athletic events free of charge with a validated Student I.D.

UNIVERSITY SERVICES

The university provides a number of services for the university community. Many are free of charges.

Career Services Center

Christian Ferris, *Director*

Eckhardt Hall 104. MSC 106. Extension 2217.

The mission of the Career Services Center is to educate and empower students to achieve personal growth, development and lifelong career success. Career Services assists students beginning in their first year on campus to 1) explore majors and careers in order to set short- and long-term goals; 2) develop effective marketing documents and techniques including résumés, cover letters and networking strategies; 3) interview effectively for internship and full-time job opportunities and 4) successfully transition from school to career. Students are encouraged to meet with Career Services early by setting up an appointment with an advisor and to proactively plan for their career successes. You may setup an in-person appointment or speak to a Career Advisor online from 9am – 9pm, Monday through Friday by visiting AdvisingNow.com.

Freshmen-Juniors:

Completing an internship can be the difference between struggling to secure a full-time job at graduation and walking straight into a well-paying job. Meet with Career Services to find out how to get started.

Seniors:

Your full-time job search should begin two semesters prior to graduation. Peak hiring for May graduates, for example, occurs in the months of October and November prior to graduation.

International Student & Scholar Services

Peter Li, *Director*

Cousins Hall 113A. MSC 176. Extension 3317

The Office of International Student & Scholar Services (OISSS) provides specialized services for international students and scholars attending Texas A&M University-Kingsville, primarily F-1 and J-1 students. These services include assistance with matters dealing with the Department of Homeland Security, employment, academic status, and other related issues.

I-20s, DS-2019s and SEVIS Reporting

The Office is responsible for the following: advising students on immigration issues; initial issuance and updates to form I-20s and DS-2019s; monitoring and verifying students' legal non-immigrant status in SEVIS; updating changes to students' non-immigration status in SEVIS; approving and granting extensions to students' legal non-immigrant status; assisting students by providing them with Social Security Letters; issuing support letters to State and Federal agencies verifying current student status; and communicating and reporting student activity to various federal agencies under the Department of Homeland Security (DHS), such as Customs and Border Protection (CBP), Immigrations and Customs Enforcement (ICE) and U.S. Citizenship and Immigration Services (USCIS) when necessary.

Curricular Practical Training (CPT) and Optional Practical Training (OPT)

The Office processes and approves Curricular Practical Training (CPT) for currently enrolled F-1 students, and Optional Practical Training (OPT) employment requests from students who have graduated from the university. The office maintains SEVIS records for all F-1 students that have been authorized to work under Post-Completion OPT Employment for 12 months, as well as students who qualify for the 24-Month OPT STEM Extension. Texas A&M University-Kingsville graduates currently working under OPT and OPT Extension are required to report any updates in their current residential address, phone, e-mail address and employment activity to our office within 10 days of any changes, or every six months. The office also provides these past students with updated documents for travel purposes, Dependent I-20s, Cap-Gap I-20s and other various documents as needed.

TAMU System Student Health Insurance Policy

International students on an F-1 or J-1 visa/status are required to purchase the TAMU System Student Health Insurance Plan (SSHIP) unless they have an alternate health insurance plan approved through the waiver process. This includes persons who are attending the English Language Training Center. The plan is automatically charged to F-1 and J-1 international students' tuition and fee statement. J-2 dependents must be covered by health insurance as per the United States Department of State regulations.

Academic Health Plans (AHP) provides program management and administrative services for the student health plans of Blue Cross and Blue Shield of Texas.

The Office of International Student & Scholar Services does not determine the cost of the SSHIP. The plan is reviewed annually by System Benefits Administration and the cost is established based on plan design, plan participation and claim experience. The SSHIP is the same for all Texas A&M University system universities. The System Policy (26.99.01 Student Health Policy) is located at: [System Policy 26.99.01](#)

PASE Applications

The Office of International Student & Scholar Services handles processing of PASE applications for Mexican national students. The PASE Application is a form of financial assistance for Mexican national students, and allows those who qualify to pay tuition as a Texas resident. These applications must be notarized and submitted with supporting documents to provide the amount of income and expenses that are reported. On average, applications take two-four weeks to process, as we have anywhere from 50-100 applicants per year.

Student Health and Wellness (SHW)

Jo Elda Castillo-Alaniz, *Director*

1210 Retama Drive. MSC 112. Extension 3991.

[Student Health and Wellness Webpage](#)

Student Health and Wellness (SHW) serves the physical, emotional and distinct academic needs of Texas A&M University-Kingsville students. Our mission is to raise students' awareness on physical, emotional, social, spiritual, intellectual and occupational dimensions, to produce life changing results and to provide a teaching and learning environment which helps students acquire life-long learning skills to obtain educational success. SHW units include Counseling Services, Health Care Clinic, Disability Resource Center (DRC), and a Wellness Program. Department office hours are Monday through Friday, 8 a.m. to 5:00 p.m., except on major holidays or during semester breaks. All services and information provided to/from students is confidential. Confidential information is protected by Federal and State laws, regulations, system policy, and departmental procedures to insure that applicable safeguards are maintained. As a result, student records maintained by SHW are confidential and will only be released as allowable by law or with the written permission by the student.

Counseling Services

1210 Retama Drive. MSC 112. Extension 3991.

[Student Health and Wellness Webpage](#)

Personal Counseling can help with the changes, challenges, frustrations, and growth that are all a part of the college experience. Licensed Professional Counselors are readily available to assist students by providing free counseling services for all currently enrolled students. Common issues include but are not limited to relationship difficulties, career uncertainty, self-esteem, academic concerns, anxiety, depression and eating concerns. Assessment and counseling sessions are confidential to the limits provided by law and professional ethics. Student information will not be released within or outside the university without the individual's written consent. Counseling services includes but is not limited to: individual counseling, career counseling, group counseling, crisis intervention, consultation, and substance abuse/misuse education. To make a counseling appointment, you may call or visit the Student Health and Wellness department.

Health Care Clinic

1210 Retama Drive. MSC 112. Extension 2904.

[Student Health and Wellness Webpage](#)

All registered students pay a health service fee that includes visits to see campus healthcare providers while classes are in session. The health service fee is not to be misconstrued as health insurance. Information about purchasing health insurance for students is available on the SHW website.

The Health Care Clinic hours are Monday through Friday from 8:00 a.m. to 5:00 p.m. (closed between 12:00 and 1:00 p.m.). Patients may call or come by the clinic to inquire about visits to the Health Care Clinic. All TAMUK students are required to present valid student ID before healthcare services are provided.

The Health Care Clinic provides ambulatory care services on a case by case basis. For a general description of health care services provided, please visit our website. Students are charged a nominal fee for medications, labs, immunizations, supplies, and miscellaneous services.

Information on local healthcare providers, after hours, care clinics, and urgent care center, can be found on the SHW website. In the event of an emergency, the students should call 911 or go to the nearest emergency room. The local emergency room is located at Christus Spohn Kleberg Hospital, 1300 General Cavazos Blvd. (361-595-1661). Fees for services rendered at an off-campus facility and transportation to any off-campus facility are the responsibility of the student.

Disability Resource Center (DRC)

1210 Retama Drive. MSC 112. Extension 3024.

[Student Health and Wellness Webpage](#)

The Disability Resource Center (DRC) promotes an inclusive environment at Texas A&M University-Kingsville that is free of physical and attitudinal barriers to ensure students with disabilities engage in a full range of college experiences. The DRC strives to be responsive to student needs by facilitating reasonable accommodations that aid in the student's academic success as well as empower students to be self-advocates.

It is the responsibility of the student to provide documentation which verifies that the student's condition meets the definition of a disability as defined by applicable laws (i.e., Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act of 1990 and the ADA Amendments Act of 2008). Federal Law requires that requests for services for student with disabilities be considered on an individual, case-by-case basis.

The Disability Resource Center (DRC) offers the following services for students with disabilities: accommodations counseling, evaluation referral options, disability related information, adaptive technology, advocacy for students' rights, and intervention services with faculty members. The DRC does not diagnose or conduct disability testing; however, students may contact the DRC office for a referral list of qualified professionals in the surrounding area. Additionally, the DRC does not provide services such as tutoring, personal equipment, personal attendants, or scholarships.

In addition, the DRC has a volunteer program. Students interested in volunteering as a note taker for students with disabilities should contact the DRC office at 361-593-3024.

Students can only self-identify a disability and request services with the Disability Resource Center and no one else on the Texas A&M University-Kingsville campus.

Wellness Program

1210 Retama Drive. MSC 112. Extension 2382.

[Student Health and Wellness Webpage](#)

The Wellness Program strives to provide increased awareness on education, prevention and intervention services involving alcohol, tobacco, other drug abuse and misuse, HIV/AIDS and other STDs, while promoting positive

decision-making and healthy lifestyles. The components within the Wellness Program include Don't Cancel Class, Peer Educator Program (PEP Talk), STEP UP Javelinas - Bystander Intervention Program, and the Women's Enrichment Program. For more information on the Wellness Programs, contact us at (361) 593-2382.

The Don't Cancel Class program is available to faculty, staff, or student organizations requesting educational presentations on academic strategy tools, alcohol, and other drug abuse and prevention, health issues, relationships, wellness and sexual health. To schedule a presentation or workshop please complete the Don't Cancel Class Reservation Form listed under Workshop Reservation Form.

The Peer Educator Program (PEP Talk) reaches out to the university community to increase awareness on health and safety issues. The goal of this program is to share, teach and empower peers to evaluate their lifestyles and make more responsible, healthier decisions.

The Women's Enrichment Program plays an important role in examining and defining the role and status of women in a variety of campus settings by providing and coordinating programs and resources. The program helps to assist with crisis intervention services and provides programs that education and enhances awareness of women's issues on campus. Annual programs include Women's Retreat, Women's History Month, Sexual Assault Prevention, Breast Cancer Awareness and "Take Back the Night."

STEP UP Javelinas –Bystander Intervention Program educates a member of the Javelina community on how to safely and effectively intervene when an individual is experiencing situations that are threatening the person's safety and well-being. To schedule a presentation or workshop contact us at (361) 593-3991.

The Marc Cisneros Center for Young Children

Marisol Loreda, *Director*

Marc Cisneros Center for Young Children. MSC 138. Extension 2219.

The center is the laboratory in which students observe and gain practical experience in working with young children and their parents. Several of the programs in the Department of Human Sciences require observation and/or participation at the center. Students from other disciplines, such as early childhood education, psychology, speech communications and kinesiology, are also provided opportunities to observe and interact with young children.

The Marc Cisneros Center for Young Children was established in 1941 and is located on the corner of University Boulevard and Santa Gertrudis Avenue. Occupying a new state-of-the-art building since June 2001, the center is seeking reaccreditation from the National Association of Child Care Professionals. It meets the needs of 54 children aged three months through five years. Fenced playgrounds provide a large assortment of play structures and equipment, shade and sun areas and open play space. Developmentally appropriate learning centers are provided in each classroom to stimulate and encourage exploration and discovery. The philosophy that young children learn through creative play is evident in planned activities that enhance the children's emotional, social, physical and cognitive development.

A highly qualified, degreed staff work with the children. The school's close proximity to campus and its high quality program make it especially attractive to the university community. Parents are encouraged to register their children early since there is a waiting list. Prospective parents are welcome to call and set up an appointment to visit the center with the Director at any time.

Academic Testing Center

Laura Clarke, *Testing Supervisor*

Robert Cousins Hall 101. MSC 147. (361) 593-3303.

[Academic Testing Webpage](#)

The Texas A&M University-Kingsville Testing Center provides comprehensive testing services for university students and prospective students. The Testing Center serves as a national testing center for tests such as the American College Test (*ACT*), College Level Examination Program (*CLEP*), Law School Admissions Test (*LSAT*), Miller Analogies Test (*MAT*), Performance Assessment Network (*PAN*), Pearson VUE and TOEFL IBT. In addition, Testing also offers: TExES/ExCET, Texas Commission on Environmental Quality (TCEQ), Texas

Commission on Law Enforcement (TCOLE). The Testing Center proctors exams for TAMU-K students and the community. Please contact the Admission office at (361) 593-2315 for the **ACT Residual exam** and the Student Success office at (361)593-4584 for the **TSI exam**.

Veterans Services

Michael R. Lugo, *Director of Veteran Affairs*

Memorial Student Union. Veterans Affairs Office. Extension 4421.

Our goal is to provide quality service to our students who have served our country and expand our military-friendly services and programs for America's finest by preparing them with all information on well-earned and deserved educational benefits. Our office is a guided resource to insure our students pursue and achieve their educational goals, along with professional and vocational objectives. Texas A&M University-Kingsville is a member of the Service members Opportunity Colleges (SOC) Consortium affirming our commitment to recognize and work with current or former military students and their families who want to obtain a college education.

Benefits

Students attending with the aid of Veterans Benefits should inquire with the Veterans Affairs Office prior to registration, to obtain needed information relative to their enrollment and "certification" of attendance to the Veterans Administration. All new students must furnish the Veterans Affairs Office a copy of their DD-214 (Member 4) or a certified DD-214 from the county court clerk of their respective county. The Veteran must also furnish certified copies of marriage certificates, divorce certificates, and dependents' birth certificates, if applicable. Students must provide approved, signed degree plans to Veterans Affairs Office prior to certification of their initial semester. Degree plans are available through the Counseling Office or through departmental advisers. The Veteran's Administration **will not** pay educational benefits for courses taken which do not appear on the students approved degree plan, nor will they pay for courses previously taken and successfully completed.

Federal Veteran Educational Benefits

Forever GI Bill – Harry W. Colmery Veterans Educational Assistance Act: Some new provisions that go into effect immediately include:

- The 15-year time limitation to use Post-9/11 GI Bill benefits is eliminated for Veterans who left active duty on or after January 1, 2013, children who became eligible for the [Fry Scholarship](#) on or after January 1, 2013, and all Fry scholarship eligible spouses.
- We are now authorized to restore benefits and provide relief to Veterans affected by school closures or disapprovals. [Learn more and apply here.](#)
- Reservist who had eligibility under the Reserve Educational Assistance Program (REAP) and lost it due to the program sunset provision will have that service credited toward the Post 9/11 GI Bill program. We are in the process of identifying the approximately 2,800 Reservists affected by this and will send them letters with instructions.
- Certain work-study is permanently authorized; previously it had been re-approved by Congress every few years.
- Anyone eligible for GI Bill can use their benefits at an accredited independent study program at an area career and technical school, or a postsecondary vocational school providing postsecondary level education. There is no action for you to take here, as these programs will go through the normal course of approval by the appropriate State Approving Agency. Any new programs will be added to our GI Bill Comparison Tool.
- The VetSuccess on Campus program will be available to students across the country.
- VA will help Veterans to more clearly identify schools that offer them priority enrollment.

Post-9/11 G.I. Bill provides financial support for education and housing to individuals with at least 90 days of aggregate service on or after September 11, 2001, or individuals discharged with a service-connected disability after 30 days. You must have received an honorable discharge to be eligible for the Post-9/11 GI Bill.

Transfer of Post-9/11 GI Bill Benefits to Dependents (TEB) also offers some service members the opportunity to transfer their GI Bill to dependents. For the first time in history, service members enrolled in the Post-9/11 GI Bill program will be able to transfer unused educational benefits to their spouses or children starting Aug. 1, 2009.

Montgomery G.I. Bill (CH 30) program provides up to 36 months of education benefits. This benefit may be used for degree and certificate programs, flight training, apprenticeship/on-the-job training and correspondence courses. Remedial, deficiency, and refresher courses may be approved under certain circumstances. Generally, benefits are payable for 10 years.

Vocational Rehabilitation and Employment (VR&E) Vet Success Program (CH 31) is authorized by Congress under Title 38, Code of Federal Regulations, CH 31. It is sometimes referred to as the CH 31 program. The Vet Success program assists Veterans with service-connected disabilities to prepare for, find, and keep suitable jobs. For Veterans with service-connected disabilities so severe that they cannot immediately consider work, Vet Success offers services to improve their ability to live as independently as possible.

Montgomery GI Bill-Selective Reserve (CH 1606) is an educational program for active members of the Selected Reserve. Eligible recipients receive a monthly stipend based on enrollment status. CH 1606 eligibility is determined by the Department of Defense. Basic eligibility requires a six-year obligation to serve in the Selected Reserve and satisfactory participation in required Selected Reserve training.

Reserve Educational Assistance Program (REAP or CH 1607) is for certain Reservists who were activated after 9/11/2001. Eligible recipients will receive a monthly stipend based on enrollment status and period of service. To be eligible, you must be a member of a reserve component and have performed active service for a minimum of 90 consecutive days.

Additional Federal programs are available at [U.S. Department of Veterans Affairs Webpage](#)

Texas Veteran Educational Benefits

Texas Hazelwood Act -Texas Veterans no longer entitled to educational benefits under the VA are eligible for assistance under the Hazelwood Act (Texas Education Code 54.203), if they are not eligible for any other federal financial aid. The Hazelwood Act waives tuition and fees for Texas Veterans. Under the Hazelwood Act, an eligible Texas Veteran is one who entered the military service from Texas, or Home of Record at the time of entry into active duty was Texas, or was a Texas resident at the time of entry into military service, served more than 180 days of federal military service- excluding Initial Entry Training (IET), received an Honorable Discharge or General Discharge under Honorable Conditions, exhausted GI Bill benefits if eligible for Post-9/11 GI Bill benefits at the 100% rate, reside in Texas during term of enrollment, meet the GPA requirement of the institution's satisfactory academic progress policy in a degree or certificate program as determined by the institution's financial aid policy and, as an undergraduate student, not to be considered to have attempted an excessive amount of credit hours. The Hazelwood Act provides qualified Veterans, Spouses, and Children with an education benefits of up to 150 hours of tuition and fee exemptions at state supported colleges or universities. **Veterans using the exemption must complete the Hazelwood Act Exemption Application** [Texas Hazlewood Act Exemption Application](#)

Texas Hazlewood Legacy Program – Eligible Veterans may assign unused hours of exemption eligibility to a child under certain condition. To be eligible, the child must:

1. Veteran must qualify for the Hazlewood Exemption
2. Provide death certificate if Veteran is deceased
3. Recipient must be the biological child, stepchild, adopted child, or claimed as dependent for current or previous tax year on IRS 1040
4. Recipient must be 25 years old or younger on first day of class
5. Must meet the GPA requirement of the institution's satisfactory academic progress policy in a degree or certificate program as determined by the institution's financial aid policy and, as an undergraduate student, not be considered to have attempted an excessive amount of credit hours. 2.0 Undergraduate and 3.0 Graduate

6. Recipient must meet the institution's resident tuition requirements
7. Provide DD214 or equivalent supporting documentation

To use the transfer of unused benefits to an eligible child, applicants must complete an application/release form. Please choose the appropriate application below:

Hazlewood Act Exemption Application – Initial application for the Hazlewood Exemption for enrollment. This document requires a notary approval when utilizing the transfer of hours option for legacy applicants.

[Texas Hazlewood Act Exemption Application](#).

Continue Enrollment Form (CEF) – Post initial application for the Hazlewood Exemption for enrollment of students subsequent to prior enrollment at the school in which the student is currently and consistently enrolled.

[Texas Hazlewood Act Exemption Application for Continued Enrollment](#)

Revocation of Previously Assigned Texas Hazlewood Act Exemption Hours – This form must be submitted to the institution where the benefits is currently being used to revoke previously assigned Hazlewood Legacy hours.

[Texas Hazlewood Act Exemption Hours](#).

University Police

Felipe Garza, *Director of Public Safety/Chief of Police*
Seale Hall. MSC 126. Extension 2611.

The University Police Department's primary purpose is to ensure the security of the campus. This department controls traffic and parking, maintains a quiet and orderly atmosphere in which students can pursue an education without disturbances and interference, provides information to visitors on the campus and assists in emergencies. The department consists of 14 state certified police officers, including the director and four state certified dispatchers.

All faculty, staff and students, full or part-time, who operate or expect to operate a vehicle on university property, regularly or occasionally, are required to register those vehicles with the University and obtain a parking permit assigning a designated area or areas for parking at the Business Office located in College Hall. Information regarding vehicle registration, parking zones, permit display, parking penalties or other information with respect to parking and traffic regulations may be found on the [University Police Parking webpage](#).

Javelina Express Card

Memorial Student Union. MSC 133. Extension 4995.

<http://www.tamuk.edu/javelinaexpress>

Texas A&M University-Kingsville requires an identification card (ID) for students, employees and dependents of students and employees. The Javelina Express card must be presented upon request. All ID cards are issued from the Javelina Express Card Office. The Javelina Express Card is your access to Texas A&M University-Kingsville gaining cardholders access to various locations on campus. Students use the card to access their meal plans, residence halls, receive services from the Health Center, the Jernigan Library, Business Office, Student Recreation Center, swimming pool and to gain access to activities and athletic events on campus free of charge. Faculty/staff and guest/dependents can use their Javelina Express Card to gain access to the university swimming pool, fitness center and other approved secured locations on-campus. Faculty and staff paying the appropriate fee will have access to the Student Recreation Center.

Initial employee and student ID cards are free, with a replacement fee of \$10. Dependent IDs carry an initial charge of \$10, with a replacement cost of \$10, and a reactivation fee of \$10 per year. Questions concerning the Javelina Express Card should be referred to the Javelina Express Card Center.

Check Cashing

The Business Office in College Hall will cash checks for students, faculty and staff (up to approved limits) with a valid I.D. card.

Mail Service

Tammy Rivas, *Mail Service Manager*
MSC 100. Extension 2400.

The federal post office located in the Memorial Student Union provides complete postal service to all faculty, staff, students and general public. Services include selling stamps, money orders, self-stamped envelopes, renting post office boxes and mailing packages. Other services include express mail, priority, registered, certified, insured and delivery confirmation. Next to the federal post office is the campus post office, which is responsible for delivering and processing all departmental mail. Mail service is also provided to the residence halls. Service window hours are 8:30 a.m. to 4 p.m. Monday through Friday. Lobby hours are from 7 a.m. to 7 p.m., seven days a week.

Barnes and Noble Javelina Bookstore

Mary Garza, *Manager*
Memorial Student Union. MSC 127. Extension 2601.

The Barnes and Noble Javelina Bookstore provides the campus community with new and used textbooks, other required course material, trade and reference books, office supplies, academically priced software, online textbook reservations, imprinted gift items and academic regalia. "We're more than just books, simple, easy, convenient."

Marketing and Communications

Adriana Garza-Flores, *Interim Associate Vice President*
College Hall 130. MSC 114. Extension 4979.

The Office of Marketing and Communications strengthens the university's image through proactive communications with internal and external audiences. To accomplish this mission, the Marketing and Communication team utilizes a variety of traditional and digital mediums to disseminate news to the university's programs and people to media outlets; university donors, alumni and friends; and other external groups. The office also assists with internal communications and special event planning for major university events and develops and implements strategic marketing communications programs for the university. In addition, the office is responsible for the university's branding and graphics standards, trademarking and licensing, electronic and print publications, and web services.

Office of Student Access

Mary L. Gonzalez, *Associate Vice President for Student Access*
College Hall 230. MSC 181. Extension 2129.

The purpose of the Office of Student Access is to promote the completion of high school, the pursuit of college and the acquisition of higher education degrees for first generation and low income students. The Administrative Office of Student Access is located in College Hall, second floor. The following programs are housed within the area of student access. These offices are located in Eckhardt Hall.

The Educational Opportunity Center (EOC)/The Educational Opportunity Center (EOC Rural)

The Educational Opportunity Center Program (EOC) is made possible through a grant from the U.S. Department of Education. EOC provides counseling information on college admissions to qualified adults who want to enter or continue a program of postsecondary education. An important objective of EOC is to counsel participants regarding financial aid options and to assist in the application process; guidance on secondary school re-entry or entry to a GED program; academic advice and career counseling. The goal of EOC is to increase the number of adult participants who enroll in postsecondary education institutions. EOC provides post-secondary education and training information and application assistance to low income first generation adults who reside in the following counties: Jim Wells, Duval, Brooks, Kleberg, and Nueces. EOC Rural serves participants in the following counties: Hidalgo and Willacy.

Talent Search (TS)

The Talent Search Program (TS) of Texas A&M University-Kingsville is funded by the U.S. Department of Education. The TS program identifies students who demonstrate an interest or desire to attend college and provides them with the motivation and support to enroll in a program of post-secondary education after high school graduation. TS encourages and prepares students for post-secondary enrollment by providing assigned students in grades 9-12 with the following services and activities through group workshops and individual appointments. Talent Search program is held at designated target schools (HM King/Robstown/San Diego/West Oso High Schools): academic advisement, college awareness activities, career exploration activities, financial aid awareness activities, scholarship information, college and career fields trips and individual assistance with college admission, scholarship applications and financial aid forms.

Gaining Early Awareness & Readiness for Undergraduate Programs (GEARUP)

The Texas A&M University-Kingsville GEARUP program (TKGU) provides a broad and strategic array of services that result in the accomplishment of several objectives: increasing the academic performance and preparation for post-secondary education, increasing the rate of high school graduation and enrollment in post-secondary education, and increasing students' and their families' knowledge of post-secondary education options, preparation, and financing. **GEAR UP** provides seven year grants to states and partnerships to provide service at high-poverty middle and high schools. **GEAR UP** grantees serve an entire cohort of students beginning no later than seventh grade and follow the cohort through high school. GEAR UP funds are also used to provide college scholarships to low-income students.

Texas Higher Education Coordinating Board (THECB) G-Force

Collegiate G-Force is a federally funded program through the THECB. The program selects TAMUK students to serve as mentors to area high school students, promoting higher education and work with federally funded TRIO programs in the same capacity. Go Centers provide students with access to information about higher education, while also reaching out to those who may not have previously considered continuing their education beyond high school. The Go Center is the physical hub of energy for college preparation activities and creating a college-going culture within the school. In order to reach out to the student body, a group of students is selected on each campus to be trained as peer educators regarding the career exploration, college preparation, and financial aid processes. This group of students is referred to as the G-Force and is responsible for conducting campus outreach activities as well as working one-on-one with their peers in the Go Center. In addition, higher education institutions have formed their own G-Force teams to assist area high schools with their Go Centers.

Ronald E. McNair Scholars Program

The mission of the Texas A&M University-Kingsville Ronald E. McNair Post-baccalaureate Scholars Program is to prepare and increase the number of juniors and seniors in the fields of Math, Sciences and Engineering to pursue doctoral studies. The program is named after the late Dr. Ronald E. McNair and is one of 155 McNair program sponsored by the U.S. Department of Education under a TRIO grant. McNair Scholars are a talented and unique group of students that, through their participation in the program, receive advising, academic skills enhancement opportunities, faculty mentorship, research experiences, counseling, tutoring and other scholarly activities in preparation for their enrollment in graduate school. Students who participate in the program come from disadvantaged backgrounds, show strong academic potential and are committed to pursuing a doctoral degree. The McNair Scholars Program works closely with the College of Graduate Studies in increasing the number, quality and diversity of Master's and Ph.D. graduates across all disciplines by identifying opportunities for talented students to pursue graduate education, fostering opportunities for fellowships and assistantships and producing new faculty to help close the gaps in higher education in Texas.

President's Undergraduate Research Scholars (PURS)

Texas A&M University-Kingsville PURS is a project designed to increase the number of individuals conducting undergraduate research. PURS is funded to serve 10 students for the spring and summer semesters and eligible to receive up to \$2,000. PURS will provide an opportunity for undergraduate students to engage in high level research with a faculty mentor and prepares them well for graduate education. Students will have the unique opportunity to interact with TAMUK University Administration in a pre and post research session. Research proposals are submitted through the Office of Sponsored Research Services. Students are assisted and trained in proposal submission and related compliance procedures. Recipients are selected by the research committee based on the

quality of the research and the value of the research experience provided for each student.

Student Support Services (SSS)

The mission of Student Support Services (SSS) is to facilitate a climate supportive of academic success and personal enrichment through proactive and individualized services available to the student from their first semester through graduation. SSS students are challenged to take charge of their learning and develop skills that will enable them to enhance their lives and become well rounded citizens of the Texas A&M University-Kingsville community. SSS staff initiate and develop partnerships with students that are academically based and also strive to lead students down a path towards cultural growth and awareness. The program serves 240 students and provides opportunities for academic development, assist students with basic college requirements, and servers to motivate them toward the successful completion of their postsecondary education.

Student Support Services-Science, Technology, Engineering, and Math (SSS-STEM)

The SSS-STEM program provides opportunities for academic development, assists 120 students with basic college requirements, and serves to motivate students toward the successful completion of their postsecondary education. The goal of SSS-STEM is to increase college retention and graduation rates of its participants and help students make the transition from one level of higher education to the next. It fosters an institutional climate supportive of the success of low income and first generation college students and individuals with disabilities through services. SSS-STEM students are challenged to take charge of their learning and develop skills that will enable them to enhance their lives and become well rounded citizens of the Texas A&M University-Kingsville community.

Upward Bound Program/Upward Bound Rural

The goal of the Upward Bound Program is to increase the rate at which participants complete secondary education and enroll in and graduate from institutions of postsecondary education. The program provides support to participants in their preparation for college entrance and opportunities for participants to succeed in their pre-college performance and ultimately in their higher education pursuits. Upward Bound serves high school students from a first generation background and/or low income families. The TAMUK Upward Bound Program serves 55 high school students each year in the target areas of Alice, San Diego, and H.M. Kingsville High Schools. The services provided by the program are as follows: academic instruction and tutoring in various curriculums, preparation for college entrance exams, academic/financial advisement and counseling, mentoring, cultural enrichment events and work study programs. The TAMUK Upward Bound Rural Program serves 60 high school students each year in the target areas of Premont and Raymondville High Schools.

Upward Bound Math and Science (UBMS)/ Upward Bound Math & Science-Rural (UBMS Rural)

The objectives of the Upward Bound Math and Science Programs are to increase the number of low income and first generation students, traditionally underrepresented, in institutions of higher education. To prepare students for college, the program provides an intensive six-week summer residential/research program in math, science, engineering and computer skills. Faculty and graduate student mentors assist with the research and help increase student competency in challenging subject matters. In addition, the Upward Bound Math and Science Program also provides the students with year-round college preparation workshops in ACT testing, financial aid, college admissions, career seminars and academic advising. The program's goal is to encourage students to pursue programs that will lead them to careers in mathematics and science. This UBMS program serves 60 students each year in the target areas of Alice, San Diego, and H.M. Kingsville high schools. UBMS Rural serves 60 students in target areas of Robstown and Premont high schools.

TAMUK Council for Undergraduate Research (TCUR)

The TAMUK Council for Undergraduate Research (TCUR) is encouraging all TAMUK faculty and students to get involved in undergraduate research. Undergraduates who aid graduate students, work with a professor on his/her research, or perhaps are just interested in furthering their knowledge in a certain area are much more likely to finish their bachelor's degree, go on to graduate school, and tend to have a better idea of what they want to do as a career. Freshmen and higher undergraduates are eligible, and are encouraged to apply in conjunction with faculty. Fifty thousand dollars have been allocated by the office of the Vice President for Research and Graduate Studies for undergraduate research. The funds are to support undergraduate student wages, research material and supplies for the student to conduct the research. Proposals will be funded between \$2,000 to \$5,000 each, for approximately 10 to 15 grants total. Each undergraduate student will have to conduct a presentation, or poster, and each faculty mentor

will have to provide simple periodic status reports, and will need to submit a final report indicating how the TCUR project assisted the goal of undergraduate research.

Javelina GOLDS – Generation Of Leaders Destined to Succeed

Javelina GOLDS's comprehensive program was created to specifically address the development of first-generation students throughout their college experience. Our program delivers multiple levels of support, including student development, coaching, academic advising, mentoring, leadership and community engagement opportunities for eligible grant recipients to help address the unique challenges first-generation students face. The Javelina GOLDS Program accepts (100) students each year to participate in this special cohort. Students are welcomed into the program upon admission to Texas A&M University-Kingsville. Students selected to the program will receive an annual \$1,000 scholarship. In addition to the scholarship, students will receive a number of social, academic, and leadership activities designed to guide Javelina GOLDS through key transitions pivotal to their success.

Javelina Teacher Preparation Enhancement Project (JTPEP)

The Javelina Teacher Preparation Enhancement Project (JTPEP) at the Texas A&M University-Kingsville (TAMUK) will implement services and activities that increase the capacity and effectiveness of TAMUK's University-Based Educator Preparation Program (UBEPP). JTPEP will provide services and activities that remove or reduce many of the barriers to persistence, graduation, and certification that TAMUK's UBEPP students (especially those students from low-income households) commonly encounter. This includes providing stipends for undergraduate students preparing for teaching careers. By providing these services and activities, JTPEP will increase the rate at which UBEPP seniors complete their baccalaureate degrees and become certified to teach in Texas at the more than 1,000 public schools across South Texas.

AUXILIARY ACADEMIC RESOURCES

Much of the learning and the research in a university occur outside organized classes. The following units of Texas A&M University-Kingsville support faculty and student educational and research pursuits.

Information Technology (iTECH)

Robert Paulson, *Associate Vice President for Information Technology & Chief Information Officer*

College Hall 220. MSC 185. Extension 2404.

[iTECH Webpage](#)

iTech will facilitate the strategic use of technology to empower students, faculty and staff to achieve their goals as scholars, educators and employees. Information Technology will strive to provide state of the art technology resources in a secure, efficient environment.

JNET

[JNET Login Webpage](#)

JNET is a comprehensive web portal connecting to web-based services. With a single login to JNET users can access registration information, Blackboard, grades, DegreeWorks, financial aid, billing services, Texas A&M University-Kingsville email, library resources, Blue and Gold Connection and much more.

24-hour Technology Support Helpdesk

[iTECH Support Services Webpage](#)

(361) 593-4357 (HELP)

iTech provides a 24-hour support helpdesk called Service Now. Reach a support technician via phone or by submitting a ticket online for assistance with questions on computer problems, Blackboard Learning Management System, JNET or other technical issues.

Student Help Desk

[iTECH Support Services Webpage](#)

iTech provides a student help desk to address technical needs. Help desk support staff can assist with password resets, account information (VDI, email, JNET, Blackboard, connecting smart devices), wireless and virus troubleshooting. Hours of operation are the same as the Jernigan Library Commons

([Jernigan Library Hours webpage](#)).

Password Reset Service

[Password Reset Service Webpage](#)

A three step process designed to assist to reset a university password online at the time that is most convenient 24/7. This web page will also give access to account information, including email address and username.

Blackboard Learning Management System Support

[Blackboard Learning Management System Support Webpage](#)

Blackboard is the University's learning management system. Some courses will be using Blackboard to post assignments, hold discussions, take assessments, post grades, etc. Find tutorials on how to perform several of the tasks to some course requirements. There is also single sign-on from JNET.

Official email

[University Email Webpage](#)

The University provides an email for official university communication. Emails regarding classes, grades, registration, status, financial aid or other important university information will be sent to the university email address.

Computer Lab Access

[iTECH Support Services Webpage](#)

iTech provides access to computer labs across campus. The lab locations and times are available on the iTech web page.

Internet

The University provides Internet for academic, research and administrative uses.

iTech Policies and Procedures

[iTECH Policies and Procedures Webpage](#)

iTech policies articulate the university's vision, strategy and principles as they relate to the use of information and information technology resources. iTech policies interpret applicable laws and regulations and ensure that the policies are consistent with legal and contractual requirements. Policies specify requirements and standards for the use of iTech resources across the university.

Office of Institutional Research and Assessment

Miao Zhung, *Director*

College Hall 231. MSC 215. Extension 2244.

The Office of Institutional Research (OIR) and Assessment supports institutional planning, policy formulation and decision making through the development and dissemination of accurate and timely data, reports and analysis. The office is committed to providing support for evaluation and assessment activities throughout the university. The office is also responsible for ensuring the timely submission and accuracy of reports to external agencies including the Integrated Postsecondary Education Data System (IPEDS) with the National Center for Education Statistics, the Texas Higher Education Coordinating Board, Legislative Budget Board and The Texas A&M University System.

Office of International Studies and Programs

Peter Li, *Director*

Cousins Hall 109. MSC 163. Extension 3558.

[Study Abroad Program](#) website

The Office of International Studies and Programs (OISP) works toward the internationalization of all aspects of Texas A&M University-Kingsville (TAMUK) by involving students and faculty in international studies and research globally. OISP consists of the following interrelated areas: 1) Study Abroad Programs and International Internships; 2) Student and Faculty Exchange Programs; 3) Collaborative International Research; 4) International Exchange Education Fund (IEEF) Scholarship; 5) International Memorandums of Understanding/Agreements of Cooperation; and 6) Student Foreign Travel.

Study Abroad Programs and International Internships

In fulfillment of the mission of TAMUK, OISP encourages undergraduate and graduate students to spend a summer, a semester or, ideally, an academic year outside the United States. Students can earn credit toward their degrees through international studies. Faculty, staff and community members are also encouraged to participate in these programs. Options, with or without credit, are available for students and non-students in any degree or non-degree program.

Exchange Programs

TAMUK has many exchange agreements with international institutions. Students may earn credit toward their degree programs while faculty can obtain experience that positively impacts their professional careers. International students and faculty can also come to TAMUK through an exchange program and study or teach here on campus. TAMUK currently has exchange agreements with institutions in Latin America, Europe and Asia.

Collaborative International Research

OISP will work with faculty, departments and colleges on identifying, developing and securing international research opportunities world-wide. This includes assisting faculty with Fulbright and other teaching and research awards and locations.

Scholarships

All Texas A&M University-Kingsville full-time students are welcome to apply for a scholarship to facilitate international studies. Scholarships can be used for tuition, fees and travel for an approved TAMUK Study Abroad Program outside the United States. These scholarships are also available to degree-seeking international students and

these pay for their tuition and fees here at A&M-Kingsville.

International Memorandums of Understanding/Agreements of Cooperation

OISP is responsible for handling the process and procedure for developing and signing of agreements of cooperation/memorandums of understanding between TAMUK and institutions abroad. The Office collaborates with the President's Office in organizing ceremonies and official visits of international delegations.

Student Foreign Travel

All students traveling internationally on behalf of TAMUK (research project, conferences or organizational activities) with or without a TAMUK employee, are required to register their travel with OISP.

Office of Research and Sponsored Programs

Maria E. Martinez, *Executive Director for Strategic Initiatives*

College Hall 150. MSC 201. Extension 2552.

The office assists faculty in securing external funds for research. It coordinates campus research activities, acts as a liaison for interdisciplinary research and community outreach programs, provides information on funding sources and proposal and budget development, as well as data on submissions and awards. All proposals for external funds are submitted through the Office of Research and Sponsored Programs.

John E. Conner Museum

Jonathan Plant, *Director*

Conner Museum. MSC 134. Extension 2849.

The museum, a unit of the College of Arts and Sciences at Texas A&M University-Kingsville, displays exhibits on the history and heritage of South Texas and the natural history of the Tamaulipan Biotic Province. Museum galleries include the Hall of South Texas History, the Caesar Kleberg Hall of Natural History, the Graves Peeler Hall of Horns and the West Gallery which features changing temporary exhibits 5-6 times a year. The museum provides a range of programs for both children and adults as public service outreach for the university in addition to collaborating with other academic departments. The museum also maintains a reference library accessible to the public and study collections accessible to researchers as consistent with its mission as an educational resource.

ACADEMIC REGULATIONS

Mildred Slaughter, *Registrar*
Memorial Student Union 132. MSC 105. Extension 2811.

TEXAS SUCCESS INITIATIVE (TSI)

The Texas Success Initiative (TSI) requires students to be assessed in reading, writing and mathematical skills before enrolling in a Texas public college or university. Texas Education Code, section 51.3062, provides institutions of higher education a means of determining students' readiness to enroll in freshman-level course work. Students are required to complete one of four assessment tests before enrolling in course work at Texas A&M University-Kingsville unless they meet one of the TSI exemptions explained under "Admission to the University" (TEXAS SUCCESS INITIATIVE (TSI)).

ONLINE SERVICES

The University offers many online services for students. These services include, but are not limited to, registering for classes, dropping classes, changing a personal identification number (PIN), updating personal information (address, telephone number, etc.), viewing grades, viewing an account summary, viewing holds, paying university bills, viewing transcripts, ordering transcripts, applying for graduation, viewing training modules on how to access and use university automated systems, access to all types of university calendars and information to university events, library resources and taking courses online.

If an online service is required that is not available, a request should be made to the appropriate department, college or to the Office of the Registrar.

ACADEMIC ADVISEMENT

Texas A&M University-Kingsville places very strong emphasis on developing a one-to-one individual academic advisory relationship between each student and an adviser. This relationship is essential when a student participates in the registration process.

Academic colleges and their departments have specific academic advising procedures, requirements and schedules for students' degree plans and for procedures to register for classes. A student's adviser is normally in the department offering the field in which the student is majoring. The Office of the Registrar will assist a student who needs help in locating an appropriate academic adviser.

A student who remains unsure of a major would profit by discussing this with an academic adviser or by going to the university counseling center or the Career Services Center to receive career counseling and testing or other appropriate referral. Some vocational aptitude tests and tests designed to help a student select a major are available.

Timely Completion of Developmental Education Course Work

Timely completion of required developmental education courses will improve the likelihood of student success. Therefore,

1. new freshmen at Texas A&M University-Kingsville (defined as having completed 0-30 semester hours prior to their first full-time enrollment) must complete all developmental education requirements within their first 45 completed hours on our campus;
2. transfer students arriving at the sophomore level or above (defined as having completed 31 or more semester credit hours) must complete all developmental education requirements within their first 30 hours of enrollment on our campus.

Failure to achieve the freshmen or transfer student standard will result in the student being placed on scholastic probation, regardless of grade point average. At this point, the student will have one semester to achieve Texas Success Initiative (TSI) compliance.

Continued failure in achieving TSI compliance as described above will result in the student being placed on enforced withdrawal (or its equivalent), regardless of grade point average. The students may return to the university after completing required developmental education elsewhere or the student may request approval for readmission from the Associate Vice President for Student Success.

Degree Plan

DegreeWorks is an automated system available online to assist a student in planning and monitoring progress towards degree completion. Information concerning DegreeWorks is available from your academic advisor, the Office of the Registrar, or on the Registrar's website.

Requirements for degree completion are reflected in DegreeWorks which will serve as the official degree plan for all students. Exceptions: Upon initial registration at this institution, Student Athletes and Student Veterans will require a department chair signed copy of their degree plan to ensure compliance with Federal regulations.

Final degree requirements must be approved by the dean of the college in which the major is taken. All undergraduate degrees must conform to "General Requirements for Graduation with a Baccalaureate Degree" set forth in this catalog. The registrar will be the final authority for graduation requirements.

Course Listings

The term "course" means a definite unit of work in a subject. Courses are offered on a semester basis. University course offerings are listed in this catalog by college and by department or program within that college according to the following method:

Letter Code: A four letter code at the beginning identifies the department or program that offers the course. A list of these letter codes is provided just after the index to the catalog (last page).

Number Code: The four digit code distinguishes each course in that department or program and identifies the level at which it is offered. The first and second digits in the course number hold specific meanings. The first digit indicates the course level (1000 freshman; 2000 sophomore; 3000 junior; 4000 senior; 5000 graduate; 6000 doctoral) and the second digit indicates semester credit hours for the course. Courses numbered at the 1000 and 2000 level are lower division courses that are normally introductory in nature. Upper division courses numbered 3000 and 4000 are advanced undergraduate courses that normally require junior or senior standing and/or the completion of a preceding course or courses. Courses numbered 5000 and 6000 are open only to students with graduate standing.

Title: The identification code is followed by the course title. The identification code and a shortened form of the course title are used to list courses in the *Class Schedule* (available view the Blue and Gold Connection) each semester for registration purposes and on a student's permanent transcript.

Two-Year College Equivalency: Courses commonly taught at two year colleges in the State of Texas are identified immediately following the title of the equivalent course by a four-letter, four-number code in parentheses. When such an entry appears, the university accepts those courses as the equivalent. No work taken at a two year college can be transferred as an upper division course.

Credit Hours: The final information given on a course listing's entry line indicates the semester credit hours of the course. When the letter *V* appears, the course is offered for variable credit, to be determined at the time of registration. The two digits in parentheses following the semester credit hours are the number of hours of lecture and the number of hours of laboratory required each week respectively. When a course includes a recitation, three digits appear in parentheses following the semester credit hours indicating the number of hours of lecture, the number of hours of laboratory and the number of hours of recitation required each week respectively.

Course Description and Special Conditions: Below the entry line is a brief description of the course and a notice of any special restrictions for registration in the course.

REGISTRATION

The university has a computer-assisted registration system. It is designed to provide individual academic advising between faculty or academic adviser and student. This gives students an opportunity to review their academic programs and select the specific sections of the courses desired for the next semester. For specific dates and information on registration, the student should consult the university website and/or the Academic Calendar.

Priority Registration

Currently registered students will register for classes according to a priority registration schedule. The schedule will provide the time and date for registration. Students need to schedule an appointment with their academic or faculty adviser prior to registering for courses. The schedule will be posted on the Registrar's website with information about the rules governing the process. New freshmen and transfer students will register during their university orientation session.

Web Registration

The university has a computer-assisted registration system which allows students to register over the web. Web registration is available for eligible students only and requires academic advising prior to registration. Specific registration dates, instructions and information are provided on the university website (Academic Calendar).

Normal Load

The normal load for a semester is usually one-eighth of the total number of credit hours required for the degree toward which the student is working. That load is normally 15-18 hours per fall and spring semesters. The normal load for a summer session is two courses (6-7 semester hours). The normal load for an intersession is 3 hours.

A full-time student, defined as one carrying a minimum of 12 semester hours, is expected to register each semester for a normal load of work. A student registered for fewer than 12 semester hours is considered a part-time student. Only hours for which a student is currently enrolled at Texas A&M University-Kingsville can be used toward certification of enrollment.

A freshman may not register for more than the normal load during the first semester. Any succeeding semester or term, a student may register for more than the normal load (an "overload") only on the approval of the respective college dean. If a student is concurrently enrolled at other institutions of higher education in the same semester, the total course load at all institutions is to be considered in applying these policies. It is the responsibility of the student to inform his/her dean of any concurrent enrollments.

Prerequisites

No student shall be allowed any credits for a course before credit in its prerequisite is obtained, except on the written approval of the chair of the department offering the course and the dean of the college in which the student is majoring.

All students must have successfully completed ENGL 1301 and ENGL 1302 during their first 75 semester hours of credit. No additional 3000- or 4000-level courses may be taken or transferred in until this requirement is met.

Schedule Changes

Adding a Course

A course may be added by a student using the online registration system without approval of university officials, as long as departmental approval is not required. (See regulation for "Normal Load.") It is highly recommended that a student consult with his/her academic adviser before attempting to add a course. After the online registration system is closed, written permission is required from the academic adviser and professor (of the course being added) to add the course. These requests must be processed by the Office of the Registrar. The student may only add classes during the time specified in the official academic calendar.

Dropping a Course

A course may be dropped by a student without approval from his/her academic adviser or other university official. However, athletes must have approval from the athletic adviser and one other athletic administrator to insure eligibility requirements. Transitional (developmental) courses can only be dropped with the approval of the

Associate Vice President for Student Success or his/her representative. It is highly recommended that a student consult his/her academic adviser before dropping a course because of the impact on financial aid, graduation, etc. After the online registration system is closed, all drops must be processed by the Office of the Registrar.

A student who, by dropping a course, becomes registered for less than 12 hours will be reclassified as a part-time student.

Refer to the Refund of Fees section of the catalog to determine if a refund of tuition and fees will be authorized.

Senate Bill 1231 (Texas Education Code Section 51.907) and the University's Drop Policy for Undergraduate Students

Senate Bill 1231, passed during the 80th Texas Legislative Session, limits the number of drops that certain undergraduate students may accrue without a punitive grade. Undergraduate students who completed a high school or equivalent program and enrolled in an institution of higher education prior to the Fall Semester of 2007 are exempt from the requirements of Senate Bill 1231. Undergraduate students who complete a high school program, or the equivalent, and enter a Texas public institution of higher education for the first time on or after the Fall Semester of 2007 are subject to the requirements of Senate Bill 1231.

Drop Policy for Undergraduate Students Exempt from Senate Bill 1231

A student exempt from Senate Bill 1231 may drop a course with an automatic grade of Q if the drop is processed on or before the date to receive an automatic grade of Q (approximately the 10th week of the semester or the 60% point of the summer session) as indicated on the official university academic calendar, regardless of the student's academic performance in the course at the time of the drop. The grade of Q is a non-punitive grade that will not affect the student's grade point average.

A course may not be dropped after the automatic Q date (set by the university's academic calendar).

Drop Policy for Undergraduate Students Subject to Senate Bill 1231

Beginning with the 2007-2008 Academic Year, undergraduate students subject to Senate Bill 1231 will be permitted only six (6) non-punitive drops during their undergraduate studies. Non-punitive grades included in the maximum number of drops will be identified on the transcript with a grade of QI. Once a student has accumulated 6 (six) QI grades, the only grade that may be awarded for a dropped course is a grade of QF (which is an F for GPA purposes), regardless of the student's academic standing in the class. Drops processed while withdrawing from the university will not be included in the maximum number of non-punitive drops.

A course may not be dropped after the automatic Q date (set by the university's academic calendar).

Drops Policy for Course with Concurrent or Corequisite Enrollment Requirements for Undergraduate Students Subject to Senate Bill 1231

In determining the number of non-punitive course drops by a student subject to Senate Bill 1231 when concurrent or corequisite courses are involved, the following regulations will apply. (Concurrent and corequisite courses are courses with different course numbers such as a lecture course with its own course number and a lab course with a different course number that must be taken at the same time.)

1. If the student is required to drop both courses when dropping either course, then both course drops will be calculated as one drop.*
2. If the student is not required to drop both courses at the same time, then each course will be treated as a separate drop.*

*Each drop will be subject to the maximum number of non-punitive drops allowable under Senate Bill 1231.

Exceptions to the Maximum Number of Non-Punitive Drops for Undergraduates Subject to Senate Bill 1231

A non-exempt student may drop a course with a non-punitive grade that is not included in the maximum number of non-punitive drops if extenuating circumstances are involved. In such cases, a grade of QE will be posted as the student's official grade for the course. A grade of QE may only be awarded if one or more of the following

circumstances are involved and the drop is approved by the appropriate college dean.

1. The student has a severe illness or other debilitating condition that affects the student's ability to satisfactorily complete the course.
2. The student is responsible for the care of a sick, injured or needy person that affects the student's ability to satisfactorily complete the course.
3. The student has suffered the death of a person who is considered to be a member of the student's family or person who is otherwise considered to have a sufficiently close relationship to the student* that the person's death is considered to be a showing of good cause for dropping the course.
4. The student is a member or dependent of a member of the Texas National Guard or the armed forces of the United States and the active military service is considered to be a showing of good cause for dropping the course.
5. The student has a change of work schedule that is beyond the control of the student and the change affects the student's ability to complete the course.
6. The student has other extenuating circumstances that prevent the completion of the course and the circumstances are approved by the dean of the college.

*A "member of the student's family" is defined to be the student's father, mother, brother, sister, grandmother, grandfather, aunt, uncle, nephew, niece, first cousin, step-parent, or step-sibling; a "person who is otherwise considered to have a sufficiently close relationship to the student" is defined to include any other relative within the third degree of consanguinity, plus close friends, including but not limited to roommates, house mates, classmates, or other persons identified by the student for approval by the institution, on a case-by-case basis.

Appeals to the Maximum Number of Non-Punitive Drops for Undergraduates Subject to Senate Bill 1231

A student who wishes to request an exemption to the maximum number of non-punitive drops must submit a letter of appeal with appropriate documentation to the dean of the college within five (5) business days of the drop. If the student cannot provide the supporting documentation within five business days of the drop, the student must request an extension with the dean of the college within five business days of the drop.

Transitional (Developmental) Courses and the 6-Drop Policy

Transitional courses are exempt from the 6-drop policy. A student may drop a transitional course with the approval of the Associate Vice President for Student Success or his/her representative. If the course is dropped on or before the date to receive an automatic grade of *Q* the student will receive grade of *Q*, regardless of the student's academic performance in the course at the time of the drop. The grade of *Q* is a non-punitive grade that will not affect the student's grade point average.

A course may not be dropped after the automatic *Q* date (set by the university's academic calendar).

Withdrawal from the University

If a student finds it necessary to withdraw from the university, the student must contact the Office of the Registrar and process a written withdrawal form. A student exempt from Senate Bill 1231 who is withdrawing (dropping all active courses) from the university prior to the automatic *Q* date (see the academic calendar for exact date) of the semester/term will receive an automatic grade of *Q* in each course being dropped at the time of the withdrawal. In the case of a student subject to Senate Bill 1231, a grade of *QE* will be awarded in each course. Students may not withdraw from the university after the automatic *Q* date (set by the university academic calendar). (**Also see regulations entitled "Refund of Fees."**)

Withdrawal of Students Ordered to Military Active Duty

If a current student is called to active duty, and the duty will exceed 25% of the total number of class meetings or contact hour equivalents, the student has several options for courses in which he/she is enrolled. The student must provide a copy of military orders to the Office of the Registrar to receive one of the following: 1) full refund of tuition and fees paid by the student for the semester in which the student withdraws; 2) with instructor approval,

incomplete grade(s) for the semester in which the student withdraws; or 3) with instructor approval, assignment of an appropriate final grade(s) or credit(s). Upon the student's request, pre-registered classes will be dropped. If the student returns prior to the beginning of a semester he/she will be reinstated into this institution.

If a current student, including one enrolled in distance education, self-paced and other asynchronous courses, is called to active military service for a period of time not to exceed 25% of the total number of class meetings or contact hour equivalents, and chooses not to withdraw from the university, the student shall be excused from attending classes or engaging in other required activities, including examinations, during that period of time. The student shall be allowed to complete (an) assignment(s) or take (an) examination(s) within a reasonable time after the absence. The student's course work previously completed will be retained and the student will be able to complete the course without prejudice and under the same course requirements that were in effect when the student enrolled in the course. If the course requirements are not completed by the end of the semester in which the student is called to active military service, the grade of *I* will be awarded. Normal academic regulations relating to grades of *I* will apply, as well as normal grade dispute resolution processes, in the event of such disputes.

Excess Undergraduate Credit Hours (45 Hour Rule vs 30 Hour Rule)

Affected Students

Effective with students initially enrolled in the fall 1999 semester and subsequent terms, hours attempted by a resident undergraduate student that **exceed more than 45 hours of the number of hours required for completion of the degree plan in which the student is enrolled**, students attending Texas A&M University-Kingsville will be assessed \$100 per credit hour for repeated and/or excessive hours.

Effective with students initially enrolling in the fall 2006 semester and subsequent terms, hours attempted by a resident undergraduate student that **exceed more than 30 hours of the number of hours required for completion of the degree program in which the student is enrolled**, students attending Texas A&M University-Kingsville will be assessed \$100 per credit hour for repeated and/or excessive hours.

For the purpose of excess hours, resident undergraduate student includes a nonresident student who is permitted to pay resident tuition.

*Limitation on Formula Funding for the 45-Hour Rule**

Funding of excess undergraduate semester credit hours is limited as follows:

- (a) Institutions may not submit for formula funding semester credit hours attempted by an undergraduate student who has previously attempted 45 or more semester credit hours beyond the minimum number of hours required for completion of the baccalaureate degree program in which the student is enrolled.
- (b) An undergraduate student at a four-year institution who is not enrolled in a degree program is considered to be enrolled in a degree program requiring a minimum of 120 semester credit hours.
- (c) Students who enroll on a temporary basis in a Texas public institution of higher education, and are not seeking a degree or Level-Two certificate, and are also enrolled in a private or independent institution of higher education or an out-of-state institution of higher education are considered to be enrolled in a degree program requiring a minimum of 120 semester credit hours.
- (d) For the purposes of the undergraduate limit, an undergraduate student who has entered into a master's or professional degree program without first completing an undergraduate degree is considered to no longer be an undergraduate student after having completed the equivalent of a bachelor's degree or all of the course work normally taken during the first four years of undergraduate course work in the student's degree program.
- (e) The following types of semester credit hours are exempt and do not count toward the limit:
 - (1) semester credit hours earned by the student before receiving a baccalaureate degree that has been previously awarded to the student;
 - (2) semester credit hours earned through examination or similar method without registering for a course;
 - (3) semester credit hours from remedial and developmental courses, technical courses, workforce education courses or other courses that would not generate academic credit that could be applied to a baccalaureate degree and is within the 18-hour limit at the institution;
 - (4) semester credit hours earned by the student at a private institution or an out-of-state institution;
 - (5) any semester credit hours not eligible for formula funding; and
 - (6) credit earned prior to high school graduation.

**Limitation on formula funding for the 30-hour rule -- same as the 45-hour rule.*

An institution of higher education may charge a higher tuition rate, not to exceed the rate charged to nonresident undergraduate students, to an undergraduate student whose hours can no longer be submitted for formula funding because of the funding limit defined in section (a) above.

Concurrent Enrollment

Another University:

Credits earned by a student at another institution while also enrolled at Texas A&M University-Kingsville will be transferred to Texas A&M University-Kingsville only if the student has received prior written approval from the college dean. Prior approval will be granted consistent with the university's normal load regulations.

Home Institution:

Concurrent enrollment, by an undergraduate with senior status, to enroll in a graduate course may be allowed only in the final year in which the undergraduate student is completing all undergraduate requirements for graduation to receive a bachelor's degree. In such concurrent enrollment, the student must not enroll in excess of a total of 15 SCH in a fall/spring semester and no more than 6 SCH in a summer term. **The graduate course(s) can be used to satisfy either the baccalaureate degree or the master's degree requirements. Once a graduate course is used towards a baccalaureate degree, it cannot be used to satisfy graduate degree requirements.** In addition, the student is limited to a maximum of nine (9) SCH of 5XXX courses. The student must have an overall minimum GPA of 2.60 or better. The concurrent enrollment form must be submitted to the Graduate Office with approved signatures, transcripts, and registration form on or before census class day of a semester or summer term.

Visiting a Course (*Auditing a Course*)

Any person may request permission of the Office of the Provost and Vice President for Academic Affairs to visit a course. Individual instruction courses are not open to visitors. Visitors do not have the privilege of submitting papers, taking part in class discussions or participating in laboratory or field work. Visitors pay fees according to the published credit hour fee schedule, except that no additional fee will be required of a full-time student. A visitor's name will not be entered on the class rolls or permanent records. The notice of approval of a request to visit a course, properly receipted after fees are paid, will serve as a permit to attend a class.

Course Attendance by Senior Citizens

A senior citizen (age 65 or older) may visit courses offered by this university without payment of a fee if space is available. Laboratory courses or individual instruction courses cannot be opened to visitors. Visitors do not have the privilege of submitting papers, taking part in class discussions or participating in laboratories or field work. The names of visitors will not be entered on the class rolls or permanent records. The visiting of courses by senior citizens will be subject to restrictions as may be determined by the chief administrative officer or designated representative on campus.

CLASS POLICIES

A student has the right to expect competent, well-organized instruction for the full number of clock hours allotted for a course; to sufficient written assignments, graded fairly and with reasonable promptness to show the student's academic standing in the course at least before mid-semester; to have ample opportunity to confer with the instructor at published office hours and to review graded written work; to freedom from ridicule, discrimination, harassment or accusations in the presence of other students or faculty members; and to an avenue for appealing to higher academic authority in case of alleged unfairness by an instructor.

Cheating and Plagiarism

Students are expected to do their own course work. Simple cases of first offense cheating or plagiarism by an individual student may be handled by the instructor after consultation with the department chair. When the evidence is indisputable, the usual penalty is a grade of *F* on the particular paper or in the course. The student is usually confronted with the evidence in private and advised of the penalty to be assessed. The evidence will be retained for at least one full year.

For more serious cases, such as those involving repeated offenses, conspiracy with other students or the theft and selling of examination questions, a report should be made by the instructor via the department chair and dean of the

college to the Provost and Vice President for Academic Affairs for disciplinary action. Expulsion from the university is a normal penalty for such offenses.

Class Attendance

A vital part of every student's education is regular attendance of class meetings. Every faculty member is encouraged to keep a current attendance record on all students. Any absences tend to lower the quality of a student's work in a course, and frequent or persistent absences may preclude a passing grade or cause a student to be dropped from one or more courses upon the request of a faculty member to the Registrar's Office through appropriate channels. Courses will be officially dropped on the day the request is received by the Registrar's Office (as long as the request is received no later than 5 p.m. on the last day to drop with an automatic *Q* (set by the university academic calendar).

Absences for Religious Holy Days

The university will allow students who are absent from classes for the observance of a religious holy day to take an examination or complete an assignment scheduled for that day within a reasonable time before or after the absence. The student should notify each faculty member of this proposed absence as early in the semester as possible. The instructor may appropriately respond if a student fails to complete the assignment or examination within a reasonable time after the absence.

"Dead Week and Study Day"

To support the learning environment, the university will adhere to a four school day period of student study before the first scheduled final examinations each term. During this time, no required quizzes, tests or examinations (except for make-up tests) shall be administered. The latter does not preclude the introduction of new material in class or the administering of laboratory final examinations, nor does it create any implication that class attendance is not expected during this period. The day before final examinations are scheduled to begin will be designated as a study day. No classes will be held on this day to allow preparation time for students and faculty. Scheduling of other university events or functions that involve students is discouraged and should be limited during this period.

Research on Human Subjects

Research that involves human subjects must be approved by the Institutional Review Board for the Protection of Human Subjects.

GRADES

Grades, with numerical values corresponding to these letters, are recorded as follows:

- | | |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>A</i> | Excellent, 90-100. |
| <i>B</i> | Good, 80-89. |
| <i>C</i> | Average, 70-79. |
| <i>D</i> | Passing, 60-69. |
| <i>F</i> | Failure, below 60. |
| <i>CR/NC</i> | Credit/Non-credit: used for courses that do not meet the normal or traditional framework of course scheduling and do not lend themselves to letter grading. |
| <i>I</i> | Incomplete: given to a student who is passing but has not completed a term paper, examination or other required work. The instructor and the student are required to complete the standard university contract form for each course in which the temporary grade of <i>I</i> has been assigned. A copy of the contract must be submitted to the Registrar's Office by the instructor no later than the date grades are due. The grade of <i>I</i> will be used only to allow a student who has encountered some emergency such as illness or an accident an opportunity to complete the requirements for a course. A grade of <i>I</i> reverts to a grade of <i>F</i> one year from the close of semester/term in which the grade was originally recorded if the course requirements have not been satisfied. Grade of an <i>I</i> will be assigned by the Office of the Registrar upon receipt of the I Contract. |
| <i>Q</i> | Dropped: given when a student has officially dropped or withdrawn from the university before or on the date indicated on the official university academic calendar for an automatic <i>Q</i> , regardless of student's standing in class. |

<i>QE</i>	Dropped: given when a student impacted by SB1231 has officially dropped a course and extenuating circumstances are involved (refer to “Exceptions to the Maximum Number of Non-Punitive Drops for Undergraduates Subject to Senate Bill 1231.” Also applies to students impacted by SB1231 who officially withdraw from the university.
<i>QF</i>	Dropped: given when a student impacted by SB1231 has officially dropped a course after the accumulation of six (6) <i>QI</i> grades regardless of the student’s academic standing in the class.
<i>QI</i>	Dropped: given when a student impacted by SB1231 has officially dropped a course before or on the date indicated on the official university academic calendar for an automatic <i>Q</i> , regardless of student’s standing in class. Students are allowed a total of six (6) drops during their entire undergraduate studies.
<i>S</i>	Satisfactory: used to report 5-week grades for 1000, 2000 and transitional developmental courses.
<i>U</i>	Unsatisfactory: used to report 5-week grades for 1000, 2000 and transitional developmental courses.
<i>X</i>	No grade posted by instructor: used to indicate that no grade was posted by the instructor teaching the course. Grade of <i>X</i> reverts to a grade of <i>F</i> at the end of the next semester.

Removing the Grade of *I*

The grade of *I* must be removed within the time specified by the instructor, not exceeding 12 months from the date the *I* was recorded. When the student completes the work in the course, the instructor submits a request for a grade change through the chair of the department and the college dean to the Registrar’s Office. The grade of *I* may be changed only to *A*, *B*, *C*, *D* or *F*. Should the instructor not submit a Request for a Grade Change, the *I* will become an *F*. Extension of time, when merited, may be granted by the Provost and Vice President for Academic Affairs after consultation with the dean of the college concerned. *I* grades must be completed prior to graduation. *I* grades not completed by the end of the semester in which the student is scheduled to graduate will turn into *F*’s and will be calculated into the cumulative grade point average. Extensions must be submitted to the Registrar’s Office by the instructor.

Students should not register again for a course for which they have received an *I* grade.

Removing the Grade of *X*

The grade of *X* must be removed by the end of the next semester or it will be changed to an *F*. The instructor must submit a Request for Grade Change to the Office of the Registrar and the *X* can only be changed to an *A*, *B*, *C*, *D* or *F*. The student should contact the instructor if a grade of *X* appears on his/her transcript.

Change of Grade

After being reported to the Registrar, grades other than *I* or *X* may not be changed unless an error has been made by the instructor.

Students should review their end of semester final grades closely to ensure their accuracy. If an error or discrepancy should occur, the student should contact the appropriate professor and/or the Office of the Registrar immediately for resolution. It is recommended that those changes occur no later than the beginning of the next semester. Under no circumstances will grades be changed after one calendar year. **Under no circumstances will grades be changed after one calendar year.**

Repetition of a Course

If a student repeats a course that may not be taken for additional credit, it is the policy of the university to count as part of a student’s cumulative grade point average only the last grade received in the course, whether passing or failing, other than a grade of *Q*. However, for purposes of grade point average calculation on course work for graduation, grades stand as recorded unless the same course is repeated at this university.

Starting with 2015 Fall Semester, all new admits, including transfers, can only exclude a grade **one time**. Any courses taken for the third time, cannot be excluded and will be averaged in the student’s GPA.

Students who have received their first bachelor’s degree from this institution cannot repeat courses that were used to earn the first degree for purposes of grade point average calculation.

It is the responsibility of the student, after repeating a course, to file a special request form in the Office of the Registrar, so that the adjustment in the grade point average, when applicable, can be entered on the permanent

record.

Repeated Grade Notation

Repeated course(s) and grade(s) are not removed from the official or unofficial transcript. The repeated grade and grade points will be removed from the cumulative grade point average only. The repeated course will be identified with the letter *E* next to the quality points on the transcript. Repeating a course after graduation will not change your graduation grade point average.

ACADEMIC STANDING

Classification of Students

Freshman: fewer than 30 semester hours of credit.

Sophomore: at least 30 semester hours of credit, but fewer than 60 semester hours.

Junior: at least 60 semester hours of credit, but fewer than 90 semester hours.

Senior: at least 90 semester hours of credit.

Grade Point Average (GPA)

The grade point average accumulated on the permanent record of a student at Texas A&M University-Kingsville will be based on course and grade points earned by a student on work taken at this university. Transfer courses will be accepted as credit only. Such credit may be used for fulfilling degree requirements and graduation requirements. (For information on specific college admission, certification and graduation requirements, refer to the appropriate section of this catalog.)

A student's grade average on this university's work is expressed in grade points. Each semester hour of *A* counts four points, *B* three points, *C* two points, *D* one point and *F* zero points. The cumulative, or overall, grade point average (GPA) is computed by dividing the total quality POINTS earned by the total number of quality hours (GPA HRS). Transferred and credit only hours are not computed in the cumulative Texas A&M University-Kingsville grade point average. Passed Hours are credits where a passing grade was earned (including courses graded as credit (*CR*) only).

Grade Point Summary

All official and unofficial transcripts will include some of the following items (institution and transfer course work will be listed on separate lines under the TRANSCRIPT TOTALS):

Attempted Hours: all hours attempted whether passed or failed

Passed Hours: only the hours where a passing grade was received

Earned HRS: number of hours earned (does not include failing grades, excludes grades *Q*, *QE* or *QI*)

GPA HRS: hours used to compute GPA (including failing grades; does not include excluded grades *Q*, *QE* or *QI*)

Points: (Quality Points) grade points from the following grades: *A*, *B*, *C*, *D* & *F*

GPA: POINTS divided by GPA HRS

Honor Roll, Dean's List and President's List

Full-time undergraduate students of highest academic rank will be honored each semester by the publication of their names on the President's List, Dean's List or the Honor Roll List. The President's List requires a grade point average of 4.00 on all work attempted for a particular semester, with a minimum of 15 semester undergraduate hours completed, exclusive of credit only (*CR*) courses. The Dean's List requires a grade point average of 3.65 on all work attempted for a particular semester, with a minimum of 13 semester undergraduate hours completed, exclusive of credit only (*CR*) courses. The Honor Roll requires a grade point average of 3.5 on all work attempted for a particular semester, with a minimum of 12 semester undergraduate hours, exclusive of credit only (*CR*) courses.

Minimum Grade Requirements

The minimum grade point requirement for students who are considered to be making satisfactory academic progress is a 2.0 cumulative institution grade point average and a 2.0 GPA is required for graduation. All transfer students must have a cumulative 2.0 GPA to transfer into Texas A&M University-Kingsville.

Extracurricular Good Academic Standing

The university defines good academic standing as an institutional cumulative GPA of 2.0 or above. Student clubs, honors societies, student-athletes—in short, ALL extracurricular activities—*may* choose a GPA higher than 2.0 for its members to qualify as being in good academic standing.

A student is considered in good academic standing to participate in University extracurricular activities for the entire academic year if the student was in good academic standing at the beginning of the fall semester of the academic year in question. Students who were *not* in good academic standing at the beginning of the fall semester, but who have brought their institutional cumulative GPA up to 2.0 or greater by the end of the fall semester may ask to be recertified as in good academic standing for the remainder of the academic year in question. Students who were not certified in fall semester because their participation in extra-curricular activities began later in the academic year may ask to be certified at the time their activity begins.

Certification and recertification will be performed by the Office of the Registrar for student-athletes, and by club/organization advisors for students participating in extracurricular clubs/organizations recognized by the Office of Student Activities.

Scholastic Probation

Students will be placed on scholastic probation any time their cumulative institution grade point average at Texas A&M University-Kingsville falls below 2.0. Such students are required to participate to the fullest in academic support programs and to seek academic advising. Students who have been placed on scholastic probation will be removed from such probation at the conclusion of the semester or summer term at this university when they have achieved a 2.0 cumulative institution grade point average.

Enforced Withdrawal

Students who have been placed on scholastic probation, and who fail to achieve the minimum cumulative institution grade point average during the next long semester, will be placed on enforced withdrawal. Students who have been placed on enforced withdrawal may return after an absence of one semester; however, students placed on enforced withdrawal for a third time may return only after an absence of one year. Students who have been placed on enforced withdrawal for a third time must obtain an approval letter from the appropriate college dean. In either case, the required absence period may be shortened or eliminated upon approval of the college dean and/or associate vice president for student success. Students who remain out for two or more years must submit a readmission application to the Office of Admissions.

Students will start the above process by making an appointment with their academic adviser to complete the necessary form for approval to return to the university.

Removal of Enforced Withdrawal Status by Summer Study

Students placed on enforced withdrawal at the end of the spring semester are eligible to attend the subsequent summer session. If the student achieves a cumulative institution grade point average of 2.0 or higher at the conclusion of the summer terms, the enforced withdrawal status will be removed.

THE STUDENT'S PERMANENT RECORD

Transcripts

Official transcripts of the student's academic record may be requested at no cost in writing from the Office of the Registrar or online. The student should provide his/her complete name as recorded while attending the university (or the name changed to after leaving the university), student identification number or last four digits of his/her social security number, date of birth, first and last enrollment, contact phone number, number of transcripts requesting (up to the maximum number allowed) and the address where the transcript(s) are to be mailed. All transcript requests must be **signed by the student**. Failure to sign the request will void the request and the request will not be processed. Transcript requests may be faxed or e-mailed but must have all required information and signature to be processed.

A student must provide identification at the Javelina Enrollment Services Center when picking up a copy of a transcript in person. The Family Educational Rights and Privacy Act of 1974, and amendments thereto, states that

parents, spouse, legal guardian or others are not authorized to pick up transcripts of students unless written authorization by the student is provided.

Holds

All students, including continuing education students, should clear any holds they have on their records immediately. Failure to clear a hold causes delays and inconvenience when trying to obtain copies of transcripts through the mail or in person. Since a hold on the record may affect a student from obtaining/viewing grades at the end of the semester, students should be sure they do not have any holds before final examinations start. Students with a registration hold on their record will not be permitted to register.

Change of Name, Address or Social Security Number

Students who wish to change their name in the student information system (which will appear on their transcript and diploma) must provide original legal documentation of the change to the Office of the Registrar. Not advising the Office of the Registrar of a legal name change may cause transcript requests and registration problems. Social Security Number (SSN) must be changed by providing the original SSN card with the new/correct number. Students who change their address should notify the Office of the Registrar, Financial Aid Office and the Business Office.

Death of a Student

The death of a currently enrolled student should be reported to the Office of the Registrar immediately. After confirming the death, the Office of the Registrar notifies the appropriate faculty and academic dean, closes all student records and codes the student information system to block mailings to the deceased.

GENERAL REQUIREMENTS FOR GRADUATION WITH A BACCALAUREATE DEGREE

The university has established General Education requirements for all baccalaureate degrees. A general education results in the acquisition of a common body of essential knowledge and skills that together facilitate the development of students as individuals and as members of communities. **Students are strongly advised to consult their individual degree plans and academic advisers for any specific requirements for their majors within the General Education curriculum. Students are also advised to consult the online catalog for any additions to the course offerings.** Some courses are listed in two areas; a student may count such a course in either area, but not both.

†NOTE:

For the 2018-2019 academic year, each of the following introductory language courses are eligible options to fulfill the General Requirements for Graduation with a Baccalaureate Degree in the category of Language, Philosophy and Culture (040);

- FREN 1311
- FREN 1312
- SPAN 1313
- SPAN 1314

That common body of essential knowledge and skills shall include each of the following component areas and must equal 42 semester credit hours:

Communication (^Communications):

Rhetoric/Composition

Required: 6 semester credit hours

ENGL 1301 and ENGL 1302

Core Objectives: Critical Thinking Skills, Communication Skills, Teamwork and Personal Responsibility

Mathematics (^Mathematics):

Required: 3 semester credit hours

Select one course from:

MATH 1314, MATH 1316, MATH 1324, MATH 1325, MATH 1334, MATH 1348, MATH 1350, MATH 2413*

PHIL 2303

Core Objectives: Critical Thinking Skills, Communication Skills and Empirical and Quantitative Skills

Life and Physical Sciences (^Life/physical sciences):

Required: 6 semester credit hours

Select two choices from:

ANTH 2303,

BIOL 1306, BIOL 1307, BIOL 2375, BIOL 2401*, BIOL 2402*

CHEM 1311, CHEM 1312, CHEM 1405*

GEOG 1301, GEOG 1302, GEOG 2472*

GEOL 1301, GEOL 1302, GEOL 1303, GEOL 1304

PHYS 1301, PHYS 1302, PHYS 1303, PHYS 1304, PHYS 1375, PHYS 1471*, PHYS 2325, PHYS 2326

Core Objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills and Teamwork

Language, Philosophy and Culture (^Lang/Phil/Culture):

Required: 3 semester credit hours

Select one course from:

ANTH 2302,

ENGL 2331, ENGL 2342, ENGL 2362

FREN 1311†, FREN 1312†, FREN 2311, FREN 2312

HIST 2321, HIST 2322

PHIL 1301

SPAN 1313†, SPAN 1314†, SPAN 1373, SPAN 2301, SPAN 2302, SPAN 2311, SPAN 2312

WGST 1301

Core Objectives: Critical Thinking Skills, Communication Skills, Personal Responsibility and Social Responsibility

Creative Arts (^Creative arts):

Required: 3 semester credit hours

Select one course from:

ARTS 1303, ARTS 1304

COMM 2304

MUSI 1305, MUSI 2306, MUSI 2308, MUSI 2310, MUSI 2320

THEA 2310.

Core Objectives: Critical Thinking Skills, Communication Skills, Teamwork and Social Responsibility

American History:

Required: 6 semester credit hours

HIST 1301 and HIST 1302

Core Objectives: Critical Thinking Skills, Communication Skills, Personal Responsibility and Social Responsibility

Government/Political Science:

Required: 6 semester credit hours

POLS 2301 and POLS 2302

Core Objectives: Critical Thinking Skills, Communication Skills, Personal Responsibility and Social Responsibility

Social and Behavioral Sciences (^Social/Behavioral):

Required: 3 semester credit hours

Select one course from:

ANTH 2301

ECON 2301, ECON 2302

EDKN 2335

EVEN 2372

HSCI 2323

POLS 2304, POLS 2340

PSYC 2301

SOCI 1301, SOCI 1306, SOCI 2361

Core Objectives: Critical Thinking Skills, Communication Skills, Empirical and Quantitative Skills and Social Responsibility

Component Option:

A. Communication:

Required: 3 semester credit hours of oral communications

Select one course from:

COMM 1307

COMS 1311, COMS 1315, COMS 1336, COMS 2374

ENGL 2374

Core Objectives: Critical Thinking Skills, Communication Skills, Teamwork and Personal Responsibility

B. Component Option. (*Component option B*)

As an option for up to three (3) semester credit hours of the Component Option, the following course(s) are allowed:

ANTH 2301, ANTH 2302

BIOL 1106, BIOL 1107, BIOL 2401 (1 hour*), BIOL 2402 (1 hour*)

CHEM 1111, CHEM 1112, CHEM 1405 (1 hour*)

EDHL 1254

EDKN 2335

ENGL 1171, ENGL 2314, ENGL 2331

GEOG 1101, GEOG 1102, GEOG 1303

GEOL 1101, GEOL 1102, GEOL 1103, GEOL 1104

HIST 2321, HIST 2322

HSCI 2323

ISYS 1301

MATH 2413 (1 hour*), MATH 2414 (1 hour*)

PHIL 1301

PHYS 1101, PHYS 1102, PHYS 1103, PHYS 1104, PHYS 1471 (1 Hour*), PHYS 2125, PHYS 2126

POLS 2340

SOCI 2361

Core Objectives: Critical Thinking, Communication Skills and one of the remaining Core Objectives

*The Mathematics core area requires 3 credit hours of Mathematics; and, the Life/Physical Science core area requires two science courses totaling 6 credit hours. For degree plans that require or recommend one or more of the 4-hour courses listed below to fulfill Mathematics or Life/Physical Science core areas, the additional 1 hour of each course may be used to fulfill 1 hour of the Component Option B requirement. For example, if a student takes BIOL 2401 and CHEM 1405 to fulfill the Life/Physical Science requirement, and MATH 2414 to fulfill the Mathematics requirement, the student has automatically fulfilled the Component Option B requirement.

BIOL 2401, BIOL 2402

CHEM 1405

MATH 2413, MATH 2414

PHYS 1471

OTHER DEGREE REQUIREMENTS

Major and Minor

A major when specified as a degree requirement shall consist of a minimum of 24 semester hours in one subject, 6 of which must be taken at this university. In English, the required freshman courses may not count as part of this amount.

A minor shall consist of a minimum of 18 semester hours in a subject closely related to the major. In English, the required freshman courses may not count as part of this amount.

At least 50% of the work offered in the major field must be advanced, and at least 6 semester hours of advanced work must be offered in the minor field.

Writing Intensive Requirement

Candidates for a bachelor's degree must complete at least one course designated as Writing Intensive, preferably in their major field. Candidates must earn a grade of *C* or better in such a course. The designation of a writing intensive course is [WI] following the title of the approved course.

Advanced Work

Candidates for a bachelor's degree must have a minimum of 36 semester hours of advanced course work.

Grade Average

An overall average of *C* (2.0) or above on all work attempted at Texas A&M University-Kingsville must be maintained. The grade average in the major and minor field where required must be *C* or above. For purposes of grade point average calculation on Texas A&M University-Kingsville course work for graduation, grades stand as recorded unless the same course is repeated at this university.

Academic Residence Requirement

Candidates for a bachelor's degree must have a minimum of 25 percent of total semester hours required for the degree completed in residence at this university. Twenty-four of the last 30 hours must be taken at this university.

RESTRICTIONS

Number of Physical Activity Courses

No more than four semesters of kinesiology activity courses may be counted toward a degree, except for the kinesiology majors and minors.

Maximum Number of Hours in Religion

No more than 12 semester hours in religion may be counted toward any degree.

Correspondence Work

No credit earned by correspondence on a course previously failed in residence may be counted toward a degree at this university.

Graduation Under a Particular Catalog

A student has the privilege of being graduated according to the curricular requirements as stated in the catalog of the year in which the student first registered for work in residence at the university, or the student may be graduated under any later catalog of a year in which the student was registered for residence work provided that requirements are met within five years of the date of the catalog chosen and provided further that the institution offers courses listed as requirements in previous catalogs.

Application for Graduation

A student who plans to receive a degree from Texas A&M University-Kingsville must apply for graduation via the online process in Blue and Gold Connection. An "Application for Candidacy" must be submitted to the Provost and Vice President for Academic Affairs by the deadline date designated in the Academic Calendar. The online Academic Calendar should be consulted for specific application and deadline dates. The degree will not be conferred

unless the candidate has completed the application process on or before the designated deadline.

Use of Official Name on Diploma

Students applying for graduation must use their official name as listed on their permanent record in the Office of the Registrar. No nicknames or any other informal name will be allowed. All printed information, including diplomas, will list a student's official name. Students requesting a name other than their official name on their diploma must change their name on their permanent record.

Graduation in Absentia

Graduation in absentia will be permitted only under special conditions stated in writing and approved by the Provost and Vice President for Academic Affairs.

A Second Bachelor's Degree

Two degrees of the same type (B.B.A., B.A., B.S., etc.) will not be awarded concurrently from the same college (at the same graduation). A single degree with a double major will be awarded.

The applicant for a second bachelor's degree must complete all residence requirements, the specific course requirements of the second degree and meet the required grade point average.

GRADUATION WITH HONORS (For undergraduate degrees only)

A grade point average of 3.8 is the minimum for graduation meriting Summa Cum Laude (with highest honors); a grade point average of 3.6 or higher but less than 3.8 will merit Magna Cum Laude (with high honors); an average of 3.4 or higher but less than 3.6 will merit graduation Cum Laude (with honors). *Grade point averages are not rounded up to achieve these figures.*

Students who have transferred work from other colleges or universities are eligible for graduation with honors provided they have completed at least 45 semester hours of work toward their degrees at this university. Only the record at this university will be used to determine eligibility for graduation with honors.

UNDERGRADUATE DEGREES AND MAJORS OFFERED

<i>Degree</i>	<i>Major</i>
Bachelor of Applied Arts and Sciences	
Bachelor of Arts	Art, Biology, Chemistry, Communications, Criminal Justice, English, History, Mathematics, Political Science, Psychology, Sociology, Spanish
Bachelor of Business Administration	Accounting, Finance, General Business Administration, Information Systems, Management, Marketing
Bachelor of Fine Arts	Art
Bachelor of Music	Music
Bachelor of Science	Architectural Engineering, Biology, Biomedical Sciences, Chemistry, Communication Sciences and Disorders, Criminology, Environmental Engineering, Geology, Industrial Management and Applied Engineering Technology, Interdisciplinary Studies, Kinesiology, Mathematics, Natural Gas Engineering, Physics
Bachelor of Science in Agriculture	Agribusiness, Agriculture Science, Animal Science, Animal-Wildlife Veterinary Technology, Range and Wildlife Management
Bachelor of Science in Chemical Engineering	Chemical Engineering
Bachelor of Science in Civil Engineering	Civil Engineering
Bachelor of Science in Computer Science	Computer Science
Bachelor of Science in Electrical Engineering	Electrical Engineering
Bachelor of Science in Human Sciences	Human Nutrition, Human Sciences
Bachelor of Science in Mechanical Engineering	Mechanical Engineering
Bachelor of Social Work	Social Work

UNDERGRADUATE TRANSCRIPTED CERTIFICATE PROGRAMS OFFERED

Administrative Unit

Accounting and Finance

Art, Communication, and Theatre

Chemistry, Civil Engineering, Electrical Engineering and Computer Science, and Mechanical and Industrial Engineering (Interdisciplinary)

Civil and Architectural Engineering

College of Arts and Sciences

Institute of Architectural Engineering Heritage

College of Business Administration

Physics and Geosciences

Physics and Geosciences

Certificate

Forensic Accounting

Digital Art

Nano Materials Science and Engineering

Facility Management

Women and Gender Studies

Heritage Preservation

Sustainability Studies

Geographic Information Systems

Geophysics

CENTER FOR CONTINUING EDUCATION

Cousins Hall 109. MSC 147. Extension 2861.

[Center for Continuing Education Webpage](#)

The Center for Continuing Education extends the services of the university to business, industry, educational institutions, professional organizations, governmental units and other groups of adults who need non-credit courses, conferences, institutes, workshops, seminars, short courses and special training programs. The center offerings fall into six categories: Academic Preparation Programs, Business Workshops & Seminars, Personal Enhancement Programs, and Professional Development Programs, Virtual Training, Continuing Education Unit's (C.E.U.'s), Industrial Safety Training Programs, "ShaleNet" Training Programs and Extension Credit Courses or "Academics on Demand" Program.

Academic Preparation Programs

These year-round programs are geared towards students currently attending grades K-12th in a public or private institution. The Center provides afterschool and weekend programs that include Academic Tutoring and the STAAR Preparation programs that give one-on-one attention to the registered participants from trained Academic Tutors in the specific field or subject needing improvement. During the summer, the Center holds the annual "College for Kids" program which is a 3-week summer camp on the TAMUK campus. The camp allows participants to build a schedule from the selected academic and enhancement courses offered for their daily activities. The participants gain a feel of the college lifestyle as they change classes around campus, engage with other participants on daily activities, and enjoy interactive presentations by different academic departments.

Business Workshops & Seminars

Throughout the year, the Center provides training opportunities to participants to broaden their professional skills with this component. The workshops and seminars offer a variety of topics that include: Proactive & Situational Leadership, Strategic Planning for Business Growth, Achieving Your Goals through Customer Service, Sustainability in Your Business, Professional & Business Ethics, and many more. These topics are offered in an 8-hour program held at the Texas A&M University-Kingsville campus or through different customizable packages to local businesses and organizations held at off-campus locations.

Personal Enhancement Programs

These programs give the opportunity for participants to develop their soft skills with courses as Basic Guitar, Basic Photography, Belly Dancing, Latin Dancing, Conversational Chinese, Conversational French, Conversational Russian, Conversational Spanish, Reiki Practitioner, and Yoga. Courses are held in the evenings, twice a week, during 4-week, 8-week, or 10-week periods depending on the semester.

Professional Development Programs

These are courses available to community members wanting comprehensive training to help gain an entry level position in a professional career track. Programs include: Administrative Assistant Training, Bank Teller Training, Bookkeeping Certification, Dental Assistant Certification, EKG Technician Certification, Medical Billing and Coding Professional, Payroll Certification and Pharmacy Technician with internship options for participants to gain hands-on experiences once the successful completion of the courses. Programs are held in the evenings, once a week, during an 8-week or 16-week period within a semester.

Virtual Training programs

Participants wanting to gain professional training without having to be in a traditional classroom environment can do so with these on-line programs provided by the Center and with its partner, Protrain. All courses are instructor-led with structured weekly lessons and graded assignments as well as student engagement with questions and discussion forums.

Continuing Education Unit's (CEU's)

Continuing Education Units (CEU's) will be given for certain noncredit instructional activities. One Continuing Education Unit is defined as ten contact hours of participation in an organized continuing education experience under qualified instruction. (A fraction of a unit may be awarded.) Texas A&M University-Kingsville maintains a permanent record of all CEUs awarded to individual participants and an official transcript is available from the Center for a flat rate of \$25. No admission requirements are necessary for noncredit course participants. A detailed description of course content and level will be available before enrollment periods. Registration dates and sites for noncredit courses are announced in advance or students may request course information from the center.

Industrial Safety Training Programs

These are training programs covering PEC Basic Orientation, Core Compliance, Globally Harmonized Systems (GHS), and Job Safety Analysis.

Extension Credit Courses or "Academic on Demand" Program

Many courses listed in this catalog may be offered as extension courses. Extension classes can be organized for out-of-state and out-of-country special purposes. However, the entire expense of the class including salary and travel for the instructor plus administrative cost must be met by the tuition and fees collected. Specific fees will be determined for each course offering. Fees will not be refunded after the first class meeting or the deadline for the first required deposit.

INTENSIVE ENGLISH LANGUAGE TRAINING CENTER

The Intensive English Training Center curriculum is focused on the needs and goals of each student. The Center provides intensive English training for non-degree and degree-seeking non-native English speaking students who have not reached the university's minimum TOEFL score requirement. The curriculum features high interest topics and focuses on both accuracy and fluency. The multi-skills course syllabi integrate themes, structures, functions, vocabulary and pronunciation. A computerized language lab with access to the World Wide Web provides an unlimited number of resources in English-as-a-Second-Language. Students who successfully complete the Intensive English Training Center Exit Portfolio are exempted from the university's TOEFL requirement. Four, eight and sixteen week sessions are available every semester or term. Visit www.tamuk.edu/iep for more information.

CENTER FOR DISTANCE LEARNING AND INSTRUCTIONAL TECHNOLOGY

Rolando Garza, *Interim Director of Distance Learning and Instructional Technology*
Jernigan Library 213. MSC 197. Extension 2860

[Center for Distance Learning and Instructional Technology Webpage \(http://www.tamuk.edu/distancelearning/\)](http://www.tamuk.edu/distancelearning/)

Distance Learning and Instructional Technology supports academic and administrative services by providing researched-based instructional support through quality training, introduction of innovative technical solutions and progression in the distance learning infrastructure. Distance learning covers a variety of options to enhance instruction in web-enhanced, hybrid and/or online courses and provides support for local and online student populations.

General Restrictions on All Courses

A student who desires university credit for a course must meet the university entrance requirements and the specific prerequisite requirements for the individual course. Students on suspension from any university cannot register for any courses.

Distance Learning Course Types

Distance learning academic credit courses are offered in a variety of delivery types.

Web-Enhanced Courses (face to face courses with technical enhancements)

A web-enhanced course is a course in which no planned instruction occurs when the students and instructor(s) are not in the same physical space. The course is supported through the learning management system, which may contain supplemental instruction material for the course.

Web-Substituted Courses (500 courses)

A web-substituted course is a course in which no more than 50 percent of the planned instruction occurs when the students and instructor(s) are not in the same physical space. The online portion of the course is conducted through the university learning management system which contains instructional material for the course.

Hybrid/Blended Courses (900 courses)

A hybrid/blended course is a course in which a majority (**more than 50 percent but less than 85 percent**) of the planned instruction occurs when the students and instructor(s) are not synchronously (same time and space whether virtual or physical) in contact. The online portion of the course is conducted through the university learning management system which contains instructional material for the course.

Fully Online Courses (600 courses)

A fully online course is a course that may have mandatory face-to-face sessions totaling **no more than 15 percent of the instructional time**. Examples of face-to-face sessions include orientation, laboratory, exam review or an in-person test. The online portion of the course is conducted through the university learning management system which contains instructional materials for the course.

Video Conference Courses (400 courses)

Distance learning interactive videoconferencing credit courses are coordinated statewide by the Trans Texas Videoconference Network (TTVN) with central offices located at Texas A&M University in College Station. All Texas A&M System campuses have the ability to collaboratively broadcast and receive hundreds of videoconference courses. TTVN classrooms at Texas A&M University-Kingsville are located on campus and one is located at the Citrus Center in Weslaco.

DISTANCE LEARNING DEGREE PROGRAMS

Texas A&M University Kingsville offers distance learning master's and doctoral degree programs. Programs are offered either completely online or through a combination of distance learning delivery methods such as TTVN videoconference (two-way audio-video), off-campus, online or hybrid (combination of face-to-face and online).

Online (fully online programs)/Distance Learning Programs (combination of delivery methods)

Doctor of Education in Bilingual Education, Master of Business Administration, Master of Education in Adult Education, Master of Education in Early Childhood, Master of Science in Bilingual Education, Master of Science in Counseling and Guidance, Master of Science in Education, Master of Science in Educational Administration, Master of Science in Industrial Engineering and Master of Science in Instructional Technology.

Registration Information

Students enroll in distance learning courses through Blue and Gold Connection in the same manner as face-to-face courses.

All courses are the equivalent to courses taught on campus and are awarded equal credit. All credit course work is calculated as a part of the overall grade point average. A student should expect the same supplemental reading, written reports and other work necessary to make the course equivalent in scope and type of instruction to a course offered on-campus face-to-face. Distance learning courses require the same number of clock hours of instruction as an on-campus class.

Textbooks for all distance learning courses will be available from the university bookstore or the electronic bookstore in accordance with course syllabi. Students are responsible for obtaining the textbooks, publisher access codes (if applicable) and any needed supplies for distance learning courses.

Blackboard Student Resource Course (SRC)

Distance Learning and Instructional Technology offers all currently enrolled students access to a student resource course in Blackboard (DIST1000). The SRC is available to students two weeks prior to the start of the semester. The purpose of this course is to provide students with a self-help Blackboard Learn Resource tool. The course is not for academic credit and does not require completion, it only serves as a self-help portal to assist students in effectively navigating the learning management system.

iTech Support Service Help Desk

For technical assistance with distance learning, contact iTech Support Services at the following locations: 24/7 *Online Help Desk* [iTech Help Desk \(http://support.tamuk.edu\)](http://support.tamuk.edu); 24/7 *Phone Help Desk* (361)593-4357; email helpdesk@tamuk.edu; On-campus Jernigan Library Commons (1st floor).

JAMES C. JERNIGAN LIBRARY

Bruce R. Schueneman, *Library Director*
Library 101A. MSC 197. Extension 3528.

Professors

Ayala-Schueneman, Schueneman, Packard

Faculty Emeritus

Tipton

Associate Librarian

Radcliff

Assistant Librarians

Atkins, Baker, Limon, Melchor, Rosenbaum, Smith, Stigall, Tallant, Thacker

Professional Staff

Sylvia Martinez, *Administrative Coordinator II*

Genaro Medrano, *Support Specialist II*

The James C. Jernigan Library's mission is to enable individuals to seek information and use it effectively to enrich their lives. The Library advances the University's mission of teaching, research, and service by ensuring quality service to all patrons; teaching information skills that lead to academic success and life-long learning; building collections of distinction that support academic programs; and providing leading technologies that enhance access to information resources.

The Jernigan Library [website](#) serves as the primary gateway to a wide selection of resources including OASIS, the library's online catalog. Library holdings (books, periodicals, and microforms) numbering well over one million items. Additionally, the library website links Texas A&M University-Kingsville students, faculty and staff to over 100 subscription databases, as well as online journals, E-books, Government information and other useful websites.

Reference and Instruction Services provides individual assistance in identifying and locating pertinent resources, as well as group services such as library tours, basic library skills instruction, course-integrated instruction and special topics workshops. For assistance in finding library materials or with help in conducting research, library users may contact the Reference Department in person, by telephone (593-3319), by linking directly from the website to an e-mail form, or by means of an online chat widget. Faculty may request library instruction by calling 4153 or by using an online form.

LibGuides ([LibGuides Webpage](#)) provide information concerning library services as well as online research help for a variety of subjects and individual classes.

Access Services (Circulation and Reserves) are adjacent to the main exit. See the Jernigan Library website for information on renewing, recalling and placing library items on hold. Details for requesting a TexShare Library card are also found on the website.

Interlibrary Loan and Document Delivery Services provides access to materials not owned by the library. Requests for books, journals and other items can be made via an online form linked on the website. Allow at least two weeks for materials to arrive.

The South Texas Archives and Special Collections were established to preserve and to make available to the public documentary materials about the history and natural history of South Texas. The Archives are located on the third floor of the library.

The Library participates in a number of resource-sharing programs including the AMIGOS Bibliographic Council, TexShare and the Texas A&M University System Libraries Council. Additionally, the Jernigan Library is a Selective Federal Depository Library.

CENTER FOR STUDENT SUCCESS

Shannon Baker, *Interim Associate Vice President for Student Success*
College Hall 234. MSC 206. Extension 3290.

Cristina Briseño, *Administrative Assistant V*
Veronica Salas, *Director, Academic Advising and Retention*
James Eric Winterbottom, *Coordinator, Pre-health Science*
Christina Rodriguez-Gonzalez, *Director of Tutoring and Mentoring*
Dr. Jeanine Birdwell, *Assistant Director of Tutoring and Mentoring*
Dr. DeAnna Hamblin, *Texas Success Initiative Coordinator*
Brett Vanness, *Coordinator, First-Year Seminar Courses*
Amanda Galvan, *Academic Career Counselor*
Breanne Flores-Contreras, *Freshman Interest Group Coordinator*
Stephanie Bain de Los Santos, *Javelina Common Read and AVID Coordinator*
Dr. Agnes Flores, *Director, Title V Integrating a Culture of Academic and Research Engagement Grant*

Academic Advisors

Jennifer Alaniz	Javier Mendoza
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Breanne Flores-Contreras	Ashley Ochoa
Sasah Diaz	Juan Ramirez
Dr. Araceli Garza	Alfonso Ramos
Priscilla Garza	Sonya Vasquez
Margaret Mary Hennessey	Suzanne Villarreal
Alma Limas	James Winterbottom
Cynthia Longoria	

The Center for Student Success is the home of programs which help students achieve college readiness, develop essential academic success skills, and strategically plan their path to graduation. In addition, the Center coordinates academic aspects of the Javelina First-Year Experience, including the First-Year Seminar, Javelina Read, Service Learning, Beginning Stages of Inquiry for Research, and Javelina Learning Communities. It provides an academic home for the advisement of all undergraduate students and is committed to creating a learner-centered environment. Additionally, the Center offers programs designed to enhance student success in the classroom. These programs include Academic Advising, Academic Career Literacy, Academic Tutoring, Supplemental Instruction, Javelina Embedded Tutor Program, and Peer Mentoring. All Center for Student Success programs are enhanced with AVID (Advancement Via Individual Determination) high impact strategies.

The Javelina First Year Experience

First-Year Seminar.

The Texas A&M University-Kingsville First-Year Seminar prepares first-year students to succeed academically and professionally. The course brings students together in a unified learning community that not only facilitates their transition into college, but gives them the tools necessary to work efficiently toward graduation and on to their chosen career path. It utilizes active-learning strategies to train the students how to organize and recall crucial information, apply that knowledge toward success in the classroom, and grow into engaged citizens who are capable of achieving significant long-term goals. While building professional relationships with faculty and fellow students, new freshmen will critically think, read, discuss and write about creative topics selected for the course. Opportunities are also provided to explore various campus resources and participate in service learning projects as well as develop knowledge of undergraduate research.

Service Learning Project.

The First-Year Seminar service learning project encourages student learning and development through active participation in thoughtfully organized service that is conducted in, and meets the needs of the community to promote civic responsibility and engagement. It focuses on the educational areas of the program in which the participants are enrolled by having structured time for students to provide service for a community agency, raise awareness on an issue and to reflect on the service experience.

Freshman Convocation.

The mission of Freshman Convocation is to welcome students and to foster a sense of community, culture, pride and tradition in Texas A&M University-Kingsville. Held each fall semester, this program promotes an understanding of the role of higher education in life-long learning, formally introduces first-year students to faculty and staff and introduces important campus traditions to new students such as the *First Year Javelina Commitment* and *Alma Mater*.

Javelina Read

Javelina Read is a program for incoming freshmen, but is also promoted throughout the campus, curriculum, and community. Each year a new book is selected by the Javelina Common Read Committee, which is comprised of faculty, staff, students, and community members. Once selected, the book is widely distributed throughout the campus and community for community building and to promote a Culture of Reading.

Learning Communities (FIGs).

Learning communities (Freshman Interest Groups) help students find their place in both academic and social settings as faculty and students work together in a collaborative learning environment. FIGs are clusters of courses that small groups of students take during their first year at TAMUK. Each cluster is created based on the student's intended major. FIGs have helped students connect quickly while fulfilling general education requirements. Through participation in the FIG Program, you will:

- Connect with fellow Javelinas in your major
- Meet student leaders who will help you transition to college life and the TAMUK campus
- Engage in critical thinking and build a strong academic foundation

Academic Support Resources

The Center for Student Success programs are designed to support students as they develop their academic, personal and leadership skills. The following programs develop, enhance and enrich the undergraduate experience and while doing so, positively impact student retention and persistence to graduation.

Academic Advising.

Texas A&M University-Kingsville places very strong emphasis on developing a one-to-one individual academic advisory relationship between each student and an advisor. Academic advising is a process of information exchange that empowers students to realize their maximum educational potential. The advising process is student-centered and will result in the student gaining a clearer understanding of himself/herself, and the experience of higher education. Center for Student Success personnel evaluate the academic background of incoming freshmen and assess student readiness for college course work. Advisors work with all undergraduate students to define and develop realistic goals, help students recognize their abilities and interests, identify any special needs and/or match students to available resources that may be required to aid in their journey to be successful. All students are encouraged to meet with their advisors on a regular basis to monitor their progress toward their educational and career goals. Advising provides a linkage between academic preparation and career goals and provides the foundation for students to pursue their educational and career goals.

Graduation Pathway Success Center.

The Graduation Pathway Success Mentoring program is designed to support incoming freshmen in making a successful and seamless transition from high school to college by creating educational and supportive relationships designed to direct students to be successful in their first year of college. The GPS Mentors help ease the transition from high school to college by sharing skills and positive habits, guiding students to resources and opportunities on campus, and promoting positive decision making. Peer mentors assist students and respond to specific questions regarding course content while assisting in the development of successful study skills and test-taking strategies in

key courses.

Pathways Academic Assistance Center.

The Pathways Academic Assistance Center's (PAAC) mission is to help students become successful and confident academically by:

- modeling the AVID (Advancement Via Individual Determination) Socratic Tutorial strategies by providing the tools and resources necessary to assume responsibility for their own learning
- asking higher-level questions to gain deeper understanding of their rigorous content through critical thinking and inquiry process
- utilizing focused note-taking as a method for mastering information, stressing Writing, Inquiry, Collaboration, Organization, and Reading (WICOR)
- The PAAC, located in Jernigan Library, Room 220, houses centralized academic support for students:
 - Academic Tutoring – Tutors understand that students encounter the learning process with different degrees of strength and comfort; therefore, a collaborative approach guides our practice. Tutors and students engage in one-on-one and/or peer conversations about the subject area while sharing knowledge and granting authority to both the tutor and student. We recognize that differences in proficiency, linguistic and cultural background need to be taken into consideration when helping students to become efficient learners.
 - Supplemental Instruction (SI) provides a series of weekly review sessions for students taking historically difficult course. Each SI section is guided by an undergraduate SI leader, a peer mentor who has previously taken the course and has received training in note-taking, study skills and test-taking strategies.
 - Academic Career Literacy Students have the opportunity to meet with professional career experts and peer educators as often as needed. During these appointments, the student can expect to explore their strengths and passions in connection to the world-of-work. The exploration process begins with a questionnaire and a computer assessment. Students also have the opportunity to interview university professions and peer educators pursuing their field of interest. In addition, they may participate in campus events, complete online research, or attend a class lecture in a prospective major to help narrow down their choice of study. After self-assessment, students explore options and decide on a major, identify resources that will help reach educational career goals, and are connected with information about scholarships and professional development opportunities.

CURRICULUM

Texas A&M University-Kingsville is committed to the success of all students and provides transitional education course work as a Co-requisite model in math and integrated reading/writing with the goal of helping students achieve college readiness. This program is designed to prepare students for successful entry into their regular academic classes. The Non-Course Based lab courses will receive a grade of credit/non-credit and the grade is not calculated in the grade point average. These lab courses do not count as part of a degree program but are meant to support the Credit-bearing College Course. Each student's academic background is reviewed and college preparedness is assessed as they are admitted to the university. Working with a Center for Student Success Academic Adviser, student schedules are customized to reflect student academic needs. Details regarding the Center for Student Success Texas Success Initiative Placement Measure are published within the Center for Student Success Transitional Education Plan, which is submitted for approval on an annual basis to the Texas Higher Education Coordinating Board.

Lecturers

Bain-de Los Santos, Birdwell, Gohre, Hamblin, Lopez, Sanchez, Serna

Non-Course Based Option Courses

0101. Non-Course Based Option Integrated Reading/Writing. (NCBI)

1(0-2)

Integration of critical reading and academic writing skills. Placement is based on TSI Assessment and holistic evaluation. Credit/Noncredit.

0101. Non-Course Based Option Math. (NCBM) 1(0-2)

Topics in mathematics such as arithmetic operations, basic algebra, concepts and notation, geometry and real complex number systems. Study of relations and functions, inequalities, algebraic expressions and equations (absolute value, polynomial, radical, rational) with specific emphasis on linear and quadratic expressions and equations. Placement is based on TSI Assessment and holistic evaluation. Credit/Noncredit.

0101. Non-Course Based Option Reading. (NCBR) 1(0-2)

Development of reading and higher order thinking skills necessary for college readiness. Placement is based on TSI Assessment and holistic evaluation. Credit/Noncredit.

0101. Non-Course Based Option Writing. (NCBW) 1(0-2)

Development of college-level writing focusing on idea generation, drafting, organization, revision and utilization of standard English. Placement is based on TSI Assessment and holistic evaluation. Credit/Noncredit.

University Learning (UNIV)

1101. Learning in a Global Context I. 1(0-2)

A student success lab designed to enhance the opportunity for success of first-year students. In-depth analysis and application, extended readings, internet assignments, class discussion and consistent student interactive and feedback concerning course content.

1102. Learning in a Global Context II. 1(0-2)

A continuation of UNIV 1101. Designed to enhance the opportunity for success of first-year students. In-depth analysis and application, extended readings, internet assignments, class discussion and consistent student interaction and feedback concerning course content. Prerequisite: UNIV 1101.

Retention Services

The Center for Student Success programs are designed to support students as they develop their academic, personal and leadership skills. The following programs develop, enhance and enrich the undergraduate experience and while doing so, positively impact student retention and persistence to graduation.

Academic Advising. The Center for Student Success personnel evaluate the academic background of incoming freshmen and assess student readiness for college course work. These advisers work with students to define and develop realistic goals, help students recognize their abilities and interests, identify any special needs and/or match students to available resources that may be required to aid in their journey to be successful. All students are encouraged to meet with their advisers on a regular basis to monitor their progress toward their educational and career goals. Advising provides a linkage between academic preparation and career goals. Advising provides the foundation for students to pursue their educational and career goals.

Learning Assistance Center. The Learning Assistance Center, located in the Jernigan Library, provides tutoring to students needing assistance in their courses.

Peer Mentoring Center. Peer mentors assist students and respond to specific questions regarding course content while assisting in the development of successful study skills and test-taking strategies in key courses.

Supplemental Instruction. Supplemental Instruction (SI) provides a series of weekly review sessions for students taking historically difficult courses. Each SI section is guided by an undergraduate SI leader, a peer mentor who has previously taken the course and has received training in note-taking, study skills and test-taking strategies.

HONORS COLLEGE

Thomas Spencer, *Dean*
Sue Nichols, *Assistant to the Dean*
Maggie Abrigo, *Staff Assistant*
Mesquite Village West 104. MSC 217. Extension 4410
[Honors College Webpage](#)

What Honors students all share is the conviction that college is about more than just getting a degree or just learning the subject matter. It is about being challenged and experiencing an in-depth involvement in their education and field of study.

The goals for the Honors College are to offer students an enriched educational experience through increased undergraduate research opportunities, leadership development and community engagement.

The Honors College is open to all Texas A&M University-Kingsville students who meet the academic requirements. Students in the Honors College belong to their degree-granting college and the Honors College. Participation in the Honors College does not lengthen the time it takes a student to graduate.

There is a separate application process for the Honors College which includes an information form, an essay, picture, resume, high school and college transcripts (unofficial) and two letters of recommendation.

Eligibility: For incoming freshmen, the requirements are a minimum ACT of 24 or SAT of 1170 (verbal/math). Current and transfer students will require a minimum grade point average of 3.50.

Benefits of a Texas A&M University-Kingsville Honors College education:

- Small classes of 20-25 scholars
- Special courses and seminars
- Priority registration
- Research experience in academic area leading to a senior thesis/project
- Study abroad scholarship support
- Assistance/mentoring with applications
- Honors housing opportunities
- Sense of community
- Honors courses listed on transcript
- Honors College recognition at university honors ceremony and graduation

**DICK AND MARY LEWIS KLEBERG
COLLEGE OF AGRICULTURE, NATURAL
RESOURCES AND HUMAN SCIENCES**

DICK AND MARY LEWIS KLEBERG COLLEGE OF AGRICULTURE, NATURAL RESOURCES AND HUMAN SCIENCES

Shad D. Nelson, *Dean*
Support Services Building, Suite 110. MSC 156. Extension 3712.

William P. Kuvlesky, Jr., *Assistant Dean*
Priscilla Guerra, *Academic Adviser*
Javier A. Mendoza, *Academic Adviser*
Carla Winterbottom, *Academic Adviser*

Mission Statement

The mission of the Dick and Mary Lewis Kleberg College of Agriculture, Natural Resources and Human Sciences is to deliver excellent programs in agriculture, natural resources and human sciences, founded upon experiential learning, that develop critical thinking and leadership skills. Through applied research, outreach and service, we improve the well-being of stakeholders.

The Dick and Mary Lewis Kleberg College of Agriculture, Natural Resources and Human Sciences is composed of the following units:

- Department of Agriculture, Agribusiness and Environmental Sciences
- Department of Animal, Rangeland and Wildlife Sciences
- Department of Human Sciences
- Caesar Kleberg Wildlife Research Institute
 - Tio and Janell Kleberg Wildlife Research Park
 - South Pasture
- Citrus Center
 - Citrus Center Main Farm
 - Citrus Center South Farm
 - Citrus Center Rio Farms Acreage
- King Ranch Institute for Ranch Management
- Marc Cisneros Center for Young Children
- University Farm
- USDA Kika de la Garza Plant Materials Center

The college offers the degrees of Bachelor of Science in Agriculture, Animal Science, Range & Wildlife, and Human Sciences.

The agricultural programs at Texas A&M University-Kingsville strive to serve the unique and diverse agriculture needs of South Texas with widely applicable programs in teaching, research and public service. Its program in the agricultural sciences is augmented by courses in the natural sciences, the arts and other supporting fields. A major in one of the six disciplines--Agribusiness, Agriculture Science, Animal Science, Plant and Soil Science, Range and Wildlife Management and Veterinary Technology--leads to a degree, as indicated later. A minor in Animal Science requires 22 semester hours, consisting of ANSC 1419, ANSC 2307, ANSC 2310, ANSC 3313, ANSC 3335, one of the following Animal Management courses ANSC 3302, ANSC 3304, ANSC 3306 or ANSC 3308, and one of the following Applied Management courses ANSC 3305, ANSC 3309, ANSC 3336, or ANSC 4305 or either ANSC 4301 or ANSC 4303. A minor in Animal Science for Veterinary Technology students requires 19 semester hours, consisting of ANSC 1419, ANSC 2307, ANSC 2310, ANSC 3313, ANSC 3335 and a choice of one of the following Animal Science courses: ANSC 3302, ANSC 3304, ANSC 3306, ANSC 3308, ANSC 3333, ANSC 3336 or ANSC 4301.

A minor in Range and Wildlife Management requires 21 semester hours of RWSC courses with at least 12 semester hours of upper-level work. Semester credit hours for Internship (RWSC 3995) do not count toward a minor. No more than 3 semester hours can be from Wildlife Research and Scientific Communication (RWSC 4395).

A minor in Agriculture Science, Agribusiness, Environmental Science or Plant and Soil Science requires 18 semester hours of AGSC, AGBU, ENVS, or PLSS courses from the same minor area with at least 12 semester hours of upper-level work, of which no more than 3 semester hours can be from Internship or Special Problems credit.

Human Sciences seeks to improve the quality of life for individuals and families through wise management of resources in varied environments. Human Sciences integrates theory and research from the physical and social sciences and the arts to prepare professionals who seek solutions to the challenges faced by contemporary families and individuals. Several programs -- Human Development and Family Studies, Fashion Merchandising, Human Nutrition and Family and Consumer Sciences Education leading to teacher certification are available to students pursuing a Bachelor of Science in Human Sciences degree. A minor in Human Sciences requires 18 semester hours with at least 9 semester hours of upper-level work selected in consultation with the chair of the department.

Transfer agreements have been developed with Blinn College and Texas State Technical College (TSTC) in Harlingen, and agreements with other community colleges are pending. The college operates several teaching laboratories and research centers, including the Texas A&M University-Kingsville Citrus Center in Weslaco, the University Farm and the Marc Cisneros Center for Young Children, adjacent to the main campus.

Degree Plans

The degrees that each department offers are found after the department course listings. Courses need not always be taken in order, although prerequisites must always be satisfied before a course is taken. *Students are responsible for seeing that their degree program meets the "General Requirements for Graduation" set forth in an earlier section of the catalog.*

Laboratory Fee

For each laboratory course a fee of \$2 to \$30 is charged depending upon cost of materials used in the course.

DEPARTMENT OF AGRICULTURE, AGRIBUSINESS AND ENVIRONMENTAL SCIENCES

Greta L. Schuster, *Chair*

Kleberg Agriculture Building 117. MSC 228. Extension 4116.

Professors

Anoruo, daGraca, Gardiner, Louzada, Nelson, Schuster, Sétamou, Williams

Associate Professor

Hanagriff

Assistant Professors

Ancona-Contreras, Chumbley, Ruppert, Simpson, Turner

Lecturer

Tymrak, Umphres

Faculty Emeriti

French, Hegwood, Hensz

The Department of Agriculture, Agribusiness and Environmental Sciences prepares students from both rural and urban backgrounds for employment in agribusiness, agricultural education, agricultural production and technology, agronomy, horticulture, soil and environmental science, or government service. The Department offers B.S. degrees in two majors: Agribusiness (AGBU) and Agriculture Science (AGSC). Agribusiness majors specialize in one of two options: Agribusiness or Agribusiness with Ranch Management. Agriculture Science majors can specialize in one of six options: Plant and Soil Science - Agronomy, Plant and Science - Horticulture, Plant and Soil Science - Environmental Soil Science, Agriculture Science - General Agriculture, Agriculture Science - Environmental Science, and Agricultural Science and Technology with Teacher Certification.

We provide students opportunities to study in classrooms, laboratories, greenhouses and on the university farm. In addition, we encourage students to gain career-related experience through research projects and off-campus internships. We sponsor student organizations in which students can enjoy associating with other students while learning and serving. We strive to develop abilities and values, and to create a nurturing environment for students.

AGRIBUSINESS (AGBU)

2301. Principles of Agribusiness Management.

3(3-0)

An introduction to agribusiness management focused around the four functions of management: planning, organizing, controlling and directing. Applications of budgeting and elementary economic analysis.

2317. Introduction to Agricultural Economics. (AGRI 2317)

3(3-0)

An introduction to agricultural economics including consumer and producer theory, marginal analysis, the definition of supply and demand, their movements and role in price determination and market characteristics.

3310. Food and Agricultural Product Retailing.

3(3-0)

Industrial organization and historical development of the grocery business. Examination of the food chain, perishable product storage and distribution and centralized purchasing functions. Management of the retail profit function with consideration of customer psychology and behavior. Retail food safety with Hazard Assessment and Critical Control Points (HACCP).

3350. Marketing of Farm Products.

3(3-0)

Estimating prospective demands for farm products in relation to supplies, improving the accuracy of the system that reflects consumers' demands to producers and reducing costs and increasing efficiency of marketing. Prerequisite: junior standing.

3355. International Agribusiness Marketing.

3(3-0)

Description of major markets and competition. Effects of U.S. agricultural trade policies and exchange rates on agriculture and firm rationalization. Topics include strategic alliance formation, market entry strategy, business ethics and corruption, pricing and terms of sale, payment methods, trade finance, cultural analysis, Foreign Trade Zones and Foreign Sales Corporations.

- 3360. Agricultural Law.** 3(3-0)
Laws affecting the organization and decision of agricultural enterprises.
- 3366. Agricultural Policy.** 3(3-0)
Agricultural and food policies studies from domestic and international perspectives with emphasis on the economic framework used to access policies that improve the competitive structure, operation, and performance of the U.S. food and agriculture. Prerequisite: AGBU 2317.
- 3371. Farm Management.** 3(3-0)
Types of farming, size of farms, capital requirements, methods of renting, farm equipment, cropping and marketing system, credit system and farm accounts. Prerequisite: junior standing.
- 3380. Environmental Economics.** 3(3-0)
The human-environment relationship studied relative to economic issues of property rights, externalities and resource scarcity as they relate to markets, economies and sustainable development. Prerequisite: junior standing.
- 3390. Special Topics in Agribusiness.** 3(3-0)
Selected topics not currently available in existing courses. May be repeated once under different topic. Prerequisite: junior standing.
- 3995. Internship. [WI]** V:1-9
Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and dean.
- 4325. Rangeland Resource Economics.** 3(3-0)
Economics, management and planning of the ranching industry, range livestock and natural resources. Prerequisite: 3 semester hours of agribusiness.
- 4350. Agricultural Finance.** 3(3-0)
Monetary affairs of farming and ranching emphasizing the Farm Credit Administration, credit policies, facilities, procurement, statement analysis, cost of capital, firm growth and management of financial resources.
- 4360. Agricultural Price Analysis.** 3(3-0)
Investigation of market operations which determine prices in the agricultural industry. Types of markets that affect price, cycles and trends; relative government policy and techniques of price analysis. Prerequisite: AGBU 3350.
- 4371. Strategic Agribusiness Management.** 3(3-0)
The systematic analysis of agribusiness strategic decision-making and management strategies with emphasis on the use of case studies to illustrate different strategic management concepts and the various issues and opportunities faced by today's agribusiness firms. Prerequisites: AGBU 2317 and AGBU 3310.
- 4395. Problems in Agribusiness.** V:1-3
Literature review, laboratory field problem. May be repeated for a total of six semester hours, only three hours may count toward a minor. Prerequisite: approval of supervising professor.
- AGRICULTURE SCIENCE (AGSC)**
- 1352. Welding. (AGRI 2304)** 3(1-4)
Techniques of oxy-acetylene processes in fusion welding of mild steel, bronze welding, hard facing and oxy-acetylene cutting; skills of arc welding in level, horizontal, vertical and overhead position.
- 1451. Introduction to Agricultural Systems.** 4(3-2)
A study and application of basic agricultural system processes. Includes design graphics, use of basic tools and machines, instrumentation and basic construction.

3352. Agricultural Power and Machinery. 3(2-2)
Study of internal combustion engines; principles of operation, construction, ignition, carbureting, cooling systems, lubrication, transmission and diesel engines. Agricultural machinery design, construction and use. Prerequisite: AGSC 1451.

3363. Program Planning for Agricultural Science and Technology. 3(3-0)
Planning, delivering and evaluating programs for agricultural service agencies such as the cooperative extension service, Natural Resources Conservation Service and any other public or private agency which is responsible for the dissemination of information. Time management, public relations, identification of program goals and industry needs, community needs.

3367. Introduction to Agricultural Science and Technology. 3(3-0)
Philosophy, aims and objectives of agriculture science and technology; historical background of agricultural service agencies and organizations programs; career opportunities and qualifications of personnel as related to agricultural service agencies. Prerequisite: junior standing.

3390. Special Topics in Agricultural Science. 3(2-2)
Selected topics not currently available in existing courses. May be repeated once under a different topic. Prerequisite: junior standing.

3995. Internship. [WI] V:1-9
Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and dean.

4353. Agricultural Building Requirements. 3(2-2)
Construction materials, costs, environment, arrangements and types of structures. Plans and drawings will be made for farmsteads, service buildings and dwellings. Prerequisite: AGSC 1451.

4361. Methods, Materials, Techniques and Classroom Management. [WI] 3(2-2)
Methods, materials and techniques in teaching agricultural science; essential elements; daily and annual teaching plans; curriculum organization, planning and evaluation; instructional methods and strategies, adult and young farmer education; students with special needs; and basic principles and procedures of classroom management.

4395. Problems in Agriculture Sciences. V:1-3
Literature review, laboratory field problem. May be repeated for a total of six semester hours, only three hours may count toward a minor. Prerequisite: approval of supervising professor.

4666. Student Teaching in Agricultural Science and Technology. 6
Student teaching in agricultural science classes in selected secondary schools. Requires daily (Monday through Friday) laboratory experience of performing the duties of an agricultural science teacher for at least nine weeks. Prerequisites: overall grade point average of 2.5 or better; junior or senior standing; AGSC 3367, AGSC 4361.

ENVIRONMENTAL SCIENCE (ENVS)

2315. Introduction to Environmental Science. 3(3-0)
Fundamental principles of environmental systems including biological, chemical, social, political, cultural, and economic factors that affect the environments: scientific and social implications of climate change, including anthropogenic pollutants and human population on the environment.

3310. Landuse Decisions. 3(3-0)
Impact of land use on natural resource conservation; land ownership and management issues; and development of environmental impact statements. Registration in ENVS 2315 is required.

3315. Environmental Health. V:1-9
Impact of natural occurring and anthropogenic environmental pollutants on human health. Registration in ENV 2315 is required.

3995. Environmental Internship. V:1-9
Experiential learning of applied environmental science in real-life conditions without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree concentration; only three may count toward a minor. Prerequisite: ENV 2315.

4310. Terrestrial Ecology of Natural Environments. 3(3-0)
The principles and processes that determine the patterns of terrestrial ecosystems, ecosystem relationships with abiotic factors, and the return of biomass to the abiotic cycles. Emphasis on temperate ecosystems of North America, with review of global ecosystems. Prerequisites: ENV 2315 or approval of instructor.

4320. Aquatic and Marine Ecosystems. 3(3-0)
Inland wetlands, estuaries, nearshore, coral reefs and open ocean habitats; explores vegetation, hydrology, water chemistry, management strategies, flow alternations, nutrient enrichment, and chemical contamination of aquatic habitats. Prerequisites: ENV 2315 and junior standing.

4395. Research in Environmental Science. 3(3-0)
Student experiential learning through research under direction of faculty advisor. May be repeated for a total of six semester hours; only three may count towards minor. Prerequisites: junior standing and approval of instructor.

4390. Special Topics in Environmental Science. 3(3-0)
Material offered will be determined by the needs of the students. The course will help each student to pursue his/her niche interest in the wide field of environmental science and environmental studies. May be repeated for credit when topics changes for a maximum of 6 hours. Junior standing and approval of supervising instructor.

GENERAL AGRICULTURE (AGRI)

2330. Introduction to Systems Thinking for Agriculture. 3(3-0)
A multi-disciplinary introduction to agriculture, agribusiness, and environmental science with emphasis on a systems approach to natural resource problem solving.

2380. Emerging Leaders in Agriculture. 3(3-0)
A basic introduction to leadership theories and practice with an emphasis on a strengths based leadership framework and the creation of a personal development plan for becoming a campus leader. Serves as entry course to leadership certificate program.

3330. Decision Making Tools in Complex Systems. 3(3-0)
A dynamic approach to understand different systems of interest with emphasis given to decision support systems (DSS) and how different types of models are used to aid in management decision making. Prerequisite: AGRI 2330.

3372. Contemporary Issues [WI] 3(3-0)
Current issues that impact agriculture that include: world food supply/security; the human diet; cultural, economic, and political consideration; environmental concerns; food safety; animal rights/welfare, genetic engineering, etc., are presented and discussed to provide students with practical and technical knowledge to prepare them for their careers.

3995. Internship. [WI] V:1-9
Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and dean.

4171. Seminar. 1(1-0)
A review of current literature on agricultural subjects. Assigned reading on selected topics with weekly conferences.

4330. Systems Modeling and Analysis for Agriculture. 3(3-0)

A practical application of systems analysis and simulation within the context of agriculture, ecology, and natural resource management; emphasis placed on development, evaluation and use of simulation models by students. Prerequisite: AGRI 3330.

4350. Collective Leadership in Agriculture and Human Sciences. 3(3-0)

Through case studies, reflective analysis, scenario learning and service learning, students will develop leadership skills in a systems thinking approach to issues in agriculture, natural resources and human sciences, by application of knowledge in real world contexts. Students will acquire an understanding of the inextricable relationship among agriculture, natural resources, human sciences and society. Prerequisite: senior standing.

4380. Advancing Leaders in Agriculture. 3(3-0)

A capstone exploration of the role of leadership and commitment to civic engagement with emphasis on the application of leadership development in order to become a socially responsible leader and an active, engaged citizen in agriculture. Prerequisite: AGRI 2380.

PLANT AND SOIL SCIENCE (PLSS)

1407. General Plant Science. (AGRI 1407) 4(3-2)

Fundamental principles underlying the selection, growth, development, maintenance, improvement, utilization and harvesting of cultivated plants.

2315. Introductory Horticulture. (AGRI 1315) 3(3-0)

Fundamental basis of horticulture. Emphasis on home gardening, the uses of horticultural plants and their importance to human civilization. Open to all university students.

2316. Describing Soils in the Field. 3(3-0)

Art and science of soil description using Soil Taxonomy of the United States Department of Agriculture and Intercollegiate Soil Judging. Provides essential experience for those in soil-related careers. Open to all majors.

3318. General Entomology. 3(3-0)

Classification, life histories, habits, and management practices of common local insects and insect pests of plants and animals. Collect, preserve and identify arthropods with emphasis on insects. Prerequisites: PLSS 1407, 3 hours of Biology.

3319. Landscape Design. 3(2-2)

Fundamentals of landscape design including historical survey of garden designs, site analysis, development and evaluation of exterior and interior environments of residential, school, commercial and public park areas. Open to all university students.

3320. Soil Formation and Classification. 3(2-2)

The genesis and evolution of soil profiles as influenced by soil forming agencies, classification schemes, soil survey techniques and utilization of soil maps in management of the soil. Prerequisite: PLSS 3410.

3321. Sustainable Soil and Water Management. 3(3-0)

Methods of reclamation, conservation and management of soils based on the kinds of soils and adapted crops.

3325. Field Crop Production. 3(3-0)

Production practices, produce quality, environmental considerations in the production of field crops and forage crops. Prerequisite: PLSS 1407.

3331. Turf and Urban Landscape Plants. 3(3-0)

Characteristics, description, identification and landscape uses of ornamental trees, shrubs, vines, flowers, ground-covers and grasses adapted to tropic and subtropical zones of the world. Prerequisite: PLSS 1407.

- 3332. Horticultural Plant Propagation.** 3(2-2)
A study of principles and practices of asexual and sexual propagation of horticultural crops. Prerequisite: PLSS 1407.
- 3334. Weed Management in Crops.** 3(2-2)
Proper selection, mode of action and application of chemicals for proper weed control and management. Prerequisites: 3 semester hours of chemistry, PLSS 1407.
- 3344. Vegetable Crop Production.** 3(2-2)
A study of principle and practices used in commercial production, harvesting, storage and processing of fruit and vegetable crops. Prerequisite: PLSS 1407
- 3381. Crop Physiology.** 3(3-0)
Physiological concepts underlying the practices utilized in crop production systems as related to growth processes and their mechanisms. Prerequisites: PLSS 1407, 3 semester credit hours of biology.
- 3410. Principles of Soil Science.** 4(3-2)
Fundamental principles underlying the formation, characteristics and management of soil. Prerequisites: 3 semester hours of Chemistry.
- 3995. Internship. [WI]** V:1-9
Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and department chair.
- 4312. Integrated Pest Management.** 3(3-0)
Current management practices used to control agricultural, horticultural, wildlife and animal pests. This includes insects, weeds, plant diseases and nematodes as they affect crop and animal production. Introduction to pesticide groups and their ecological effects. Prerequisites: PLSS 3325 and 3 semester credit hours of Biology.
- 4313. Landscape Maintenance and Construction.** 3(2-2)
Grading, drainage and construction of landscaped areas to include cost and bid estimation, soil preparation, transplanting operations, arboriculture, turf management, pest and disease control and general maintenance of landscaped areas. Prerequisite: 3 semester credit hours of Biology or PLSS 1407.
- 4325. Plant Breeding and Genetics.** 3(3-0)
Methods of plant breeding applied to agronomic and horticultural crops to ultimate development of superior varieties. Practical application of Mendelian genetics in the breeding and improvement of crop plants. Prerequisites: PLSS 1407 and 3 semester credit hours of Biology.
- 4326. Horticultural Fruit and Crop Production.** 3(3-0)
Tropical and subtropical climates and physiography related to production and management of tropical and subtropical crops including fruits and vegetables, root and tuber crops, beverage crops, oil and industrial crops, legumes, spices, herbs and medicinal plants. Recent significant development in production technology will be presented. Prerequisite: junior or senior standing or permission of the instructor.
- 4327. Soil Water Movement in Landscapes.** 3(3-0)
The water-related properties of plants and soil, the properties of water and the natural processes that affect the behavior of water in plants. Prerequisite: junior standing.
- 4328. Introduction to Plant Pathology.** 3(3-0)
Comprehensive study of diseases and arthropod pests of cultivated crop plants with emphasis on symptoms identification, economic importance and control measures. The concept of integrated pest management is discussed. Prerequisite: senior standing.

4329. Soil Health and Plant Productivity. 3(2-2)
The principles of soil fertility, mechanisms of plant nutrient uptake and plant nutrient requirements. Includes a study of soil fertility management. Prerequisite: PLSS 3410.

4331. Greenhouse Crop Production. 3(2-2)
Commercial production and management of floricultural crops in greenhouses, modern nurseries and other forcing structures. Prerequisite: PLSS 1407.

4390. Studies in Plant and Soil Science. 3(3-0)
Material offered to be determined by the needs of the students. Lecture will vary according to the subject needs with each course having three hour credit. May be repeated for credit when the topic changes. Prerequisite: junior or senior standing.

4395. Problems in Plant and Soil Science. V:1-3
Literature review, laboratory field problem or undergraduate research under direction of a faculty advisor. May be repeated for a total of six semester hours, only three may count toward a minor. Prerequisite: approval of supervising professor.

Degree Requirements
Bachelor of Science in Agriculture
Agribusiness

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1405	4	AGBU 3310	3	FINC 3321	3
ENGL 1301	3	ENGL 1302	3	AGBU 3350	3	MGMT 3322	3
HIST 1301	3	HIST 1302	3	AGBU 3395	2	AAES Elective, adv.**	3
MATH 1324	3	MATH 1325	3	AGRI 3330	3	AGBU/AGRI Elective, adv.*	3
UNIV 1101	<u>1</u>	UNIV 1102	1	<i>^Lang/Phil/Culture</i>	3	<i>^Communications</i>	<u>3</u>
	14	<i>^Creative arts</i>	<u>3</u>	<i>^Component option B</i>	<u>1</u>		<u>15</u>
			17		15		
Sophomore Year				Senior Year			
ACCT 2301	3	ACCT 2302	3	AGBU 3371	3	AGBU 4325	3
AGRI 2330	3	AGBU 2317	3	MKTG 3324	3	AGBU 4371	3
ECON 2301	3	AGRI 2380	3	AAES Elective, adv.**	3	AGRI 4171	1
PLSS 1407	4	ECON 2302	3	AGBU/AGRI Elective, adv.*	3	AAES Elective, adv.**	3
POLS 2301	<u>3</u>	POLS 2302	<u>3</u>	Ag., adv.	<u>3</u>	AGBU/AGRI Elective, adv.**	<u>3</u>
	16		15		15		13
						Total Hours Required	120

*Students must choose one of the following advanced elective in AGBU (3355, 3365, and 3390) or AGRI (3372, 4330, and 4380).

**Student must choose an advanced elective from the Department of AAES (AGSC, AGBU, AGRI, or PLSS).

Degree Requirements
Bachelor of Science in Agriculture
Agribusiness–Ranch Management Option

Freshman Year				Junior Year			
BIOL 1306/1106	4	AGBU 2317	3	AGBU 3310	3	ANSC 2307	3
ENGL 1301	3	CHEM 1311/1111	4	AGBU 3350	3	FINC 3321	3
HIST 1301	3	ENGL 1302	3	AGRI 3330	3	RWSC 2330	3
MATH 1314	3	HIST 1302	3	ANSC 2310	3	RWSC 3328	3
UNIV 1101	<u>1</u>	UNIV 1102	1	RWSC 2323	<u>3</u>	AGBU/AGRI Elective, adv.**	<u>3</u>
	14	<i>^Creative arts</i>	<u>3</u>		15		<u>15</u>
			17				
Sophomore Year				Senior Year			
AGRI 2330	3	AGRI 2380	3	AGBU 3371	3	AGBU 4325	3
ANSC 1419	4	ECON 2301	3	AGBU 3395	2	AGBU 4371	3
MATH 1325	3	PLSS 1407	4	RWSC 3380	3	AGRI 4171	1
POLS 2301	3	POLS 2302	3	AAES Elective, adv.***	2	ANSC 3304 or	3
<i>^Communications</i>	<u>3</u>	<i>^Component B*</i>	1	AGBU/AGRI Elective, adv.**	<u>3</u>	ANSC 3308 or	
	16	<i>^Lang/Phil/Culture</i>	<u>3</u>		13	ANSC 3390	
			17			AAES Elective, adv.***	<u>3</u>
							<u>13</u>
						Total Hours Required	120

*To be selected from any EDKN course option in Component Area Option B.

**Students must choose one of the following advanced electives in AGBU (3355, 3365, and 3390) or AGRI (3372, 4330, and 4380).

***Students must choose an advanced elective from the Department of AAES (AGSC, AGBU, AGRI, or PLSS).

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Agriculture
Agriculture Science-Agricultural Science and Technology with Teaching Certification

Freshman Year			Junior Year				
AGSC 1451	4	ANSC 1419	4	AGSC 3363	3	AGRI 4171	1
BIOL 1306/1106	4	ENGL 1302	3	AGSC 3367	3	AGSC 3352	3
ENGL 1301	3	HIST 1302	3	AGBU, adv.	3	PLSS 3410	4
HIST 1301	3	MATH 1314	3	AGBU/AGSC/	3	AGBU, adv.	3
UNIV 1101	<u>1</u>	UNIV 1102	1	PLSS, adv.		ANSC, adv.	<u>3</u>
	15	<i>^Creative arts</i>	<u>3</u>	ANSC, adv.	<u>3</u>		14
			17		15		
Sophomore Year			Senior Year				
AGBU 2301 or	3	AGSC 1352	3	AGSC 4353	3	(Student Teaching)	
AGBU 2317		ENGL 2314	3	EDED 3302	3	AGSC 4361	3
PLSS 1407	3	POLS 2302	3	EDED 3304	3	AGSC 4666	6
POLS 2301	4	<i>^Communications</i>	3	EDED 3332	3	EDRG 4314	<u>3</u>
<i>^Lang/Phil/Culture</i>	3	<i>^Social/Behavioral</i>	<u>3</u>	EDSE 4350	<u>3</u>		12
CHEM (w/lab)*	<u>4</u>		15		15		
	17						
						Total Hours Required	120

*Must meet *Life/physical sciences requirement.*

Degree Requirements
Bachelor of Science in Agriculture
Agriculture Science-General Agriculture

Freshman Year			Junior Year				
AGSC 1451	4	ENGL 1302	3	AGBU 2301 or	3	AGSC 3352	3
ENGL 1301	3	HIST 1302	3	AGBU 2317		ENGL 2314	3
HIST 1301	3	MATH 1314	3	AGSC 3363	3	Ag. Elective	3
PLSS 1407	4	UNIV 1102	1	AGSC 3367	3	*Internship 3995	3
UNIV 1101	<u>1</u>	<i>^Creative arts</i>	3	PLSS 3325 or	3	PLSS or RWSC, adv.	<u>3</u>
	15	<i>^Lang/Phil/Culture</i>	<u>3</u>	PLSS 3334			15
			16	PLSS 3410	<u>4</u>		
					16		
Sophomore Year			Senior Year				
ANSC 1419	4	AGSC 1352	3	AGSC 4353	3	AGBU 3371	3
BIOL 1306/1106	4	COMS 1311 or	3	AG., adv.	3	AGRI 4171	1
POLS 2301	3	COMS 1315	3	AGBU, adv.	3	ANSC 4308	3
<i>^Social/Behavioral</i>	<u>3</u>	POLS 2302	3	Elective, adv.	3	PLSS 3381	3
	14	CHEM (w/lab)**	4	PLSS Elective	<u>3</u>	Ag., adv.	<u>3</u>
		*Internship 3995	<u>3</u>		15		13
			16				
						Total Hours Required	120

*Internship requirements may be fulfilled with AGBU 3995, AGRI 3995, AGSC 3995, ANSC 3995, PLSS 3995 or RWSC 3995.

**Must meet *Life/physical sciences requirement.*

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Agriculture
Agriculture Science – Environmental Science

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1311/1111	4	AGBU 3380	3	ENVS 3315	3
ENGL 1301	3	ENGL 1302	3	ENVS 3310	3	ENVS 4390	3
HIST 1301	3	HIST 1302	3	ENVS 3995	2	ENVS 4395	3
PLSS 1407	4	MATH 1314	3	PLSS 3410	4	GEOG 3460	4
UNIV 1101	<u>1</u>	UNIV 1102	1	PLSS 3325, PLSS 3334	<u>3</u>	PLSS 3321	<u>3</u>
	15	<i>^Component Option B</i>	<u>1</u>	or PLSS 4312	15		16
			15				
Sophomore Year				Senior Year			
COMS 1311	3	AGBU 2317	3	CHEM 3451	4	ENVS 4320	3
ENVS 2315	3	EVEN 2311	3	EVEN 3336	3	PLSS 4327/PLSS 4329	3
GEOG 2472	4	POLS 2302	3	ENVS 4310	3	RWSC 4380	3
POLS 2301	3	<i>^Lang/Phil/Culture</i>	3	PLSS 3331, PLSS 3344	3	Advance Elective*	<u>3</u>
<i>^Creative arts</i>	<u>3</u>	<i>^Social/Behavioral</i>	<u>3</u>	or PLSS 4331			12
	16		15	Elective*	<u>3</u>		16
					16		
						Total Hours Required	120

*Students must choose an approved elective from AGSC, AGBU, AGRI, ENVS, or PLSS.

Degree Requirements
Bachelor of Science in Agriculture
Agriculture Science - Plant and Soil Science-Agronomy

Freshman Year				Junior Year			
BIOL 1306/1106	4	ANSC 1419	4	AGBU 2317	3	ANSC 4308	3
ENGL 1301	3	CHEM 1311/1111	4	AGRI 3372	3	PLSS 3318 or	3
MATH 1314	3	ENGL 1302	3	PLSS 3325	3	PLSS 3334	
PLSS 1407	4	HIST 1301	3	PLSS 3344 or	3	PLSS 3321 or	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	PLSS 4326		PLSS 4329	
	15		15	Ag. Sci., elective	<u>3</u>	Ag. Sci., adv.*	3
					15	PLSS, adv.	<u>3</u>
							15
Sophomore Year				Senior Year			
HIST 1302	3	GEOG 2472**	4	PLSS 3331 or	3	AGRI 4171	1
POLS 2301	3	PLSS 3995	3	PLSS 4331		PLSS 4312	3
PLSS 3410	4	POLS 2302	3	PLSS 3381	3	PLSS 4328	3
<i>^Creative arts</i>	3	<i>^Communications</i>	3	Ag., adv.	3	Ag. Sci., adv.*	3
<i>^Social/Behavioral</i>	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>	Ag. Sci., adv.*	3	Ag. Sci., adv.*	<u>3</u>
	16		16	Ag. Sci., adv.*	<u>3</u>		13
					15		
						Total Hours Required	120

*Students must choose an elective or advance elective (adv.) course from AGSC, AGBU, AGRI, PLSS, or other Dept. of AGSC.

**Students may choose to take an upper division GIS course from GEOG 3460 or GEOG 4429 course.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Agriculture
Agriculture Science - Plant and Soil Science-Environmental Soil Science

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1311/1111	4	AGBU 2317	3	ANSC 4308	3
ENGL 1301	3	ENGL 1302	3	AGRI 3372	3	PLSS 3320	3
MATH 1314	3	GEOL 1303	3	CHEM 3451	4	PLSS 3321	3
PLSS 1407	4	HIST 1301	3	PLSS 3381	3	PLSS 3995	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	Ag. Sci., elective	<u>3</u>	RWSC, adv.	<u>3</u>
	15		14		16		15
Sophomore Year				Senior Year			
CHEM 1312/1112	4	POLS 2302	3	GEOG 2472	4	AGRI 4171	1
HIST 1302	3	PLSS 3410	4	PLSS 3344 or	3	PLSS 3325 or	3
PLSS 2316	3	^Creative arts	3	PLSS 4326		PLSS 3334	
POLS 2301	3	^Communications	3	PLSS 4327 or	3	Ag. or Sci., adv.	3
^Social/Behavioral	<u>3</u>	^Lang/Phil/Culture	<u>3</u>	PLSS 4329		Ag. Sci., adv.*	3
	16		16	Ag. or Sci., adv.	3	Sci., adv. elective**	4
				Kinesiology	<u>1</u>		14
					14		
Total Hours Required						120	

*Students must choose an elective or advance elective (adv.) course from AGSC, AGBU, AGRI, PLSS or other Dept. of AGSC.

**Students may choose one course with laboratory in Physics, or advanced Geography, Geology, Environmental Engineering, or Advanced GIS course [GEOG 3460, GEOG 4429, etc].

Degree Requirements
Bachelor of Science in Agriculture
Agriculture Science - Plant and Soil Science-Horticulture

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1311/1111	4	AGRI 3372	3	ANSC 4308	3
ENGL 1301	3	ENGL 1302	3	PLSS 3319 or	3	CHEM 2421	4
HIST 1301	3	HIST 1302	3	PLSS 4313		PLSS 3344	3
PLSS 1407	4	MATH 1314	3	PLSS 3320 or	3	PLSS 4331	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	PLSS 3321		Ag. Or Sci., adv.	<u>3</u>
	15		14	PLSS 3381	3		16
				GEOG, adv.**	<u>4</u>		
					16		
Sophomore Year				Senior Year			
GEOG 2472	4	PLSS 3410	4	PLSS 3332 or	3	AGRI 4171	1
POLS 2301	3	PLSS 3995	3	PLSS 4326		PLSS 3331 or	3
^Communications	3	POLS 2302	3	PLSS 4327 or	3	PLSS 4331	
^Creative arts	3	^Lang/Phil/Culture	3	PLSS 4329		PLSS 4328	3
Ag. Sci., elective*	<u>3</u>	^Social/Behavioral	<u>3</u>	PLSS, adv.	3	Ag. Sci., adv.*	3
	16		16	Ag. Sci., adv.*	3	Ag. or Sci., adv.	3
				Ag. or Sci., adv.	<u>3</u>		13
					15		
Total Hours Required						121	

*Students must choose an elective or advance elective (adv.) course from AGSC, AGBU, AGRI, PLSS or other Dept. of AGSC.

** Students may choose to take an advanced GIS course from GEOG 3460 or GEOG 4429.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF ANIMAL, RANGELAND AND WILDLIFE SCIENCES

Scott E. Henke, *Chair*

Kleberg Agriculture Building 133. MSC 228. Extension 2188.

Regents Professors

Fulbright, Henke, Lukefahr, Tewes

Professors

Ballard, Brennan, Bryant, Fedynich, Garcia, Hernandez, Hewitt, Kuvlesky, Ortega-Santos, Rasmussen, Stanko, Wester

Associate Professors

R. DeYoung, Finney, Hilton, Machado, Rideout-Hanzak

Assistant Professors

Bell, Conkey, Perrotto

Faculty Emeritus

C. DeYoung

Department curriculum is designed to provide students with foundation knowledge in basic and applied Animal Science (ANSC), Range and Wildlife Management (RWSC) and Veterinary Technology (VETT). The department emphasizes development of creative thinking and communication skills that are crucial for success.

The curriculum balances presentation of theory in the classroom with hands-on experience in the field. The Texas A&M University-Kingsville Farm provides Animal Science majors experience in swine, beef and goat management. Wildlife majors have the opportunity to work and study on the South Pasture Wildlife Research Area, a facility dedicated to wildlife management and research just south of Kingsville, Texas. The faculty are involved in research that keeps them abreast of current thinking in the animal and wildlife sciences to provide students with up-to-date information.

The department assesses its program by administering comprehensive examinations to undergraduates when they enter the program and during their last semester before graduation. Also, the department chair interviews graduating seniors to determine their impressions on strengths, weaknesses and needs of the program. Results from these activities are used to continually update and improve undergraduate education.

Students majoring in Range and Wildlife Management (RWSC) must have a minimum GPA of 2.5 within the College of Agriculture, Natural Resources and Human Sciences in order to graduate with a Bachelor of Science degree. Range and Wildlife Management students must receive a grade of *C* or better in College of AGNRHS courses and upper division (3000 and 4000 level) biology courses in order to graduate with a bachelor of science degree. Students majoring in Veterinary Technology (VETT) must receive a grade of *C* or better in all VETT courses. Failure to receive a *C* or better in any VETT course may result in immediate withdrawal from the Veterinary Technology program. Students would need to reapply to the program the following year.

Graduates from the department find employment with state and federal agencies or with ranches, farms and other private businesses. The undergraduate curriculum also prepares students for continued education at the master of science level.

UNIVERSITY TEACHING AND RESEARCH FARM

The University Farm is a working laboratory that provides students with experiences in swine, beef cattle and meat goat management. The University Farm houses the only meat rabbit center in the state and demonstrates rabbit management and production practices.

The working and animal housing facilities at the University Farm allow faculty and students to conduct animal science and biomedical research involving cattle, goats, rabbits or swine. The University farm accommodates both applied livestock management and basic physiological research projects.

The University Farm is located one mile north of campus on Armstrong Street and includes over 650 acres of native brush, improved pastures, irrigated and dry-land plots, feed mill, rodeo arena and horse facilities and a covered livestock pavilion. In addition to the close proximity to campus, the diversity of livestock species, facilities and land use provides many educational opportunities for students and faculty in the College of Agriculture, Natural Resources and Human Sciences. In addition, the University Farm hosts several yearly activities involving local and regional youth groups, including 4-H and FFA.

The South Pasture Wildlife Research Area (SPWRA) is a 254-acre tract of native brush and grasslands that is located approximately 6 miles south of TAMUK campus. The property borders the King Ranch to the west and host a diversity of wildlife species found in southern Texas. The facility houses an outdoor laboratory where students will gain hands-on experiences in their courses. Wildlife surveys and captures, telemetry, prescribed fires, and habitat manipulations are commonly performed at SPWRA. Undergraduate and graduate students have the opportunity to conduct independent research on SPWRA. The TAMUK Wildlife Society holds several monthly meetings at the facility.

ANIMAL SCIENCE (ANSC)

1211. Preparation for Animal Agriculture. 2(2-0)
Key issues and trends impacting care and use of livestock and domestic and companion animals. Career opportunities in the animal science profession.

1419. Introduction to Animal Science. (AGRI 1419) 4(3-2)
Basic scientific fundamentals of livestock production, including feeding and nutrition, reproductive physiology, selective breeding, health, management and marketing of major and minor species.

2307. Principles of Feeds and Feeding. 3(3-0)
Chemical composition of feeds, utilization of nutrients, characteristics of feedstuffs and feed usage. Prerequisites: ANSC 1419, MATH 1314, CHEM 1311 plus CHEM 1111.

2310. Livestock Management Techniques. 3(1-4)
Application of animal handling and management techniques for major and minor livestock species including behavior of livestock species relevant to handling, methods of restraint and blood sampling. Prerequisites: ANSC 1419 and sophomore standing.

3302. Swine Management. 3(3-0)
Systems of swine management including breeding, feeding and various management problems with their solutions. Prerequisites: ANSC 2307 and ANSC 2310.

3304. Beef Management. 3(3-0)
Systems of beef management including breeding, feeding and various management problems with their solutions. Prerequisites: ANSC 2307 and ANSC 2310.

3305. Market Classes and Grades of Livestock. 3(2-2)
Classifications and judging of livestock; factors affecting classification, grading and valuing and procedures of marketing livestock. Prerequisites: 9 semester hours of Agriculture including ANSC 1419.

3306. Equine Management. 3(3-0)
Principles of equine management, including conformation, nutrition, reproduction, health and general management practices. Prerequisites: ANSC 2307 and ANSC 2310.

3308. Sheep and Goat Management. 3(3-0)
Systems of sheep and goat management for meat, fiber and milk including breeding, feeding and various management problems and their solutions. Prerequisites: 9 semester hours of animal science including ANSC 1419.

3309. Meat Preparation and Evaluation. 3(2-3)
Market class determination, live animal evaluation; slaughter, cutting, curing, carcass evaluation and grading. Prerequisites: ANSC 1419 and junior standing.

- 3313. Reproductive Physiology of Domestic Animals.** 3(2-2)
Comparative anatomy and physiology of the male and female reproductive systems, endocrinology, gestation, parturition and lactation, management techniques, performance traits and diseases. Prerequisites: ANSC 1419, CHEM 1311 plus CHEM 1111.
- 3335. Animal Breeding and Genetics.** 3(3-0)
Introduction to genetic concepts and principles of livestock improvement involving gene function, molecular genetics, gametogenesis, Mendelian inheritance, selection and breeding systems. Prerequisite: ANSC 1419.
- 3336. Artificial Breeding of Livestock.** 3(2-3)
Study of artificial insemination techniques and reproductive technologies. Application of artificial insemination and pregnancy diagnosis techniques in cattle, goats and swine. Prerequisites: ANSC 1419, ANSC 3313.
- 3390. Special Topics in Animal Science.** 3(3-0)
Selected topics not currently available in existing courses. May be repeated once under different topic. Prerequisite: junior standing.
- 3995. Internship.** V:1-9
Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and chair.
- 4301. Growth Physiology of Livestock Species.** 3(3-0)
Study of the principles of growth and its measurement from the cell to the tissue to the entire animal. Prerequisite: junior standing.
- 4303. Anatomy and Physiology of Domestic Animals.** 3(3-0)
Introduction to the study of functional anatomy and fundamental physiological processes of domestic animals. Prerequisites: ANSC 1419 and CHEM 2421 or CHEM 3323.
- 4305. International Animal Agriculture.** 3(3-0)
Global contributions of animal agriculture involving traditional and nontraditional species on the welfare of human development. Includes a review of selected literature papers and a study of alternative livestock production systems especially appropriate for developing countries. Prerequisite: junior or senior standing.
- 4307. Animal Nutrition.** 3(3-0)
Chemical composition of the animal, functions of nutrients, digestion, metabolism, physiological effects of feed additives. Prerequisites: ANSC 1419 and CHEM 2421.
- 4308. Statistics in Agriculture.** 3(3-0)
Basic and practical overview of agricultural experimentation, which includes an understanding of hypothesis testing, sampling, probability and analysis and interpretation of agricultural research data. Prerequisite: junior/senior standing.
- 4385. Experimental Techniques.** 3(2-3)
Laboratory exercise and demonstrations of current biotechniques used in animal research and their applications to management of animal and wildlife species. Prerequisite: 9 semester hours of animal science or approval of instructor.
- 4395. Problems in Animal Science.** V:1-3
Literature review, laboratory field problem. May be repeated for a total of six semester hours, only three hours may count toward a minor. Prerequisite: approval of supervising professor.

RANGE AND WILDLIFE MANAGEMENT (RWSC)

- 1110. Wildlife Sciences Profession.** 1(1-0)
Elementary studies introducing the wildlife profession. Emphasis on departmental requirements, certification and careers, and species identification and taxonomy of North American wildlife.
- 1320. Wildlife in Literature.** 3(3-0)
Study of literary works emphasizing past and present wildlife and ecological issues.
- 2330. Principles of Wildlife Management.** (AGRI 2330) 3(3-0)
Introduction to the history of the wildlife profession. The role of habitat, harvest theory, human dimensions, livestock interactions, exotic species, endangered species and non-game species as they relate to wildlife management.
- 2331. Range and Wildlife Ecology.** 3(3-0)
General overview of basic range and wildlife ecological concepts including natural selection, food webs, trophic levels, competition, predation, niche theory, life-history patterns and succession. Prerequisite: RWSC 2330.
- 3310. Wildlife Management Techniques.** 3(2-2)
Field and laboratory techniques used in wildlife management and research: aging, sexing, marking, capture, monitoring, disease surveys, food habitats and nutrition analyses, habitat assessment and population estimation. Prerequisite: RWSC 2330 or instructor consent.
- 3328. Rangeland Plants.** 3(2-2)
Basic rangeland plant physiology and morphology, plant community function and structure and plant community response to disturbance. Identification of range grasses, forbs and shrubs; areas of adaptation, utilization and economic importance. Emphasis on range plants of Texas. Prerequisites: BIOL 1106 and BIOL 1306 or PLSS 1407.
- 3380. Rangeland Improvements.** 3(3-0)
Range improvement techniques, practices and expected results in various situations. Desirability, including economics, of selected range improvements. Prerequisite: BIOL 1307 and 1107 or PLSS 1407.
- 3385. Wildlife Policy, Law and Public Relations. [WI]** 3(3-0)
Legislation, administration, public relations and biopolitics as they relate to range and wildlife management. Prerequisite: RWSC 2331. Non-RWSC majors require approval from Department Chair.
- 3390. Special Topics in Range and Natural Resources Management.** 3(3-0)
Selected topics not currently available in existing courses. May be repeated once under different topic. Prerequisite: junior standing.
- 3995. Internship.** V:1-9
Supervised and planned work experience under college guidelines in an agriculture enterprise or agency setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with formal evaluation. May be repeated for a maximum of nine semester hours toward degree; may not count toward minor. Prerequisite: written consent of adviser and chair.
- 4171. Wildlife Capstone Seminar.** 1(1-0)
Holistic knowledge of wildlife management principles and practices. Prerequisite: senior standing in graduating semester or department chair approval.
- 4319. Methods in Rangeland Ecology.** 3(2-2)
Methods of vegetation sampling and community analysis, range condition and trend analysis, estimating stocking rates, wildlife habitat evaluation, use of expert systems. Prerequisite: RWSC 3328 and STAT 1342.
- 4320. Prescribed Burning.** 3(3-0)
Science and art of prescribed burning; review science and ecology concepts basic to prescribed burning and discuss management aspects such as firing techniques, fire weather, fireline safety and smoke management.

4325. Grazing Management and Nutrition. 3(3-0)
Physiological processes, morphological development, nutritional qualities and palatability of range plants as a basis for grazing management strategies for domestic and wild animals.

4370. Ecology and Management of Game Birds. 3(3-0)
Life-history characteristics, population dynamics, population monitoring, harvest management and habitat management of North American game birds. Prerequisite: consent of instructor.

4380. Wetland Ecology and Management. 3(3-0)
Focus on the ecology and management of North American wetlands. Topics that will be covered include unique characteristics of wetlands, wetland classification, biological adaptations to wetlands, wetland management and restoration, the functional roles of wetlands and their importance to wildlife. Prerequisite: 9 semester hours of range and wildlife management.

4382. Large Mammal Ecology and Management. 3(3-0)
Principles of managing large mammal populations in their native habitat. Methods and techniques of evaluating the habitat and requirements of major North American large mammals. Weekend field trips. Prerequisite: 9 semester hours of range and wildlife management. Activity fee, \$20.

4383. Ecology of Arid and Semiarid Lands. 3(3-0)
Ecological principles of arid and semiarid land ecosystems are introduced. These principles are used to illustrate consequences of deliberate and unintentional human actions on arid and semiarid environments. Prerequisite: 9 semester hours of range and wildlife management.

4385. Human Dimensions and Wildlife Conflict Resolution. 3(3-0)
Beliefs, attitudes and behaviors relative to wildlife and wildlife conflicts are examined in the context of natural resource planning, decision-making and actions. Introduction to theory and practice of assessing and controlling human-wildlife conflicts. Prerequisites: 9 semester hours of range and wildlife management and junior standing.

4395. Problems in Range and Wildlife Management. V:1-3
Literature review, laboratory field problem. May be repeated for a total of six semester hours; only three hours may count toward a minor. Prerequisite: approval of supervising professor.

VETERINARY TECHNOLOGY (VETT)

3209. Veterinary Parasitology. 2(1-2)
Study of parasites common to domestic animals including zoonotic diseases. Prerequisites: VETT 3301, VETT 3303, VETT 3324, VETT 3402, and VETT 3405, with a grade of C or better.

3301. Introduction to Veterinary Technology 3(1-3)
Survey of the profession of veterinary technology with emphasis on basic techniques, handling and care of animals and ethical and professional requirements. Prerequisite: admission into the Veterinary Technology Program.

3303. Veterinary Physiology. 3(3-0)
Study of physiological functions and relationships of body systems in domestic animal species. Prerequisite: admission into the Veterinary Technology Program.

3306. Veterinary Diagnostic Imaging. 3(2-3)
Presentation of theory, principles, and practical application of diagnostic imaging techniques within the field of veterinary medicine. Prerequisites: VETT 3301, VETT 3303, VETT 3324, VETT 3402, VETT 3405 and with a grade of C or better.

3311. Veterinary Disease Management II. 3(3-0)
Continued study of common and zoonotic disease of canines and felines encountered in the practice of veterinary medicine. Prerequisites: VETT 3301, VETT 3303, VETT 3324, VETT 3402, and VETT 3405 with a grade of C or better.

- 3324. Veterinary Disease Management I.** 3(3-0)
Introduction to the study of common and zoonotic diseases of canines and felines encountered in the practice of veterinary medicine. Prerequisite: admission into the Veterinary Technology Program.
- 3390. Special Topics in Veterinary Technology.** V:(1-3)
Selected topics not currently available in existing courses. May be repeated once under different topic. Prerequisite: approval of instructor.
- 3402. Veterinary Anatomy.** 4(1-4)
Gross anatomical study of body systems and their topographic relationships in domestic animal species. Prerequisite: admission into the Veterinary Technology Program.
- 3405. Veterinary Nursing Technology I.** 4(1-4)
Common management practices, basic nursing skills, and care of canines and felines in a clinical setting. Prerequisite: admission into the Veterinary Technology Program.
- 3407. Veterinary Clinical Pathology.** 4(3-4)
In-depth study of hematology, blood chemistries, microbiology, urinalysis and other diagnostic tests with emphasis on lab procedures. Prerequisites: VETT 3301, VETT 3303, VETT 3324, VETT 3402, and VETT 3404, with a grade of *C* or better.
- 3410. Clinical Externship I.** 4(4-0)
Supervised and planned work experience under college guidelines in a veterinary clinical setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with the formal evaluation. Prerequisites: VETT 3209, VETT 3301, VETT 3303, VETT 3306, VETT 3311, VETT 3324, VETT 3402, VETT 3405, VETT 3407, and VETT 3425, with a grade of *C* or better.
- 3425. Veterinary Nursing Technology II.** 4(1-4)
Common management practices, advanced nursing skills, and care of canines and felines in a clinical setting. Prerequisites: VETT 3301, VETT 3303, VETT 3324, VETT 3402, and VETT 3405 with a grade of *C* or better.
- 4210. Clinical Externship I.** 2(2-0)
Supervised and planned work experience under college guidelines in a veterinary clinical setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with the formal evaluation. Prerequisites: VETT 4311, VETT 4312, VETT 4318, and VETT 4413, with a grade of *C* or better.
- 4217. Veterinary Office Management.** 2(1-2)
Practical experience in management of the veterinary practice. Emphasis on client relations, record keeping, inventory, employment skills, and computer skills in the veterinary environment. Prerequisites: VETT 4312, VETT 4315, VETT 4319, VETT 4414, and VETT 4426, with a grade of *C* or better.
- 4218. Veterinary Emergency Medicine and Critical Care.** 2(2-0)
Fundamentals of emergency medicine including veterinary first aid, CPR, toxicology and specialized medical techniques and procedures. Prerequisites: VETT 4311, VETT 4312, VETT 4318, and VETT 4413, with a grade of *C* or better.
- 4219. Clinical Externship II.** 2(2-0)
Supervised and planned work experience under college guidelines in a veterinary clinical setting. Practical application of knowledge and skills of major subject area without classroom consultation, but with the formal evaluation. Prerequisites: VETT 4312, VETT 4315, VETT 4319, VETT 4414, and VETT 4416, with a grade of *C* or better.
- 4221. Advanced Veterinary Nursing Techniques.** 2(1-2)
Fundamentals of advanced nursing care at the veterinary technologist level. Prerequisites: VETT 4312, VETT 4315, VETT 4319, VETT 4414, and VETT 4426, with a grade of *C* or better.

- 4311. Surgical Nursing.** 3(2-4)
Fundamentals of common surgical procedures, asepsis, patient monitoring and surgical instrument identification and care. Prerequisites: VETT 3306, VETT 3307, VETT 3308, VETT 3309 and VETT 4110, with a grade of *C* or better.
- 4312. Veterinary Pharmacology.** 3(3-0)
Fundamentals of pharmacology including recognition, calculation, labeling, packaging and administration of veterinary drugs, biologicals and therapeutic agents. Prerequisites: VETT 3209, VETT 3306, VETT 3311, VETT 3407, and VETT 3425, with a grade of *C* or better.
- 4315. Veterinary Disease Management III.** 3(3-0)
Common disease, preventive medicine and nursing of food and fiber animals and horses in the practice of veterinary medicine. Prerequisites: VETT 3209, VETT 3306, VETT 311, VETT 3407, and VETT 3425, with a grade of *C* or better.
- 4317. Veterinary Office Management.** 3(3-2)
Practical experience in management of the veterinary practice. Emphasis on client relations, record keeping, inventory, employment skills and computer skills in the veterinary environment. Prerequisites: VETT 4311, VETT 4312, VETT 4313 and VETT 4314, with a grade of *C* or better.
- 4318. Laboratory Animal Medicine.** 3(3-3)
Fundamentals of laboratory animal medicine including management, care and ethical use of animals. Basic handling, restraint and common veterinary procedures on small animals. Prerequisites: VETT 3306, VETT 3309, VETT 3407, and VETT 4210, with a grade of *C* or better.
- 4319. Veterinary Clinical Pathology II.** 3(1-3)
Continued study of hematology, blood chemistries, urinalysis and cytology with emphasis on lab procedures. Prerequisites: VETT 3209, VETT 3306, VETT 3311, VETT 3407, and VETT 3425, with a grade of *C* or better.
- 4322. Veterinary Disease Management IV.** 3(3-0)
Common disease, preventive medicine and nursing of avian and exotic animals in the practice of veterinary medicine. Prerequisites: VETT 4312, VETT 4315, VETT 4319, VETT 4414, and VETT 4426, with a grade of *C* or better.
- 4323. Laboratory Animal and Small Mammal Management.** 3(1-3)
Fundamentals of laboratory and small mammal medicine including management, husbandry, and common procedures. Prerequisites: VETT 4312, VETT 4315, VETT 4319, VETT 4414, and VETT 4426, with a grade of *C* or better.
- 4327. Veterinary Nursing Technology IV.** 3(1-3)
Feeding, common management practices and care of avian and exotic animals in a clinical or zoological setting. Prerequisites: VETT 4312, VETT 4315, VETT 4319, and VETT 4414, and VETT 4426, with a grade of *C* or better.
- 4413. Large Animal Medicine.** 4(3-4)
Feeding, management practices and care of food producing animals and equine in clinical setting. Common diseases, preventive medicine and nursing of food producing animals and horses in the practice of veterinary medicine. Prerequisites: VETT 3306, VETT 3309, VETT 3407, VETT 3408, and VETT 4210, with a grade of *C* or better.
- 4414. Veterinary Nursing Technology III.** 4(1-4)
Feeding, management practices, and care of food and fiber animals and equids in clinical setting. Prerequisites: VETT 3209, VETT 3306, VETT 3311, VETT 3407, and VETT 3425, with a grade of *C* or better.
- 4415. Anesthesia and Surgical Assistance.** 4(3-4)
In-depth application of surgical, obstetrical and anesthesia techniques including identification and use of instruments and equipment. Prerequisites: VETT 4311, VETT 4312, VETT 4313 and VETT 4314, with a grade of *C* or better.

4416. Avian and Exotic Animal Medicine. 4(3-4)
Feeding, common management practices and care of avian and exotic animals in a clinical or zoological setting. Common diseases, preventive medicine and nursing of avian and exotic animals in the practice of veterinary medicine. Prerequisites: VETT 4311, VETT 4312, VETT 4318, and VETT 4413, with a grade of C or better.

4420. Veterinary Anesthesia and Surgical Nursing II. 4(1-4)
In-depth application of surgical, obstetrical, and anesthesia techniques. Prerequisites: VETT 4312, VETT 4315, VETT 4319, VETT 4414, and VETT 4426, with a grade of C or better.

4426. Veterinary Anesthesia and Surgical Nursing I. 4(1-4)
Fundamentals of veterinary anesthesia, patient monitoring, asepsis, and surgical instrument identification and care. Prerequisites: VETT 3209, VETT 3306, VETT 3311, VETT 3407, and VETT 3425, with a grade of C or better.

**Degree Requirements
Bachelor of Science in Agriculture
Animal Science**

Freshman Year				Junior Year			
ANSC 1211	2	ENGL 1302	3	ANSC 3313	3	AGRI 3372	3
ANSC 1419	4	HIST 1301	3	CHEM 2421	4	ANSC 3305, ANSC	3
BIOL 1306/1106	4	MATH 1314	3	*ANSC Management	3	3309 or ANSC 4301	
ENGL 1301	3	PLSS 1407	4	<i>^Lang/Phil/Culture</i>	<u>3</u>	ANSC 3335	3
UNIV 1101	<u>1</u>	UNIV 1102	1		13	ANSC 3995	1
	14	<i>^Creative arts</i>	<u>3</u>			*ANSC Management	3
			17			Ag., adv.	<u>3</u>
							16
Sophomore Year				Senior Year			
AGBU 2301	3	ANSC 2307	3	ANSC 4303	3	AGRI 4350	3
CHEM 1311/1111	4	ANSC 2310	3	PLSS 3410	4	ANSC 4307	3
HIST 1302	3	CHEM 1312/1112	4	ANSC, adv.	6	ANSC 4308	3
POLS 2301	3	POLS 2302	3	ANSC or RWSC, adv.	<u>3</u>	Ag. or BIOL, adv.	<u>3</u>
<i>^Communications</i>	<u>3</u>	<i>^Social/Behavioral</i>	<u>3</u>		16		12
	16		16				
						Total Hours Required	120

*ANSC Management courses include ANSC 3302, ANSC 3304, ANSC 3306, ANSC 3308 and ANSC 4305; student must choose two.

**Degree Requirements
Bachelor of Science in Agriculture
Animal Science-Pre-Vet**

Freshman Year				Junior Year			
ANSC 1211	2	BIOL 1307/1107	4	ANSC 3313	3	AGRI 3372	3
ANSC 1419	4	ENGL 1302	3	ANSC 4301	3	BIOL 3402	4
BIOL 1306/1106	4	HIST 1301	3	BIOL 2421	4	CHEM 3323/3123	4
ENGL 1301	3	UNIV 1102	1	POLS 2302	<u>3</u>	*MATH 1316	<u>3</u>
UNIV 1101	<u>1</u>	<i>^Creative arts</i>	3		13		14
	14	<i>^Social/behavioral</i>	<u>3</u>				
			17				
Sophomore Year				Senior Year			
ANSC 2310	3	ANSC 2307	3	ANSC 4303	3	ANSC 3335	3
CHEM 1311/1111	4	CHEM 1312/1112	4	CHEM 3325/3125	4	ANSC 4307	3
COMS 1315	3	PHYS 1302/1102	4	ANSC, adv.	3	ANSC 4308 or	3
HIST 1302	3	POLS 2301	3	**ANSC Management	<u>6</u>	MATH 2413	
PHYS 1301/1101	<u>4</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>		16	CHEM 4341	<u>3</u>
	17		17				12
						Total Hours Required	120

Admission to the College of Veterinary Medicine at Texas A&M University requires an additional course, CHEM 4342.

*Requires two years of high school algebra or MATH 1314.

**ANSC Management courses include ANSC 3302, ANSC 3304, ANSC 3306, ANSC 3308 and ANSC 4305; student must choose two.

*^ * For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog*

Degree Requirements
Bachelor of Science in Agriculture
Animal-Wildlife Veterinary Technology

Freshman Year				Junior Year			
ANSC 1419	4	COMS 1311 or	3	VETT 3303	3	VETT 3209	2
BIOL 1106	1	COMS 1315		VETT 3324	3	VETT 3306	3
BIOL 1306	3	ENGL 1302	3	VETT 3402	4	VETT 3311	3
ENGL 1301	3	HIST 1301	3	VETT 3405	4	VETT 3407	4
UNIV 1101	<u>1</u>	MATH 1314	3		14	VETT 3425	<u>4</u>
	12	UNIV 1102	<u>1</u>				16
			13				
						Summer Session	
						VETT 3410	<u>4</u>
							4
Sophomore Year				Senior Year			
CHEM 1111	1	ECON 2301 or	3	VETT 4312	3	VETT 4217	2
CHEM 1311	3	PSYC 2301		VETT 4315	3	VETT 4221	2
HIST 1302	3	POLS 2302	3	VETT 4319	3	VETT 4322	3
POLS 2301	3	<i>^Creative Arts</i>	3	VETT 4414	4	VETT 4323	3
VETT 3301	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>	VETT 4426	<u>4</u>	VETT 4327	3
	13		12		17	VETT 4420	<u>4</u>
							17
				Winter Intersession			
				VETT 4219	<u>2</u>		
					2		
						Total Hours Required	120

Veterinary Technology: upon satisfactory completion of the prescribed course work the student will be awarded a B.S. degree in Agriculture (Veterinary Technology) and will be eligible to take the examination to become a licensed Veterinary Technologist.

Degree Requirements
Bachelor of Science in Agriculture
Range and Wildlife Management

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	ANSC 4308	3	ANSC 3335	3
ENGL 1301	3	ENGL 1302	3	RWSC 2323	3	BIOL 4425	4
HIST 1301	3	MATH 1325	3	RWSC 3310	3	RWSC 3385	3
MATH 1314	3	RWSC 2330	3	RWSC 3328	3	RWSC 4319	<u>3</u>
RWSC 1110	1	UNIV 1102	1	RWSC 3995	<u>3</u>		13
UNIV 1101	<u>1</u>	<i>^Lang/phil/culture</i>	<u>3</u>		15		
	15		17				
Sophomore Year				Senior Year			
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 4429	4	RWSC 4171	1
HIST 1302	3	GEOG 2472	4	PLSS 3410	4	RWSC 4325	3
POLS 2301	3	POLS 2302	3	RWSC 3380 or	3	RWSC 4382	3
RWSC 2331	3	<i>^Communications</i>	3	RWSC 4320		RWSC 4380 or	3
<i>^Creative arts</i>	<u>3</u>	<i>^Social/Behavioral</i>	<u>3</u>	RWSC 4385	<u>3</u>	RWSC 4383	
	16		17		14	RWSC, adv.	<u>3</u>
							13
						Total Hours Required	120

*^ * For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog*

DEPARTMENT OF HUMAN SCIENCES

William P. Kuvlesky, *Interim Chair*

Human Sciences Building 101. MSC 168. Extension 2211.

Regents Professor

Rees

Associate Professor

Deyhim

Assistant Professors

Ko, Li, Oblad

Lecturer

Carrier

Faculty Emerita

Van Buren

The mission of the profession is to improve the quality of life for individuals, families and communities. The department prepares students for careers in business, Texas AgriLife Extension Service, dietetics, community nutrition and foodservice management, fashion merchandising, family and consumer sciences education, child care, elder care and family services. The major in human sciences has a strong liberal arts/general education foundation. The common body of knowledge that comprises human sciences is drawn from the conceptual areas of human nutrition, clothing, shelter, human development, relationships and resource management. Emphasis is placed upon the development of leadership, research, critical thinking and problem solving skills. The department is a member of the Family and Consumer Sciences Alliance and has an accredited Didactic Program in Dietetics.

Undergraduate Programs Leading to the Bachelor of Science in Human Sciences

The Department of Human Sciences offers the Bachelor of Science in Human Sciences degree with majors in Human Science and Human Nutrition. Students selecting the major in Human Sciences can select a concentration in Family and Consumer Sciences Education leading to Teacher Certification, Fashion Merchandising or Human Development and Family Studies.

Family and Consumer Sciences Education. The curriculum prepares students to meet the requirements for certification as family and consumer sciences teachers as well as for employment with the Texas AgriLife Extension Service and other education agencies. Demand for graduates in this major is high. Graduates also may be employed in business settings such as retail establishments, newspaper organizations and magazine publishing. Additional prescribed course work can be completed to support certification in early childhood education. The program requires knowledge of nutrition and foods; clothing, textiles and merchandising; human development and family studies; consumer economics and family resource management; housing and interiors; curriculum development; occupational programs; and classroom management. The Human Sciences Department is a member of the Family and Consumer Sciences Alliance.

Fashion Merchandising. Fashion Merchandising students are prepared for a variety of careers in retail management, fashion buying, visual merchandising, retail and wholesale sales, product development and merchandise coordination. Students are required to take specialized courses in retail buying, apparel construction, flat pattern, fashion illustration, apparel product development, promotional strategies and visual merchandising, textiles, historic costume, global issues, fashion entrepreneurship, residential analysis, and historic structures and interiors. Opportunities are provided for students to gain valuable hands-on experience through participation in field trips, interaction with industry representatives, class assignments designed to include community service, travel study and practicum. To enhance preparation for entering the fashion industry, students may elect to complete courses required for a minor in Business Administration or other related areas, such as Art.

Human Development and Family Studies. The need for quality child care and a growing elderly population have created an increasing demand for professionals educated in human development and family studies. The curriculum is flexible enough to plan a program that will prepare the student to work in a child care or elder care facility as a caregiver or administrator or in a child and family services agency as a counselor. The program provides a developmental approach to understanding human growth from prenatal development to old age. Study of the family

as a system and as the basic unit of society undergirds the curriculum. Concepts covered include marital adjustment, sexual relationships, prenatal development and birth of children, parenting, child care and development, aging and the life cycle of the family. A practicum is required. The Marc Cisneros Center for Young Children provides opportunities for students to gain experience in working with preschool age children and their parents in a closely supervised setting.

Human Nutrition. The major in Human Nutrition prepares students for careers in dietetics, food systems management and community nutrition. Students may find jobs in hospitals, community nutrition programs, wellness programs, school lunch programs, restaurants, hotels, catering establishments and a variety of management positions in the foodservice industry. Concepts studied include food principles, nutrition, medical nutrition therapy, experimental foods, community nutrition, quantity food preparation and food service management. The Human Nutrition program is a Didactic Program in Dietetics (DPD) accredited by the Academy of Nutrition and Dietetics (AND) Accreditation Council for Education in Nutrition and Dietetics (ACEND). This program is designed to meet the educational requirements for acceptance into an accredited dietetic internship program.

Didactic Program in Dietetics Verification Statement Policy

A verification statement is required in order to apply to dietetic internship programs. To be eligible to receive a verification statement, students in the Didactic Program in Dietetics (DPD) must have a minimum GPA of 3.0 overall in required DPD courses and hold a baccalaureate degree. Receipt of a verification statement, alone, does not guarantee acceptance into an ACEND accredited dietetic internship as programs are highly competitive. Students who do not meet the grade point requirement for a verification statement, but satisfy graduation requirements, remain eligible to graduate with a Bachelor of Science in Human Sciences. For more detailed information please see the [Didactic Program in Dietetics Student Handbook](#) available online.

Internships/Practica

Most of the programs in the department require completion of an internship or practicum in a setting that enhances and expands the knowledge and skills gained through course work. Students who plan to take the exam to become a registered dietitian should apply for an internship in an Accreditation Council for Education in Nutrition and Dietetics (ACEND) approved site following the completion of their degree. The department offers a fully accredited dietetic internship.

Grade Policy

Students majoring or minoring in human sciences must make at least a *C* in every human sciences course taken toward their degree.

Marc Cisneros Center for Young Children

Marisol Loreda, *Director*

Marc Cisneros Center for Young Children. MSC 138. Extension 2219.

The Marc Cisneros Center for Young Children is the laboratory in which students observe and gain practical experience working with young children and their parents. Several courses in the Department of Human Sciences require observation and/or participation at the Center. Students from other disciplines, such as early childhood education, psychology, speech communications and kinesiology, are also provided opportunities to observe and interact with young children.

The Marc Cisneros Center for Young Children was established in 1941 and is housed on the corner of University Boulevard and Santa Gertrudis Avenue. It meets the needs of 60 children ages three months through five years. Fenced playgrounds provide a large assortment of play structures and equipment, shade and sun areas and open play space. Learning centers are provided in each room to stimulate and encourage exploration and discovery. The philosophy that young children learn through creative play is evident in planned activities that enhance the children's emotional, social, physical and cognitive development.

A highly qualified staff works with the children. The school's close proximity to campus and its high quality program make it especially attractive to the university community. Parents are encouraged to register their children early since there is a waiting list. Prospective parents are welcome to visit at any time.

CURRICULUM

1300. Introduction to Human Sciences.

V:1-3

Overview of the human sciences profession and its interrelationships with the natural and social sciences and the arts, study of the mission and philosophical bases of the profession, emphasis on professional opportunities in the field. Open to all students; required of all human sciences majors.

3370. Trends and Issues in Human Sciences. [WI]

3(3-0)

Historic issues and contemporary trends in human sciences; philosophical base of family and consumer sciences. Prerequisites: ENGL 1301 and ENGL 1302.

4300. Problems in Human Sciences.

V:1-3

Guided independent study in one of the program areas in human sciences. Prerequisites: junior or senior standing in human sciences, consent of the department chair. May be repeated for a maximum of 6 semester hours of credit.

4302. Honors Tutorial.

V:1-3

Guided independent study and research in the student's selected major in human sciences. Prerequisites: junior and senior standing, 3.25 GPA, completion of at least 15 semester hours in human sciences and consent of instructor. May be repeated for a maximum of 6 semester hours of credit.

4370. Human Sciences Seminar: A Capstone Experience.

V:1-3

Seminar focusing on the integration of the Human Sciences specializations to meet the needs of individuals and families. Leadership; ethics; public policy at local, state, national and international levels; contemporary social issues that affect individuals and families; a capstone course where students work in teams representing various specializations to integrate concepts of problem solving. Prerequisite: senior standing.

4601. Practicum in Human Sciences.

V:3-6

Supervised work experience in a setting appropriate to the student's specialization within human sciences. Prerequisites: senior standing and at least 24 semester hours in human sciences. May be repeated for a maximum of 6 semester hours of credit.

HUMAN DEVELOPMENT AND FAMILY STUDIES

2320. Foundations of Child Development.

3(3-2)

Overview of the theories and enhancement of development of infants, toddlers, young children and adolescents in physical, mental, social and emotional areas within a family context; includes methods and techniques used in observing children. Observation and participation required.

2321. Prenatal, Infant and Toddler Development.

3(2-2)

In-depth study of the theories of child growth and development from conception through the first two years. Includes interactions with caregivers, peers and the environment. Observation and participation required.

2322. Family and Community Health.

3(3-0)

Personal, family and community health problems; community and governmental health agencies; principles of first aid and home care of the sick with special reference to the care of children and the aged.

2323. Marriage and Family Relationships.

3(3-0)

Analysis of the family unit as a group of interacting members at each stage of the life cycle, cultural and social influences upon the marriage unit and individuals in the family, alternate life styles in modern society and how to deal with them in the community.

3320. Development of the Preschool Child.

3(2-2)

In-depth study of the theories of child growth and development as they relate to children from toddlerhood to preschool age. Observation and participation required. Prerequisites: HSCI 2320, HSCI 2321 or junior standing.

3322. Parenthood.

3(3-0)

Basic principles and skills for parent effectiveness, diverse parenting situations, parent-child interaction and communication. Methods, materials and techniques for teaching parenting. Prerequisite: junior standing.

4320. The Family in Later Life. 3(3-0)
Family-oriented problem solving and its relation to major gerontological issues such as intergenerational struggles, independence, loneliness, alternative living arrangements; an examination of family kinship patterns in later life; relationships with spouse, adult children and siblings. Prerequisite: junior standing.

4321. Family Resource Management. 3(3-0)
Selected areas of interest in home management, consumer economics, housing and household equipment. Students are given the opportunity to solve special problems with families having economic, management, housing or household equipment problems. Prerequisite: junior standing.

4322. Family and Consumer Economics. 3(3-0)
Personal and family problems at various stages of the family life cycle in the use of time, money and energy. Factors affecting the family as an economic unit. Decision making applied to financial problems encountered throughout the family life cycle. Prerequisite: junior standing.

4323. Administration of Programs for Dependent Care. 3(2-2)
Principles and practices of administration and supervision in dependent care settings. Patterns of organization and environment planning, program development, staff relationships and development, personnel and business practices. Observation and participation required. Prerequisite: 6 semester hours of human development and family studies courses.

FASHION MERCHANDISING

1330. Fundamentals of Fashion. 3(3-0)
Introduction to fashion merchandising with emphasis on supply, manufacture, distribution and auxiliary components of the fashion industry, as well as fashion terminology and career opportunities.

2333. Software Applications in Fashion and Interiors. 3(3-0)
Overview of computers in layout creation and merchandising, microcomputer applications, analysis of appropriate databases and utilization and evaluation of software specific to fashion and interiors merchandising. Prerequisite: computer literacy course.

2334. Social Responsibility and Apparel. 3(3-0)
Examination of social responsibility in the global textile and apparel industries.

2335. Apparel Construction. 3(1-4)
Basic sewing and construction skills; including understanding a variety of sewing techniques as well as following patterns.

2340. Introduction to Housing. 3(3-0)
Analysis of family housing needs, social and economic conditions affecting housing, production processes, the roles of government in housing.

2431. Textiles. 4(3-2)
Overview of chemical and physical properties of fibers, yarns and fabrics as they influence the selection and performance of textile products. Prerequisite: credit or registration in CHEM 1405.

3330. Historic Costume. 3(3-0)
Survey of historic modes of dress as they reflect the social, economic and cultural life of a people. Application of design principles to modern dress.

3331. Apparel Analysis. 3(3-0)
Evaluation of apparel quality, including analysis of aesthetics, construction, details, performance, cost and end-use. Prerequisite: HSCI 2431.

- 3332. Quantitative Buying Methods.** 3(3-0)
Principles and application of basic mathematical calculations performed by buyers of fashion merchandise and other analytical skills related to the fashion and similar industries. Prerequisite: MATH 1314 or MATH 1324.
- 3335. Computer-Aided Design for Apparel.** 3(2-2)
Development and production of textile and apparel designs and patterns via selected computer software packages. Implications for use in apparel industry. Prerequisite: HSCI 1330.
- 3336. Fashion Illustration.** 3(3-0)
Elements and principles of design in hand and computer rendered fashion illustrations using a variety of media. Prerequisite: ARTS 1311 or ARTS 1316 or permission of instructor.
- 3340. Residential Analysis.** 3(3-0)
Evaluation and analysis of residential interior environments, including analysis of activities, major elements and materials. Prerequisite: 3 semester hours of ARTS.
- 4330. Promotional Strategies in Merchandising.** 3(3-0)
Overview of promotional activities as they support the merchandising function; emphasis on planning, creating and evaluating visual displays and other promotional materials. Prerequisite: ARTS 2313 or ITEN 1311.
- 4331. Clothing in Society.** 3(3-0)
An exploration of the sociological, economic, psychological and cultural aspects of wearing apparel. Prerequisite: PSYC 2301 or SOCI 1301.
- 4332. Qualitative Buying Methods.** 3(3-0)
An exploration of the buying function and differences in buyers' responsibilities in various types of merchandising organizations. Topics include buying-selling cycles, stocking merchandise, assortment planning, merchandise resources, vendor relations, negotiating, pricing and development of import marketing programs. Prerequisite: HSCI 3332.
- 4333. The Fashion Industry.** 3(3-0)
Factors that influence acceptance or rejection of apparel, with emphasis on the process by which fashion apparel is developed and distributed; role and responsibilities of merchandisers in development and distribution of fashion goods. Prerequisites: junior standing and MKTG 3324 or HSCI 3332.
- 4334. Global Issues in Textiles and Apparel.** 3(3-0)
Study of the economic importance of the textile and apparel industry from a global perspective.
- 4335. Flat Pattern.** 3(1-4)
Drafting of apparel patterns and incorporating construction techniques. Using apparel drafting tools and techniques to create original garments. Prerequisite: HSCI 2335.
- 4336. Apparel Product Development.** 3(3-0)
Consumer behavior and merchandising, exploring the acceptance or rejection of apparel, with emphasis on the process by which fashion apparel is developed and distributed. Prerequisite: HSCI 3336.
- 4339. Fashion Entrepreneurship.** 3(3-0)
Prepare individuals for the steps involved in opening their own retail store. Information on entrepreneurship provided with emphasis on activities necessary in the completion of a business plan. Prerequisites: ACCT 2301, ECON 2301, HSCI 1330.
- 4340. Historic Structures and Interiors.** 3(3-0)
Survey of period design in architectural structures, interiors and furnishings from antiquity through the present. Prerequisite: junior standing or completion of visual/performing arts requirement.

HUMAN NUTRITION

1350. Food Preparation and Meal Management. 3(2-2)
Management of resources in selection, purchasing, preparation and serving of foods. Basic principles and fundamental knowledge of standard food preparation are included. Meals and special occasion menus which meet the dietary needs of family members are planned, prepared and served.

2150. Introductory Nutrition Laboratory. 1(0-2)
A laboratory experience that focuses on assessment of nutritional status of individuals. Nutrient composition of food, computerized dietary analysis and survey of the dietetic practice. Corequisite: HSCI 2350.

2350. Introductory Nutrition. 3(3-0)
Basic principles of human nutrition with emphasis on the nutrients and factors which affect their utilization in the human body. Prerequisite: 4 semester hours of Biology or Chemistry.

3350. Nutrition through the Life Cycle. 3(3-0)
An in-depth study of the normal growth, development and nutrition associated with pregnancy, infancy, childhood, adolescence, adulthood and aging. Review of appropriate nutritional assessment methods. Prerequisite: junior standing.

3352. Experimental Food Science. 3(2-3)
Food preparation designed to consolidate previous food studies and to develop experimental attitudes and techniques. Emphasis is placed on basic scientific principles. Includes fundamentals of quality assurance and the various subjective and objective methods of evaluation. Prerequisites: CHEM 2421, HSCI 1350.

3353. Medical Nutrition Therapy I. 3(3-0)
Fundamentals of nutritional assessment techniques and management of diseases of infancy and childhood, diabetes, diseases of the heart, diseases of the upper and lower GI tract. Emphasis on physiology as related to disease and practical application of nutritional support. Includes case studies, practice problems, counseling methods and documentation. Prerequisite: Credit in HSCI 2350/HSCI 2150 with a minimum grade of "C".

3363. Medical Nutrition Therapy II. 3(3-0)
Advanced study of medical nutrition therapy. Course includes fundamentals of enteral and parenteral support and study of physiology as related to acute and chronic kidney disease, surgery, liver disease and acid/base balance. Prerequisites: Credit in HSCI 2350/HSCI 2150, HSCI 3353 with a minimum grade of "C".

4351. Cultural and Community Aspects of Foods and Nutrition I. 3(3-0)
Study of the influence of socioeconomic, cultural and psychological trends, issues and other impacts on food and nutrition behaviors of individuals and communities.

4352. Cultural and Community Aspects of Foods and Nutrition II. [WI] 3(3-0)
Global overview of agencies from community to international levels with emphasis on planning, marketing, implementing and evaluating nutrition programs. Prerequisite: Credit in HSCI 2350/HSCI 2150, HSCI 3353 with a minimum grade of "C".

4360. Quantity Food Preparation and Management. 3(1-4)
Meal planning, food purchasing and preparation of food in large quantities. Introduction to systems management and employer-employee relations. Prerequisites: Credit in HSCI 1350 with a minimum grade of "C".

4366. Advanced Institutional Foodservice Management. 3(3-0)
Advanced studies in institutional foodservice administration including computer applications in foodservice management. Prerequisites: Credit in HSCI 4360 with a minimum grade of "C".

4367. Advanced Nutrition I. 3(3-0)
Study of nutrients and their relation to the chemistry and physiology of the human body, including metabolism of energy and macronutrients in chronic diseases. Analysis and interpretation of current nutrition research. Prerequisites: CHEM 1312, CHEM 1112, credit in HSCI 2350/HSCI 2150 with a minimum grade of "C", or

permission of instructor.

4368. Advanced Nutrition II. 3(3-0)
Study of nutrients and their relation to the chemistry and physiology of the human body, including regulatory nutrients and micronutrients and homeostatic maintenance in chronic diseases. Analysis and interpretation of current nutrition research. Prerequisites: Credit in HSCI 4367 with a minimum grade of "C", or permission of instructor.

FAMILY AND CONSUMER SCIENCES EDUCATION

4310. Occupational Family and Consumer Sciences. 3(3-0)
Analysis of occupational programs which are designed to meet needs of special populations; projects are designed for specialized laboratory settings and the workplace environment. Observations of occupational programs are included. Prerequisites: junior standing and completion of 9 semester hours of human sciences course work.

4311. Professional Applications in Occupational Family and Consumer Sciences. 3(3-0)
Classroom study and application of skills through field experiences in the occupational areas of human sciences; institutional maintenance; hospitality services; food production management and services; services for the elderly; child care and guidance management; fashion design; apparel and textiles production and management; housing, home furnishings and equipment management; production and services. Prerequisite: junior standing.

4312. Methods and Teaching Strategies in Family and Consumer Sciences. 3(3-0)
Principles of teaching the various subject matter areas in family and consumer sciences, including food science and nutrition, to secondary students, out-of-school youth and adults. Emphasis is on program planning; development and evaluation; curricula and other teaching materials; department management, record keeping and reporting. Prerequisites: junior standing.

4610. Directed Teaching in Family and Consumer Sciences. 6(6-0)
Supervised student teaching in family and consumer sciences programs in selected high schools. Full-day, Monday through Friday, laboratory experience for at least 10 weeks; scheduled seminars on university campus. Prerequisites: HSCI 4312, overall GPA of 2.5, senior standing. Students are expected to furnish their own transportation for directed teaching.

Degree Requirements
Bachelor of Science in Human Sciences
Human Sciences - Family and Consumer Sciences Education leading to Teacher Certification

Freshman Year			Junior Year				
CHEM 1405	4	ENGL 1302	3	EDED 3310	3	EDED 3302	3
ENGL 1301	3	HIST 1301	3	HSCI 2335	3	EDED 3332	3
HSCI 1300	1	UNIV 1102	1	HSCI 3340	3	EDED 3333	3
HSCI 1350	3	<i>^Creative arts</i>	3	HSCI 3370	3	HSCI 4312	3
MATH 1314	3	<i>^Communications</i>	3	HSCI adv. elective	<u>3</u>	HSCI 4320	<u>3</u>
UNIV 1101	<u>1</u>	<i>^Life/physical sciences</i>	<u>3</u>		15		15
	15		16				
Sophomore Year			Senior Year				
HIST 1302	3	HSCI 2320	3	EDRG 4314	3	EDSE 4349	3
HSCI 2322	3	HSCI 2323	3	HSCI 4310	3	HSCI 4370	3
HSCI 2431	4	HSCI 2350	3	HSCI 4321.	3	HSCI 4610	6
POLS 2301	3	POLS 2302	3	HSCI 4322	3	Elective	<u>1</u>
SOCI 2361	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>	HSCI 4360	<u>3</u>		13
	16		15		15		
						Total Hours Required	120

NOTE: For students not wishing to seek vocational certification, appropriate course substitutions are made with the approval of the student's adviser. Students can earn an additional certification in early childhood education by completing specified course work.

Degree Requirements
Bachelor of Science in Human Sciences
Human Sciences - Fashion Merchandising

Freshman Year			Junior Year				
CHEM 1405	4	ENGL 1302	3	ECON 2301	3	HSCI 2334	3
ENGL 1301	3	HIST 1302	3	HSCI 3330	3	HSCI 3332	3
HIST 1301	3	HSCI 1330	3	HSCI 3336	3	HSCI 3335	3
HSCI 1300	1	UNIV 1102	1	MGMT 3322	3	HSCI 3370	3
MATH 1314 or	3	<i>^Creative arts</i>	3	MKTG 3324	<u>3</u>	HSCI 4335	<u>3</u>
MATH 1324		<i>^Life/physical sciences</i>	<u>3</u>		15		15
UNIV 1101	<u>1</u>		16				
	15						
						Summer School	
						*HSCI 4601	<u>3</u>
							3
Sophomore Year			Senior Year				
HSCI 2431	4	ACCT 2301	3	BUAD 3341 or	3	BUAD 2374	3
POLS 2301	3	HSCI 2335	3	BUAD 3355 or		HSCI 4334	3
PSYC 2301 or	3	ISYS 2302	3	MGMT 3312		HSCI 4336	3
SOCI 1301	3	POLS 2302	3	HSCI 4330	3	HSCI 4370	<u>3</u>
<i>^Communications</i>	3	<i>^Component option B</i>	2	HSCI 4331	3		12
<i>^Lang/Phil/Culture</i>	<u>3</u>		14	MGMT 3310	3		
	16			Elective	<u>2</u>		
							14
						Total Hours Required	120

*Must be taken in summer school before the senior year

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Human Sciences
Human Sciences - Human Development and Family Studies

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	EDHL 2327 or	3	HSCI 3322	3
HIST 1301	3	HIST 1302	3	EDHL 4334		HSCI 3370	3
HSCI 1300	1	HSCI 2320	3	HSCI 3320	3	PSYC 2308	3
MATH 1314	3	HSCI 2322	3	HSCI, adv.	3	or SOCI 4341	
UNIV 1101	1	PSYC 2301 or	3	*Electives	<u>6</u>	PSYC 3314	3
^Communications	<u>3</u>	SOCI 1301			15	or SOCI 3322	
	14	UNIV 1102	<u>1</u>			*Elective	<u>3</u>
			16				15
						Summer Session I	
						HSCI 4601	<u>3</u>
							3
Sophomore Year				Senior Year			
HSCI 2350 or	3	HSCI 2321	3	HSCI 4320	3	HSCI 4312	3
HSCI 3350		HSCI 2323	3	HSCI 4321	3	HSCI 4322	3
POLS 2301	3	POLS 2302	3	*Elective	6	HSCI 4323	3
^Creative arts	3	**^Life/physical	3	HSCI, adv.	<u>3</u>	HSCI 4370	<u>3</u>
^Lang/Phil/Culture	3	sciences			15		12
**^Life/physical	<u>3</u>	*Elective	<u>3</u>				
sciences	15		15				
						Total Hours Required	120

*Electives are to be selected with the approval of the student's adviser from psychology, sociology, business or other appropriate fields.

**To be selected with the consent of the adviser.

Degree Requirements
Bachelor of Science in Human Sciences
Human Nutrition

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1311/1111	4	BIOL 2401	4	BIOL 2402	4
ENGL 1301	3	ENGL 1302	3	CHEM 4345	3	HSCI 3352	3
HSCI 1300	1	PSYC 2301	3	HSCI 3350	3	HSCI 3363	3
HSCI 1350	3	UNIV 1102	1	HSCI 3353	<u>3</u>	HSCI 3370	<u>3</u>
MATH 1314	3	^Communications	3		13		13
UNIV 1101	<u>1</u>	^Creative arts	<u>3</u>				
	15		17				
Sophomore Year				Senior Year			
CHEM 1312/1112	4	CHEM 2421 or	4	BIOL 2421	4	HSCI 4312	3
HIST 1301	3	CHEM 3323/3123		HSCI 4351	3	HSCI 4352	3
HSCI 2150	1	HIST 1302	3	HSCI 4360	3	HSCI 4366	3
HSCI 2350	3	POLS 2302	3	HSCI 4367	3	HSCI 4368	3
POLS 2301	3	^Lang/Phil/Culture	3	MGMT 3312	<u>3</u>	HSCI 4370	<u>3</u>
STAT 1342	<u>3</u>	HSCI elective	<u>3</u>		16		15
	17		16				
						Total Hours Required	122

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

CAESAR KLEBERG WILDLIFE RESEARCH INSTITUTE

David G. Hewitt, *Leroy G. Denman, Jr. Endowed Director of Wildlife Research*
Howe Agricultural Lab Building 169. MSC 218. Extension 3922.

Rebecca W. Trant, *Director, Administration*
Yolanda Ballard, *Assistant Director, Administration*
Fred C. Bryant, *Director, Development*
Anne Thurwalker, *Assistant Director, Development*

Endowed Chairs

Ballard, Brennan, Tewes

Endowed Professors

Fulbright, Hernandez

Regents Professors

Fulbright, Henke, Tewes

Professors

Ballard, Brennan, Fedynich, Hernandez, Hewitt, Kuvlesky, Ortega-Santos, Wester

Associate Professors

R. DeYoung, Hilton, Rideout-Hanzak

Assistant Professors

Conkey, Foley, Grahmann, Perotto-Baldivieso

Endowed Directors

Hewitt, Bryant, Smith

Research Associate

Obregon

Faculty Emeritus

C. DeYoung

The Caesar Kleberg Wildlife Research Institute was established in 1981 by a grant from the Caesar Kleberg Foundation for Wildlife Conservation to enhance our understanding of wildlife conservation and management in South Texas and related environments.

The institute has embarked on many programs to help accomplish its goal. Focus is on developing four broad areas of research: (1) management of sensitive species and ecosystems; (2) understanding wildlife biology and ecology; (3) management strategies for enhancing wildlife habitat; and (4) wildlife diseases, parasitology and toxicology.

In the study and testing of native plants for future use by wildlife and livestock, the USDA/NRCS Kika de la Garza Plant Materials Center was established in 1981. The center is closely linked to the Institute through projects called *South Texas Natives and Texas Native Seeds*. Other centers that are under the umbrella of the Caesar Kleberg Wildlife Research Institute include the Richard M. Kleberg, Jr. Center for Quail Research, the Meadows Center in Semi-arid Land Ecology and the Feline Research Center.

SOUTH PASTURE

The South Pasture is a 250-acre property located approximately five miles south of the main campus. It is a research and demonstration area owned by the university and managed by the Caesar Kleberg Wildlife Research Institute and the Department of Animal, Rangeland and Wildlife Sciences that exemplifies range and wildlife management techniques commonly used in southern Texas. It is used as a field laboratory for various wildlife and range courses in which students actively participate in plant collections, vegetation sampling, habitat management and wildlife surveys. South Pasture provides students with the opportunity to observe and apply theory learned in courses.

TIO AND JANELL KLEBERG WILDLIFE RESEARCH PARK

This park, named after long-time supporters of the Caesar Kleberg Wildlife Research Institute, Tio and Janell Kleberg, contains five facilities. These include the Buddy Temple Wildlife Pathology and Diagnostic Lab, the Albert and Margaret Alkek Ungulate Research Facility, the Duane M. Leach Research Aviary, the South Texas Natives Research Facility and the Caesar Kleberg Wildlife Center, a South Texas-style conference center and botanical garden on the edge of the main campus.

TEXAS A&M UNIVERSITY-KINGSVILLE CITRUS CENTER

John V. da Graça, *Professor and Executive Director*

312 N. International Boulevard, Weslaco, Texas 78599 Phone (956) 447-3360

Teresa C. Gonzales, *Executive Assistant*

Professors

da Graça, Louzada, Nelson, Sétamou

Assistant Professors

Ancona-Contreras, Kunta, Simpson

Faculty Emeritus

Hensz, French

The Texas A&M University-Kingsville Citrus Center, which opened in 1948 to support the citrus industry, is located northeast of Weslaco in the subtropical Lower Rio Grande Valley, where the commercial citrus industry of Texas is located. The Citrus Center's 60-acre main campus is situated on FM 1015 (International Blvd.), on the north side of I-2 (Expressway 83). There is also a 250-acre research farm 2 miles south of the Center, and a 50-acre farm is leased from Rio Farms in Monte Alto where the soils are more typical of the Valley. The orchards are used for research in all aspects of citriculture, while in the research laboratories cutting-edge technologies are used to benefit the citrus growers of Texas. While the Center is best known for the creation of the dark red grapefruits, it has also been the source of many other products and programs which have helped the growers, including new integrated pest and disease control strategies (both chemical and biological), improved disease detection methods, water saving methodologies, and new breeding techniques. The Center manages the state's certified budwood program, and provides citrus nurseries pathogen-free budwood. It also houses a USDA-certified diagnostic laboratory dedicated to detect exotic diseases which could threaten the industry.

The research results are disseminated through publications, presentations to growers and other scientists, news media and grower consultations. The scientists cooperate with other researchers in Texas, as well as other states and countries, and the Center has hosted visiting scientists and students from around the world.

Faculty also teach classes and guide graduate students' research projects, all of which are designed to help growers. Over 90 students, who increasingly come from families in the Valley, have graduated with masters and doctorate degrees, and have established successful careers.

KING RANCH INSTITUTE FOR RANCH MANAGEMENT

Clay Mathis, *Director and Robert J. Kleberg, Jr. and Helen C. Kleberg Endowed Chair*
Kleberg Agriculture Building 124 + 125, MSC 137. Extension 5401.

Niki Kaiser, *Administrative Coordinator*
Ashley Patterson, *Web and News Media Coordinator*
April Everett, *Administrative Assistant*

Endowed Chair
Mathis, Machen

The King Ranch Institute for Ranch Management was inaugurated in commemoration of the 150th anniversary of the King Ranch in 2003. In keeping with their long history of leadership and philanthropy, the King Ranch and its family and friends endowed the King Ranch Institute for Ranch Management for its operation and in support of its students.

The vision of the institute is to educate leaders who will make a positive difference in ranching and ensure that our hard earned heritage is not lost. Its mission is to teach graduate students using a multi-disciplinary, systems approach to ranch management, and provide the highest quality lectureships and symposia to stakeholders in the ranching industry. We serve the ranching industry by empowering graduate students and outreach attendees with skills that will enable them to strategically manage complex ranching operations and successfully lead our industry.

The program is designed for a higher level of study, and emphasizes the recruitment of mature and experienced students, who will be trained for the complexities of managing ranches. A system approach is used to provide students with a broad background in business, animal science, wildlife management and range management. The curriculum is enhanced with a series of lectureships on special topics such as the oil and gas industry, wildlife habitat management, law and current issues. An annual symposium with world class speakers is presented that will further students' education and training. King Ranch and other large ranches are used as teaching laboratories. Each student is given the opportunity to spend extended time on two internships with cooperating ranches.

COLLEGE OF ARTS AND SCIENCES

COLLEGE OF ARTS AND SCIENCES

Dolores Guerrero, *Dean*
A.L. Kleberg Hall 130. MSC 117. Extension 2761.

Michael Houf, *Assistant Dean*
Shannon Baker, *Assistant Dean*
Elisa Guerra, *Executive Assistant to the Dean*
Pamela Rauch, *Coordinator, Student Services*
Kathy Pawelek, *Business Administrator I*
Jennifer Vela, *Administrative Coordinator II*
Carlos Alvarado, *Advisor*
Pricilla Guerra, *Advisor*
Alma Limas, *Advisor*
Alfonso Ramos, *Advisor*
Sonya Vasquez, *Advisor*
Suzanne Villarreal, *Advisor*
J. Eric Winterbottom, *Pre-Health Coordinator*

The College of Arts and Sciences is unique in offering students a broad-based, liberal arts education transmitting a core of knowledge and cultural values. The college provides the service courses required by all university academic degree programs and specialized courses that may lead to employment or post baccalaureate studies.

The college is committed to providing a humanistic and analytical education through a student-focused educational environment. Its faculty excel in teaching, scholarship and service. The curriculum and its orientation are responsive to the cultural diversity of the students and to the entire South Texas region. In this way, the college helps to expand the academic, social and cultural horizons and expectations of the people it serves.

Through teaching, scholarship and service, the college provides students with a core of cultural knowledge and understanding necessary to function as global citizens and with the life skills and judgment essential to contribute fully to society. The college provides oral and written communication skills and computer literacy required for all disciplines and helps students attain general professional competency in the area of their major. Fulfilling its mission, the college fosters lifelong learning.

The college is composed of the following departments (with the nonteaching degrees each offers):

- Art, Communications and Theatre (B.A., Art, Communications; B.F.A.)
- Biological and Health Sciences (B.A., Biology; B.S., Biology, Biomedical Sciences)
- Chemistry (B.S.)
- Clinical Health Sciences (B.S., Communication Sciences and Disorders; B.S.W., Social Work)
- History, Political Science and Philosophy (B.A., Criminal Justice, History, Political Science)
- Language and Literature (B.A., English, Spanish)
- Mathematics (B.A.; B.S.)
- Music (B.M., Music, Performance)
- Physics and Geosciences (B.S., Geology, Physics)
- Psychology and Sociology (B.A., Psychology, Sociology; B.S., Criminology)

The college also houses the program in Applied Arts and Sciences, which offers the B.A.A.S. degree, programs in International Studies, Religion, and Women & Gender Studies, as well as the Dual Enrollment Program.

Laboratory Fee

For each laboratory course a fee of \$2 to \$30 is charged depending upon cost of materials used in the course.

Teaching Certification

Students seeking a certificate to teach in the secondary schools of Texas must earn a bachelor's degree in a recognized major. The State Board for Educator Certification approved new teaching fields and grade levels for certification beginning in 1999. Majors in the College of Arts and Sciences that may lead to all-level certification include the following:

- Art
- Music

Majors in the College of Arts and Sciences that may lead to secondary certification include the following:

- Biology (Life Science)
- Chemistry
- Communications (Speech)
- English (see Language and Literature)
- Geology (Science emphasis, see Physics and Geosciences)
- History
- History (Social Studies emphasis)
- Mathematics
- Physics (Science emphasis)
- Spanish (see Language and Literature)

For specific degree requirements, contact the chair of the department of the academic discipline involved. For additional information, refer to the College of Education and Human Performance section regarding the Standard Certificate in this catalog.

Pre-Law

Students who desire to enter the law profession should consult the Pre-Law Adviser in the Department of History, Political Science and Philosophy upon enrollment regarding a degree plan and selection of courses.

Pre-Health Professions

Students who desire to pursue any health profession (medicine, dentistry, physical therapy, pharmacy, nursing, etc.) should consult the Pre-Health Professions Coordinator in the Center for Student Success. General information regarding programs offered by Texas A&M University-Kingsville is listed separately in this catalog.

Requirements for the Degree

All students obtaining a bachelor's degree must satisfy the "General Requirements for Graduation" as set forth in an earlier section of this catalog. This includes, among others, the communication skills requirement, residence requirements and grade average rules.

Each program sets the minimum number of hours required for its major and for graduation. A minimum of 45 of the total number of hours must be on the advanced level. Individual degree programs are outlined below.

A minimum grade point average of 2.0 is required on (1) all course work specified for the degree, (2) all course work attempted at this university, (3) all courses in the major and the minor where required on work taken at this university and (4) all courses transferred for the minor when no courses in the minor field are taken at this university.

Communication Skills

Some majors, though not all, in the college have a communications skills requirement for graduation. The following majors have a communications skills requirement: Biology, Biological Sciences, Chemistry and Communications (Speech and Journalism).

Foreign Language

All Bachelor of Arts degrees must include two years (12 SCH) of foreign language study. Students are required to complete their foreign language requirements in a single language.

Major

A major shall consist of a minimum of 24 semester hours in one subject, 6 of which must be taken at this university. At least 50% of the work offered in the major field must be advanced. Double majors must complete the specific requirements for both fields.

Minors

Students receiving a Bachelor of Arts or a Bachelor of Science degree (except for double majors and certain degrees with Teaching Certification) must have a recognized minor. A minor consists of a minimum of 18 hours. Certain minors have specific requirements; see "Recognized Minors" below. At least six hours in the minor field must be on the advanced level.

Recognized Minors

The following minors are available to Arts and Sciences majors: Agribusiness, Agriculture Science, Animal Science, Anthropology, Art, Biology, Business Administration, Chemistry, Computer Science, Criminal Justice, Criminology, English, Environmental Science, Film Studies, French, Generic Special Education, Geographic Information Systems, Geography, Geology, Geophysics, Health, History, Human Sciences, Industrial Technology, International Studies, Journalism, Kinesiology, Mathematics, Mathematical Biology, Mexican American Studies, Military Science, Music, Philosophy, Physics, Plant and Soil Science, Political Science, Psychology, Range and Wildlife Management, Reading, Social Work, Sociology, Southwest Borderlands Studies, Spanish, Spanish Journalism, Speech, Sports Journalism, Sustainability Studies, Theatre Arts, Women and Gender Studies and Writing.

In addition, any group of courses which leads to a specific state-recognized teaching certification or similar endorsement, and which meets the minimum requirements indicated above for all minors, may be accepted as a minor, subject to approval by the dean and by the student's major department. An interdisciplinary or other specialized minor which meets the minimum requirements indicated above, may be recognized in individual cases, subject to approval by the student's major department, the dean and any department in which at least 9 hours of the proposed minor will be taken. The dean's office will circulate a list of minors that has been approved under either of these conditions.

Special conditions apply to the following minors:

Agriculture: The academic coordinator in Agriculture must be consulted for required courses.

Biology: 20 semester hours, including BIOL 1306/BIOL 1106, BIOL 1307/BIOL 1107 and three advanced BIOL courses, one of which must be BIOL 3301 or BIOL 3402. If the student's major requires BIOL 2401 and BIOL 2402, they may be substituted for BIOL 1306/BIOL 1106, BIOL 1307/BIOL 1107.

Business Administration: The following courses are required: ACCT 2301, ECON 2301, ISYS 2302 and a minimum of nine semester credit hours (a total of at least six semester credit hours must be advanced) chosen from ACCT 2302, BCOM 2107, BUAD 2374, BUAD 3341, BUAD 3355, ECON 2302, FINC 2331, MGMT 3312, MGMT 3322 and MKTG 3324.

Chemistry: The minimum number shall be 20 semester hours including CHEM 1311/CHEM 1111, CHEM 1312/CHEM 1112, CHEM 3323/CHEM 3123, CHEM 3325/CHEM 3125 and other chemistry courses (excluding CHEM 1405 and CHEM 1407); CHEM 2421 may not be counted for the minimum amount.

Computer Science: The requirements for the minor in Computer Science are listed in the Electrical Engineering and Computer Science section of this catalog.

Criminal Justice: See requirements listed in the Department of History, Political Science and Philosophy section of this catalog.

English: The minimum number shall be 18 semester hours beyond ENGL 1301-ENGL 1302, 12 of which must be advanced.

Environmental Science: A multidisciplinary minor is offered. Requirements may be obtained from the Chair, Department of Chemistry.

Film Studies: Consists of a minimum of 18 hours. Required: ENGL 2376; 3 semester hours from these courses in non-canonical film – COMM 3369, COMM 4369, ENGL 4370, SPAN 4320; 12 semester hours from these courses in canonical film – COMM 1307, COMM 3308, COMM 3367, COMM 3368, COMM 4366, COMM 4367, COMM 4371, ENGL 3399, HIST 4380. The ACT department chair may approve other courses for this minor.

Geographic Information Systems: A minor consists of five 4-SCH courses. For required and elective courses, see the description under the Department of Physics and Geosciences.

Geophysics: The following courses are required: GEOL 1103, GEOL 1303, GEOL 3370, GEOL 3431, GEOL 4107, GEOL 4307, and GEOL 4375. Courses counted in this minor may not also be counted towards a minor in Geology.

Health: The requirements are given under the Department of Health and Kinesiology later in this catalog.

History: The minimum requirement shall be 18 semester hours, consisting of HIST 1302, HIST 2321-2322 and 9 hours of advanced electives.

Industrial Technology: The minimum requirement shall be 18 semester hours, consisting of ITEN 1311; ITEN 1315 or ITEN 3300; ITEN 2301 or ITEN 3324; and at least three approved advanced ITEN courses in a specified concentration.

International Studies: A multidisciplinary minor is offered. Requirements are listed in the Department of History, Political Science and Philosophy under the heading of International Studies; or contact Dr. Nirmal Goswami, Director, for more information.

Kinesiology: Course work leading to five minor concentrations is offered: physical education, coaching, exercise science, performance psychology, and sport business. Consult the Department of Health and Kinesiology section of the catalog for concentration specific requirements.

Mathematical Biology: Requirements are given under Department of Mathematics later in this catalog.

Mathematics: A minor in Mathematics requires 18 semester hours and 9 hours of advance courses. Please refer to the Department of Mathematics section of this catalog.

Mexican American Studies: A multidisciplinary minor is offered. Requirements are listed in the Department of Psychology and Sociology under the heading of Mexican American Studies.

Military Science: An interdisciplinary minor consists of 22 semester hours. Courses should be selected in consultation with the Military Science adviser.

Music: Consult the Department of Music section of the catalog for requirements.

Physics: PHYS 3343 is required, plus additional PHYS (which may include any prerequisites) to total at least 18 semester hours; at least 3 of the additional hours must be advanced. Prospective PHYS minors should consult with their adviser and the physics faculty to identify courses that will meet their needs.

Social Work: Requirements are listed in the Department of Clinical Health Sciences under the heading of Social Work.

Southwest Borderlands Studies: A multidisciplinary minor is offered. Requirements are listed in the Department of Psychology and Sociology under the heading of Southwest Borderlands Studies.

Spanish Journalism: The following courses are required: COMM 1307; COMM 2310; COMM 2311; SPAN 3302 or SPAN 3311; SPAN 4319; and SPAN 4320. Spanish language proficiency must be demonstrated. Faculty will

evaluate students' Spanish proficiency by assessing students' coursework in Spanish.

Sports Journalism: The minor in Sports Journalism consists of: COMJ 3304, COMJ 3327, COMM 2310, COMM 3301, COMM 3302, COMM 4306 (Sportswriting and Reporting), COMM 4391 (Independent Study in Sportswriting).

Sustainability Studies: Contact the Program Director for information regarding this minor.

Women and Gender Studies: A minor in Women and Gender Studies requires 18 semester hours to be selected from the courses listed under that program later in this catalog.

Writing: For limitations and requirements for this minor, see the Writing Minor in Language and Literature Department section of this catalog

Certificates

The Department of Mathematics offers an undergraduate SAS Certification Program jointly with SAS Institute, Inc. See Department of Mathematics for details.

The Department of Physics and Geosciences offered an undergraduate Geophysics certificate program. See Department of Physics and Geosciences for details.

The Department of Physics and Geosciences offers an undergraduate Geographic Information Systems (GIS) certificate program. See Department of Physics and Geoscience for more information.

An undergraduate transcribed certificate in Women and Gender Studies requires 12 semester hours. See the detailed requirements in the Women and Gender Studies section of the catalog.

APPLIED ARTS AND SCIENCES (B.A.A.S. Program)

The purpose of the Bachelor of Applied Arts and Sciences (B.A.A.S.) is to offer students with formal training in a vocational-technical studies area the opportunity to obtain a baccalaureate degree without the significant loss of credits that normally occurs in pursuing a traditional degree. This program is especially appropriate for graduates of an Associate of Applied Science program. The degree is designed to afford both academic and professional depth to individuals who possess recognized competence in an occupational or technical field. It is designed to offer flexibility that will permit tailoring the program to the student's background and educational objectives. The B.A.A.S. is not available as an online degree.

Limitations of the B.A.A.S. Degree

The B.A.A.S. degree is not designed to accommodate students seeking teacher certification while completing the bachelor's degree. Students who wish to teach in state of Texas should contact the College of Education and Human Performance for Certification requirements.

The B.A.A.S. degree is not intended to prepare students for graduate or professional school. Students who plan to apply to law school, medical school, or a graduate program in academic disciplines should consult with an advisor in the discipline of interest before applying for the B.A.A.S. program.

Degree Requirements

The student must complete a baccalaureate degree plan (120 semester hours minimum) consisting of 36 residence hours, plus transfer credit.

- A. **General Education and Electives** (minimum 42 semester hours): The General Education component of 42 hours is made up of freshman and sophomore-level courses which meet each of the criteria identified by the university as important aspects of a general education as described under "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this catalog.
- B. **Area of Specialization** (18-48 semester hours): Credits toward the area of specialization may be earned from junior or community colleges, vocational or technical schools, and armed forces schools whose work can be equated to vocational/technical schools. Courses will be transferred from these entities to TAMUK at the first-year (BAAS 1300) or second-year (BAAS 2300) level.
- C. **Professional Development** (30 semester hours): The courses taken in this area are to be chosen to provide academic depth and breadth to the area of specialization and, in addition, afford substantive developmental knowledge in the student's professional career goals. The component focuses on areas of learning directly related to upward mobility and further extends a student's knowledge, skill and expertise. The professional development sequence of 30 semester hours will be selected from human science, criminology, industrial management and technology, psychology, sociology or another approved professional area. The professional sequence will be tailored to each student's needs by structured counseling.
- D. **Advanced Work:** Within the above requirements, candidates for the B.A.A.S. degree must have a minimum of 36 semester hours of advance course work.

Students must meet all requirements associated with their course selections. For more information, contact the College of Arts and Sciences, (361) 593-2761.

1300. Vocational/Technical Topic.

V:(1-3)

Selected topics at the introductory level not currently available in existing courses. May be repeated under different topic. This course cannot be used for academic credit. It cannot be transferred to other institutions, nor does it stand as basic coursework or stemwork towards a master's degree. Prerequisite: Approval from BAAS Advisor.

2300. Vocational/Technical Topic.

V:(1-3)

Selected topics at a second-year level not currently available in existing courses. May be repeated under different topic. This course cannot be used for academic credit. It cannot be transferred to other institutions, nor does it stand as basic coursework or stemwork towards a master's degree. Prerequisite: Approval from BAAS Advisor.

DEPARTMENT OF ART, COMMUNICATIONS AND THEATRE

Todd Lucas, *Chair*

Speech Building 174. MSC 178. Extension 3401.

Professors

Barraza, Flores, C. Wissinger

Associate Professors

De La Rosa, Faherty, Lucas, Ranson

Assistant Professors

Ibanez, McDonnell, F. Wissinger

Lecturers

A. Brown, L. Brown, Roberts

Faculty Emeriti

Deacon, Renfrow, Schmidt

In the Art, Communications and Theatre Department, students are exposed to a myriad of learning opportunities that can lead to careers in media, advertising/public relations, art, and theatre. The department provides instruction for students studying in the fields of art, print and online journalism, sports journalism, advertising-public relations, social media, film, live web streaming, radio/television and theatre. In addition, students interested in education can gain certification in speech and in theatre arts. The department also offers specialization at the elementary level for speech.

In Art, students learn the fundamentals of artistic expression in order that their developed individuality may lead them toward one of the many directions found in the field of art. The Ben Bailey Art Gallery allows the department to carry out an ambitious exhibition program that is part of the university's commitment to the promotion of culture in South Texas. Participation by students and faculty in exhibitions provides a significant expressive and educational experience. Faculty and students also exhibit their work throughout the area and state and have exhibited internationally in Mexico, Canada, China and different locations in Europe. The program offers a comprehensive B.F.A. degree that provides students with strong foundations in drawing, painting, sculpture, printmaking, ceramics and metalwork.

Opportunities to prepare for a career in advertising art, graphic design or art history are also available. Art courses are offered for students seeking certification in a second teaching field or as a specialization in an elementary art education. The B.A. with a major in art is designed for students who wish to obtain a liberal arts degree. Most courses are open to interested students as electives. In addition, students can take up to 15 graduate hours in art.

The Department offers an undergraduate level certification in Digital Art. Students will receive the transcribed certificate upon completing all courses (C or better) stated in the course requirements. In order to receive the transcribed certificate, students must take four courses, three required and one chosen from electives:

Required Courses

ARTS 3301, Digital Painting

ARTS 4355, Advanced Graphic Design

ARTS 4356, Typography

Elective Courses

ARTS 4357, Web and Interface Design

ARTS 4358, Package Design

For more information about gaining the Transcribed certificate of Digital Art, please consult the department chair.

Students majoring or minoring in the various areas of the department are encouraged to take advantage of the experience and training offered to them in the various activities sponsored by the university and the department.

Journalism students are expected to work with the student print and online newspaper, *The South Texan*, which also offers experience in live web streaming. Credit for this work can be received by registering for COMJ 2129 or through a variety of approved courses in the curriculum. Journalism students compete in the Texas Intercollegiate Press Association (TIPA), the Associated Collegiate Press (ACP) and National Student Advertising Competition (NCAS) sponsored by the American Advertising Federation.

Communication majors can hone their skills through a variety of hands-on experiences, including working for the university's radio station -- KTAI FM 91.1—and the student television station – TAMUK TV 2.

Both journalism and speech concentrations have the opportunity to take courses in film studies and documentary making. Communications majors also compete in TIPA and ACP contests.

The department offers minors in Spanish Journalism and Sports Journalism and cooperates in the Interdisciplinary Minor in Film Studies. For details, see “Recognized Minors” in the Arts and Sciences section of the catalog. In addition, the interdisciplinary major in sports management offered through the Health and Kinesiology Department incorporates several journalism courses.

In speech, students can participate in forensic activities and travel to competition throughout the state and nation. Those interested are encouraged to register for COMS 1144 for a minimum of 3 semester hours of elective credit.

Theatre students are involved in up to eight productions each year and compete in the Kennedy Center American College Theatre Festival. Students have the opportunity to develop acting skills, learn about design, production, lighting and other various aspects of theatre. Students can obtain up to 18 hours of theatre credit.

All department activities are open to members of the university who are not majoring or minoring in departmental programs. The department has a communication skills requirement for graduation. Students must contact their department for information about the communication skills requirement.

ARTS (ARTS)

1303. Art History I. (ARTS 1303) 3(3-0)
A lecture course in the history of painting, sculpture, architecture and other art forms from prehistoric times to the 14th century.

1304. Art History II. (ARTS 1304) 3(3-0)
A lecture course in the history of painting, sculpture, architecture and other art forms from the 14th century to the present.

1311. Design I. (ARTS 1311) 3(2-4)
An art studio course in the theory and practice of design. Focus is on the development and application of critical thinking skills to visual problems through the fundamental principles and elements of design. Includes possible applications in secondary education and/or art related professions.

1312. Design II. (ARTS 1312) 3(2-4)
An art studio course in the formal elements of design in three dimensions. Critical thinking skills are furthered through explorations of volume and form. Includes possible applications in secondary education and/or art related professions.

1316. Drawing I. (ARTS 1316) 3(2-4)
A basic course organized to promote confidence in working with the techniques, media and aesthetics of drawing.

1317. Drawing II. (ARTS 1317) 3(2-4)
Studio problems of modeling forms in space, perspective and composition, and combining these into visual expression.

- 1325. Principles of Art.** 3(2-4)
Studio activities with art materials in conjunction with a survey of the history and philosophy of art. Includes the study of art's essential elements.
- 1375. Introduction to Digital Photography.** 3(2-4)
The creation of art through use of the digital camera and computer technology, with emphasis on color design elements.
- 2301. Structure of the Arts.** 3(2-4)
Art, Music and Theatre Arts are combined in selected problems dealing with arts structure. Creative production is the result of studio activity and critique.
- 2303. History of Architecture.** 3(3-0)
Survey course in the history of Architecture. Aspects of construction, building materials, design, and aesthetics, and considerations of the urban landscape. Concentration on modern to contemporary expression.
- 2313. Graphic Design.** (ARTS 2313) 3(2-4)
Studio emphasis on theory and practices of advertising (commercial) art, planning layout, developing messages, selecting media and executing advertising art.
- 2316. Painting.** (ARTS 2316) 3(2-4)
Studio emphasis in the theory of color and the use of paint to suggest form and space, convey ideas and emotions and explore the dynamics of visual expression.
- 2323. Life Drawing** 3(2-4)
Study of human figure and its historical and contemporary implications for the artist, including anatomical and structural dynamics, gesture, narrative, and issues concerning the body as subject. May be repeated for credit. Prerequisite: ARTS 1316 or 1317.
- 2326. Sculpture.** (ARTS 2326) 3(2-4)
An art studio course which explores three-dimensional concepts of form in a variety of sculptural media.
- 2333. Printmaking.** (ARTS 2333) 3(2-4)
An art studio course which explores various printmaking techniques, including planographic, intaglio, stencil and relief with emphasis on their expressive power.
- 2346. Ceramics.** (ARTS 2346) 3(2-4)
An art studio course in the use of clay for hand building and wheel throwing. Design and decoration are studied from historical and aesthetic perspectives.
- 3301. Digital Painting.** 3(2-4)
Introduction to digital painting, focusing on image manipulation and painting tools such as Photoshop. Translation of traditional painting techniques to the computer. Exercises emphasize understanding of the software interface, ability to visualize and sketch out compositions, control of light and value, and creation of representational images.
- 3302. Women and the Arts.** 3(3-0)
Issues surrounding the participation of women in the arts. Selected women who have contributed to the visual and performing arts throughout history are studied in relation to the culture of their time and the principles related to the arts. No previous experience in theatre, art or music required. Prerequisite: completion of visual/performing arts component requirement. (Credit may be obtained in only one of ARTS 3302, MUSI 3302, THEA 3302 or WGST 3302.)
- 3377. Materials and Their Use in Art.** 3(2-4)
Study and studio use of the tools, materials, techniques and methods used in the many art processes not covered by drawing, painting, sculpture, printmaking or ceramics.

- 3388. Elements of Art.** 3(2-4)
The essential elements of visual design as they relate to the studio production of works of art.
- 4300. Advanced Drawing.** 3(2-4)
Studio drawing with emphasis on greater mastery of technical skills toward development of a personal vision. May be repeated as needed. Prerequisites: ARTS 1316 and ARTS 1317.
- 4303. History of Mexican American Art.** 3(3-0)
The history of modern Mexican American art, from its roots to contemporary times. Prerequisite: completion of core requirements.
- 4311. Advanced Painting.** 3(2-4)
Studio painting with emphasis on greater mastery of technical skills toward development of a personal vision. May be repeated as needed. Prerequisite: ARTS 2316.
- 4322. Advanced Sculpture.** 3(2-4)
Studio sculpture with emphasis on greater mastery of technical skills toward development of a personal vision. May be repeated as needed. Prerequisite: ARTS 2326.
- 4333. Advanced Printmaking.** 3(2-4)
Studio printmaking with emphasis on greater mastery of technical skills toward development of a personal vision. May be repeated as needed. Prerequisite: ARTS 2333.
- 4344. Advanced Ceramics.** 3(2-4)
Studio ceramics with emphasis on greater mastery of technical skills toward development of a personal vision. May be repeated as needed. Prerequisite: ARTS 2346.
- 4355. Advanced Graphic Design.** 3(2-4)
Studio emphasis on greater mastery of technical skills chosen from the many directions associated with graphic design, such as typography, layout, visualization, conceptual problem solving, the ad campaign, illustration or computer aided design. Students prepare portfolios for entry into undergraduate, graduate or work-related programs. May be repeated as needed. Prerequisite: ARTS 2313 or ARTS 3301.
- 4356. Typography.** 3(2-4)
Introduction to typography – the art of designing with type. Study of the history and aesthetics of type and letterforms. Introduction to digital typesetting. Prerequisite: ARTS 2313 or ARTS 3301.
- 4357. Web and Interface Design.** 3(2-4)
Studio emphasis in the construction of web and interface design, which communicates the function of hypermedia. May be repeated as needed. Prerequisite: ARTS 2313 or ARTS 3301.
- 4358. Package Design.** 3(2-4)
Studio emphasis on design concepts and practical applications of package design and construction. Analysis and creation of 3-dimensional and graphic solutions for packaging problems, with consideration of marketing concerns. Prerequisite: ARTS 2313 or ARTS 3301.
- 4369. Experimental and Underground Film.** 3(2-2)
Experimental and underground films in the United States. Avant-garde genres and their influence on the broader film culture; film language, iconography, technique and style of experimental and/or underground film. Prerequisite: 6 semester hours of advanced course work in film or consent of the instructor. (Credit may not be earned in both ARTS 4369 and COMM 4369.)
- 4370. Special Problems in Art.** V:1-3
Study of problems in the creative arts. May be repeated for credit when the topic changes. Prerequisite: approval of instructor.

4399. Senior Exhibition. 3(3-0)
The execution of a successful professional gallery exhibition by a B.F.A. candidate. Prerequisite: registration for graduation in the semester taken.

COMMUNICATION (COMM)

1307. Introduction to the Mass Media. (COMM 1307) 3(3-0)
Mass communication in modern society. Communication processes, legal consideration and social implications.

1318. Interpersonal Communication. (SPCH 1318) 3(3-0)
Interpersonal communication including one-to-one and small-group settings. Issues such as self-concept, perception, relationship development, conflict, and communication barriers.

2304. Introduction to Film. 3(3-0)
Introduction to film, including narrative, directing, acting, cinematography, and the film industry.

2310. Media Design. 3(3-0)
Theory and practice of media design, editing and layout for print and electronic media. Journalistic ethics and other problems confronting editors and publication designers. Prerequisite: COMM 2311.

2311. Newswriting. (COMM 2311) 3(2-3)
Theory and practice of newswriting and relationships with sources. Lectures and assignments covering news for print and electronic media. Discussions of journalistic ethics and other problems confronting reporters. Prerequisites: ENGL 1301 and ENGL 1302.

2333. Small Group Communication. 3(3-0)
Communication techniques for leading and participating in small groups. Special emphasis on the nature of small groups, factors influencing communication in groups, and small group decision-making. Prerequisites: COMS 1311 or permission from instructor.

2341. Introduction to Oral Interpretation. 3(3-0)
Process of creating performance texts from various forms of literature, including poetry, prose, public address, and various forms of media. Students will generate scripts for performance. Prerequisite: COMS 1311 or permission of instructor.

3301. Reporting. 3(2-3)
Theory and practice in news gathering and writing; types and techniques of public affairs reporting. Lab assignments include coverage of university departments and activities, municipal and county government, schools and courts for *The South Texan*. Lab requires use of computers as editing terminals and data bases. Prerequisite: COMM 2310.

3302. Sportswriting and Reporting. 3(3-0)
An overview of sports journalism; writing, reporting, interviewing and editing skills. Game stories, advances, follow-up stories, feature and human-interest stories and columns. Analysis of successful sportswriters. Writing for newspapers, magazines, online and social media, from Little League to the Olympics. Prerequisite: COMM 2311 or consent of the instructor.

3352. Nonverbal Communication. 3(3-0)
Study of nonverbal communication, including body language, use of space, and sound as nonverbal forms of communication. Nonverbal communication as it pertains to both gender and culture. Prerequisite: 6 semester hours of COMM or consent of instructor.

3353. Acting for the Camera. 3(3-0)
Developing concepts of the use of the voice and body in the creation of character for the camera, film and television.

3355. Intercultural Communication. 3(3-0)
Communication in multicultural contexts, in intrapersonal, interpersonal, and small-group contexts. Emphasis on conflict resolution and constructive collaboration in intercultural situations. Prerequisite: 6 semester credit hours of

COMM or consent of instructor.

- 3356. Conflict and Communication.** 3(3-0)
Comprehensive perspectives on conflict, including its causes, manifestations, and outcomes. Communication techniques applied in interpersonal, intergroup, organizational, and community conflicts. Prerequisite: 3 semester hours of COMM courses, or by consent of instructor.
- 3360. History of American Film I.** 3(3-0)
Introduction to American film history from its origins to the 1960's, including major trends facing the industry, important genres, and important figures. Prerequisites: 3 semester hours in Communication, Journalism, Speech, or Theatre (COMS 1311 excluded) or consent of the instructor.
- 3361. History of American Film II.** 3(3-0)
Introduction to American film history from the 1960's to present, including major trends facing the industry, important genres, and important figures. Prerequisites: 3 hours in Communication, Journalism, Speech, or Theatre (COMS 1311 excluded) or consent of the instructor.
- 3368. Classic Horror Films.** 3(2-2)
Themes of the classic horror film genre. Includes critical viewing and analysis of classic films, classic sequels, classic remakes, international remakes and comic spin-offs. Prerequisite: 3 semester hours of communication, journalism or speech.
- 3369. Hispanics and Film.** 3(2-2)
Hispanic-themed and Spanish-language films in the United States; their impact on the perception of Hispanics. Hispanic pioneers in the motion picture industry and their influence on American character and culture. Prerequisite: 3 semester hours of communication, journalism or speech.
- 4306. Selected Topics in Communication.** 3(3-0)
Literature and research in areas of communication. Includes such topics as international press, yearbook production, semantics and history of public address. May be repeated once for credit when topic varies. Prerequisite: 6 semester hours of communication, journalism and/or speech.
- 4307. Hispanics in the Media.** 3(3-0)
Provides historically accurate information about the impact of Spanish-language media in the United States and develops appreciation for diversity and knowledge of Latino subcultures of the United States. Prerequisite: 6 semester hours of communication, journalism and/or speech.
- 4310. Rhetoric and Public Address.** 3(3-0)
The nature and function of rhetorical criticism, explored through the systematic study of important speeches. Prerequisite: 6 hours of COMM courses or junior standing.
- 4311. American Public Address.** 3(3-0)
The nature and function of rhetorical criticism, explored through the systematic study of important American speeches. Prerequisite: COMS 1311 or COMS 1315.
- 4312. Research in Mass Communication.** 3(3-0)
Systematic study of mass communication/journalism. Quantitative and qualitative methods of research. Prerequisite: 6 semester hours of communication, journalism and/or speech.
- 4313. Gender and Communication.** 3(3-0)
The role of gender in human communication. Attention to oral histories, alternative narratives and gender theory, including systematic, cultural, cognitive and behavioral approaches to studying gender and communication. Special attention to gender in the workplace. Prerequisites: 6 hours of COMM and junior standing.

- 4316. Advanced Seminar in Communication.** 3(3-0)
Advanced theory and practice in selected types of speech communication, debate, and oral interpretation. Contest speaking, tournament management and communication evaluation. Prerequisites: 6 hours of COMM and junior standing.
- 4317. Mass Media, the Public and the Law. [WI]** 3(3-0)
Legal and ethical limitation and responsibilities of the mass media, relationship and interaction between broadcaster, governmental regulatory agencies and the public. Prerequisite: 6 semester hours of journalism and/or radio-television.
- 4331. Readings in Communication and Theatre.** 3(3-0)
Research in contemporary thought in communication and theatre. Prerequisites: 6 hours of COMM and junior standing. (Credit may not be obtained in both COMM 4331 and THEA 4331).
- 4350. Organizational Communication.** 3(3-0)
Theoretical investigation and practical application of organizational communication principles. Focus on information processing and problem solving within organizations. Prerequisites: 6 semester hours of COMM and junior standing.
- 4351. Communication Theory.** 3(3-0)
Critical examination of theories and research in communication. Focus on rhetorical, interpersonal, group, mass, and organizational communication theories. Prerequisites: junior or senior standing, 9 semester hours of COMM, at least 6 of which must be sophomore level or higher, or consent of instructor.
- 4360. History of World Film I.** 3(3-0)
Introduction to the history of film outside of the United States from its origins to the 1960's, including major trends facing the industry, important genres, and important figures. Prerequisite: 9 hours in Communication, Journalism, Speech, or Theatre (COMS 1311 excluded), or consent of this instructor.
- 4361. History of World Film II.** 3(3-0)
Introduction to the history of film outside the United States from 1960's to the present, including major trends facing the industry, important genres, and important figures. Prerequisite: 9 hours in Communication, Journalism, Speech, or Theatre (COMS 1311 excluded), or consent of the instructor.
- 4369. Experimental and Underground Film.** 3(2-2)
Experimental and underground films in the United States. Avant-garde genres and their influence on the broader film culture; film language, iconography, technique and style of experimental and/or underground film. Prerequisite: 6 semester hours of advanced course work in film or consent of the instructor. (Credit may not be earned in both COMM 4369 and ARTS 4369.)
- 4371. Documentary Video Production.** 3(2-2)
Storytelling in the digital age: the design, creation and production of digital video documentaries. Includes management and production skills and practical exercises. Prerequisites: COMS 4335 and permission of the instructor.
- 4391. Independent Study in Communication.** V:1-3
Intensive work in a special area of the student's major or minor. A maximum of 6 semester hours of credit in independent study may be applied toward graduation. Prerequisite: 6 semester hours in communication, speech or journalism.
- 4399. Senior Project.** 3(3-0)
The execution of a successful design or performance project.

DIGITAL COMMUNICATION (DCOM)

2306. Directing

3(3-0)

Theory and training in major facets of directing: finding appealing material, interpreting a script, working with actors, casting and rehearsals, pre-visualization processes, storyboarding, on-set protocols, creative blocking of scenes, and working with the producer, director of photography, art director, and editor. Awareness of professionalism in the collaborative arts. Prerequisite: COMM 2304.

3304. Screenwriting.

3(3-0)

The art and crafts of writing for the screen. Theory and training in preparation to work in the film industry. Excellence in writing screenplays is emphasized. Differences in story structure between short and long forms; judging good story form; rewriting techniques; the relationship with the producer and director; protocol in receiving and incorporating notes; and collaboration. Students will complete at least one draft screenplay for a short film. Prerequisites: COMM 2304.

3307. Production Across Digital Media.

3(3-0)

Theory and basic training in producing video and digital short-format content across media: film, digital, television, radio, and the web. Storytelling and the basics of producing, writing, directing and editing shorts, such as those in newscasts and on websites, as well as developing work habits and ethics of an industry professional. Prerequisite: COMM 2304 or permission of instructor.

3310. Digital Editing.

3(3-0)

Craftsmanship and aesthetics of digital editing; the relationship between editor and director. Terminology and concepts, conventions, the rules and when to break them. Technological workflow for both picture and sound editing. The historical role of editing, from silent films through the ongoing Digital Revolution will be studied, especially via screenings and workshops. Prerequisite: COMM 2304.

4310. Feature Screenplay Writing.

3(3-0)

Training and craftsmanship in writing feature-length screenplays. Writing and rewriting as the route to the best screenplay possible. Course will proceed through screening of films and television shows, writing labs, workshops, presentations, and lectures. Students will write a feature screenplay, first draft (90-120 pages). Prerequisite: COMM 2304 or permission of instructor.

4311. Writer-Producer-Director.

3(3-0)

Advanced production course in writing for the screen. Instruction in how to translate writing for the page to writing for film. Designed to prepare students, through fast-paced immersion, to write, produce and direct by quickly putting onto the screen what they write on the page. Prerequisites: DCOM 2306 and DCOM 3304 or permission of instructor.

JOURNALISM (COMJ)

2129. Publications Laboratory.

1(0-2)

Practical experience in publications. The course may be repeated for a maximum of 6 semester hours of credit. Prerequisite: COMM 2311.

3304. Feature and Special Articles.

3(3-0)

Identifying and developing feature story ideas. Reporting and writing feature articles and arranging for appropriate pictures for publication in newspapers or periodicals. Emphasis on training students in identifying markets for nonfiction writing. Prerequisite: junior standing.

3321. Principles of Advertising.

3(3-0)

Advertising writing, layout, typography and art work. Advertising campaigns, selling, practice exercises and advertising work for publication.

3327. Digital Photojournalism.

3(2-3)

Technical and artistic aspects of digital photography and digital photojournalism. Storytelling through the lens; analysis of photographic images. Prerequisites: 6 semester hours of ARTS, COMJ and/or COMM.

- 4301. History of Journalism.** 3(3-0)
Development of the newspaper in England and the United States with attention to the social, economic and political forces which brought about changes in journalistic techniques and in basic ideas as to newspaper functions. Study of the careers of noted journalists.
- 4302. Editorial Writing.** 3(3-0)
Purpose and style of editorial comment. Editorial page editing. Prerequisite: junior standing.
- 4309. Advanced Advertising.** 3(3-0)
Experience with professional-style presentations to national and international clients. Prepares students for the American Advertising Federation's National Student Advertising Competition. Prerequisite: COMJ 3321.
- 4322. Public Relations.** 3(3-0)
Principles of public relations and their application in business, industry, education, government, social agencies and other institutions; the media of public relations; research methods used in public relations; journalistic implications of the public relations process. Case studies and analysis. Practice in public relations planning and writing.
- 4324. Advanced Public Relations.** 3(3-0)
Crisis management and problem solving through journalism and communications. Theoretical basis for public relations; laws and ethics concerning the profession. Prerequisite: COMJ 4322.
- SPEECH (COMS)**
- 1144. Forensic Lab.** 1(0-1)
Participation and training in forensic activities, such as debate, extemporaneous speaking, oral interpretation and oratory. May be repeated for a total of 6 semester hours. Required for those participating in intercollegiate competition.
- 1311. Introduction to Oral Communication.** (SPCH 1311) 3(3-0)
Theory and practice of speech communication in interpersonal, small group and public speaking.
- 1313. Principles of Speech.** 3(3-0)
Theory and practice of choral speaking, oral reading of children's poetry and prose, creative drama, public speaking and small group discussion with children. Recommended for future elementary teachers.
- 1315. Business and Professional Communication.** (SPCH 1321) 3(3-0)
Theories and skills of speech communication as applied to business and professional situations.
- 1336. Introduction to Television Production.** (COMM 1336) 3(2-3)
The techniques of TV program production and procedures involved. Student participation in videotaped productions from the studio and remote locations.
- 2118. Radio Control Room Operations.** 1(1-0)
Practical experience in campus radio broadcasting activities. May be repeated for a total of 6 semester hours. Prerequisite: 3 semester hours of radio or television.
- 2301. Audio Production.** 3(3-0)
Survey of the techniques and equipment of audio production. Topics will include the use of microphones, tape machines and accessories. Both analog and digital processes will be covered.
- 2331. Radio Announcing and Production.** (COMM 2331) 3(2-3)
The principles of speech for radio and an analysis of the background and trends in broadcasting. An application of the principles for practical experience with emphasis on radio production.
- 2335. Discussion and Debate.** (SPCH 2335) 3(3-0)
Small group theories and techniques as they relate to group processes and interaction as well as the basic principles and practice of argumentation and debate. Prerequisite: COMS 1311 or high school experience.

- 2342. Voice, Phonetics and Diction.** (SPCH 1342) 3(3-0)
Voice production, the International Phonetic Alphabet and its application to the production of the sounds of American English. Required for majors.
- 2374. Professional Communication.** 3(3-0)
Communication skills for the professional. Writing of reports, letters, proposals, etc. Oral presentations in the form of group problem-solving, design reviews, requests for funding and/or public testimony/hearing. Use of presentation media to support oral communication. Prerequisite: ENGL 1302. (Credit may not be obtained in both COMS 2374 and ENGL 2374.)
- 3304. Advanced Oral Interpretation.** 3(3-0)
Analysis and practice of techniques in the oral interpretation of drama, poetry, prose, programmed readings, lecture recital and group interpretations. Prerequisite: 6 semester hours of speech.
- 3331. Persuasive Communication.** 3(3-0)
Theories and techniques of persuasive communication including the psychological, logical and ethical principles involved. Types of speaking and persuasion in the media will be studied. Required for speech concentration. Prerequisite: COMS 1311 or equivalent.
- 3337. Intermediate Television Production and Direction.** 3(2-4)
Expanded operation and theory of television equipment is utilized in the production and direction of programs for the local educational cable television system. Prerequisite: COMS 1336.
- 4335. Advanced Studio and Remote Television Production.** 3(1-5)
Mastery of television equipment utilization both in the studio and field. Practical experience in electronic news gathering and electronic field production for educational cable television. Prerequisite: COMS 3337.
- THEATRE ARTS (THEA)**
- 1120. Theatre Practice I.** (DRAM 1120) 1(0-2)
Experience in the participation in and evaluation of rehearsal and performance activities related to departmental productions. Required for Theatre Arts minors. May be repeated once.
- 1322. Acting I.** (DRAM 1351) 3(2-2)
Beginning concepts of the use of the voice and body in the creation of a character for the stage.
- 1341. Makeup for the Stage.** 3(2-4)
The theory and practice of stage makeup with emphasis on the latter.
- 2301. Structure of the Arts.** 3(2-4)
Art, Music and Theatre Arts are combined in selected problems dealing with arts structure. Creative production is the result of studio activity and critique.
- 2310. Introduction to Theatre.** 3(3-0)
Introduction to theatre including narrative, directing, acting, design and theatre as a profession.
- 2330. Stagecraft.** (DRAM 1330) 3(2-3)
Introduction to stagecraft as it pertains to academic theatre. Scene shop and set construction skills. Basic concepts of drafting and design. Participation in stage work required. Prerequisite: THEA 1120.
- 2361. Theatre History I.** 3(3-0)
Introduction to Western theatre history from the Greeks to the early nineteenth century, including major trends and figures from theatre history, as well as the theatre's relationship to larger cultural trends in the West during these eras.

- 2362. Theatre History II.** 3(3-0)
Introduction to Western theatre history from the early nineteenth century to the present, including major trends and figures from theatre history, as well as the theatre's relationship to the larger cultural trends in the West during these eras.
- 3131. Rehearsal and Performance I.** 1(0-2)
Experience in acting and crew work in departmental productions. Required for Theatre Arts minors. May be repeated once.
- 3132. Rehearsal and Performance II.** 1(0-2)
Experience in acting and crew work in departmental productions. Required for Theatre Arts minors. May be repeated once.
- 3311. Advanced Problems in Scenography and Performance.** 3(2-3)
Consideration of topics such as scenery and lighting design, advanced problems of acting, costume history and construction. May be repeated once for credit when topic changes.
- 3330. Technical Theatre.** 3(2-3)
Introduction to technical theatre as it pertains to academic theatre. Light hanging and focusing skills; use of light and sound boards; basic concepts of lighting and soundtrack design. Participation in stage work for department required. Prerequisite: THEA 2330.
- 3341. Introduction to Musical Theatre.** 3(3-0)
Introduction to the basics of musical theatre, particularly from the perspective of performance. Designed to prepare students for the summer musicals held in conjunction with the Department of Music. Prerequisite: registration or credit in MUSI 1159.
- 3352. Acting II: Advanced Acting.** 3(2-2)
For students with a background in acting. Scenes from classical theatre, avant-garde theatre and other period and non-traditional genres. Prerequisite: THEA 1322.
- 3365. Costuming for the Theatre.** 3(3-0)
Introduction to costuming for the theatre, including history of costume fashion in the West as well as skills necessary to develop costume renderings. Prerequisite: 6 hours in Theatre or Art, or consent of the instructor.
- 4302. Play Direction.** 3(3-0)
Problems of selecting and producing the play, practice in directing the one-act play. Prerequisites: THEA 1341.
- 4308. Selected Topics in Theatre History and Criticism.** 3(3-0)
Studies of the major periods of theatre, such as Greek to Elizabethan, Elizabethan to modern and the development of theatrical criticism. May be repeated once as topic varies. Prerequisite: sophomore standing.
- 4331. Readings in Speech Communication and Theatre Arts.** 3(3-0)
Research in contemporary thought in speech communication and theatre arts. Prerequisites: COMS 1311, COMS 2335, COMS 2342. (Credit may not be obtained in both COMS 4331 and THEA 4331.)
- 4392. Independent Study in Theatre Arts.** V:1-3
Intensive work in a special area of the student's major or minor. A maximum of 6 semester hours of credit in individual study may be applied toward graduation.
- 4399. Senior Project.** 3(3-0)
Execution of a successful design or performance project.

**Degree Requirements
Bachelor of Arts
Art**

Freshman Year			Junior Year				
ARTS 1303	3	ARTS 1304	3	ARTS, adv.	3	ARTS, adv.	6
ARTS 1316	3	ARTS 1317	3	Elective, adv.	3	Elective, adv.	3
ENGL 1301	3	ENGL 1302	3	Foreign language	3	ARTS Elective	3
UNIV 1101	1	UNIV 1102	1	Minor	3	Foreign language	3
[^] Life/Physical sciences*	3	[^] Life/Physical sciences*	3	[^] Component option B	3		15
Elective	1	[^] Social/Behavioral	3		15		
	<u>14</u>		<u>16</u>				
Sophomore Year			Senior Year				
HIST 1301	3	COMS 1311	3	ARTS, adv.	6	ARTS, adv.	6
POLS 2301	3	HIST 1302	3	Elective, adv.	3	Elective, adv.	3
[^] Lang/Phil/Culture	3	POLS 2302	3	Minor	6	Minor, adv.	6
[^] Mathematics	3	Foreign language	3		15		15
Foreign language	3	Minor	3				
	<u>15</u>		<u>15</u>				
						Total Hours Required	120

*To meet the Life/physical sciences requirement, CHEM 1376 and PHYS 1375 are suggested.

**Degree Requirements
Bachelor of Fine Arts**

Freshman Year			Junior Year				
ARTS 1303	3	ARTS 1304	3	ARTS, adv.	9	POLS 2302	3
ARTS 1311	3	ARTS 1312	3	[^] Component option B	3	ARTS, adv.	9
ARTS 1316	3	ARTS 1317	3	[^] Life/Physical sciences	3	[^] Life/Physical sciences	3
ENGL 1301	3	ENGL 1302	3		15		15
MATH 1314	3	UNIV 1102	1				
UNIV 1101	1	[^] Social/Behavioral	3				
	<u>16</u>		<u>16</u>				
Sophomore Year			Senior Year				
ARTS 2313	3	ARTS 2333	3	ARTS, adv.	6	ARTS 4399	3
ARTS 2316	3	ARTS 2346	3	Electives, adv.	6	ARTS, adv.	6
ARTS 2326	3	HIST 1302	3	*Elective	1	Electives, adv.	6
COMS 1311	3	POLS 2301	3		13		15
HIST 1301	3	[^] Lang/Phil/Culture	3				
	<u>15</u>		<u>15</u>				
						Total Hours Required	120

*See advisor for more information.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Fine Arts
All-Level Art with Teaching Certification**

All-Level Art with Teaching Certification. Contact the Department Office for semester-by-semester degree requirements.

**Degree Requirements
Bachelor of Arts
Communication-Journalism**

Freshman Year				Junior Year			
COMM 1307	3	COMM 2311	3	COMJ 2129	1	COMJ 4317	3
ENGL 1301	3	ENGL 1302	3	COMJ 3304	3	COMJ/COMM, adv.	3
HIST 1301	3	HIST 1302	3	COMJ 4322	3	Elective, adv.	3
UNIV 1101	1	UNIV 1102	1	COMS 1311,	3	Minor	3
[^] Mathematics	3	[^] Social/Behavioral	3	COMS 1315	3	Minor	<u>3</u>
Foreign language	<u>3</u>	Foreign language	<u>3</u>	[^] Component option B	3		15
	16		16	[^] Creative arts	<u>3</u>		
					16		
Sophomore Year				Senior Year			
COMM 2310	3	COMS 3301	3	COMJ 4301	3	COMM 4319	3
ENGL 2342 or	3	ENGL 2342 or	3	COMM 4306	3	Elective, adv.	3
ENGL 2362		ENGL 2362		Elective, adv.	3	Minor, adv.	3
POLS 2301	3	POLS 2302	3	Minor, adv.	3	Minor, adv.	<u>3</u>
[^] Life/physical sciences	3	[^] Life/Physical sciences	3	Minor, adv.	<u>3</u>		12
Foreign language	<u>3</u>	Foreign language	<u>3</u>		15		
	15		15				
						Total Hours Required	120

**Degree Requirements
Bachelor of Arts
Communication-Speech**

Freshman Year				Junior Year			
COMS 1311	3	ENGL 1302	3	COMS 3331	3	COMM/COMS, adv.	3
ENGL 1301	3	HIST 1302	3	COMM/COMS	3	COMM/COMS, adv.	3
HIST 1301	3	UNIV 1102	1	Elective, adv.	3	Elective, adv.	3
UNIV 1101	1	[^] Creative arts	3	Elective, adv.	3	Minor	3
[^] Mathematics	3	[^] Social/Behavioral	3	Minor	<u>3</u>	Minor	<u>3</u>
Foreign language	<u>3</u>	Foreign language	<u>3</u>		15		15
	16		16				
Sophomore Year				Senior Year			
COMS 2342	3	ENGL 2342 or	3	COMM/COMS, adv.	3	COMM/COMS, adv.	3
ENGL 2342 or	3	ENGL 2362		COMM/COMS, adv.	3	COMM/COMS, adv.	3
ENGL 2362		POLS 2302	3	COMM/COMS, adv.	3	Elective, adv.	3
POLS 2301	3	[^] Component option B	3	Elective	1	Minor, adv.	3
[^] Life/Physical sciences	3	[^] Life/Physical sciences	3	Minor, adv.	<u>3</u>	Minor, adv.	<u>3</u>
Foreign language	<u>3</u>	Foreign language	<u>3</u>		13		15
	15		15				
						Total Hours Required	120

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Arts
Speech with Teaching Certification**

Freshman Year				Junior Year			
COMS 1311	3	COMM 1318	3	COMM 3352	3	COMM 4310	3
ENGL 1301	3	COMM 2333	3	COMM 3355	3	COMS 3331	3
HIST 1301	3	ENGL 1302	3	EDED 3310	3	EDED 3302	3
UNIV 1101	1	HIST 1302	3	COMS, adv.	3	EDED 3333	3
[^] Mathematics	3	UNIV 1102	1	Foreign language	<u>3</u>	Foreign language	<u>3</u>
[^] Social/Behavioral	<u>3</u>	[^] Life/Physical sciences	<u>3</u>		15		15
	16		16				
Sophomore Year				Senior Year			
COMM 2341	3	COMM 2335	3	COMM 4350	3	EDED 4623	6
POLS 2301	3	POLS 2302	3	COMM 4351	3	EDRG 4314	3
[^] Creative arts	3	Foreign language	3	EDED 3332	3	EDSE 4349	<u>3</u>
[^] Life/Physical sciences	3	[^] Lang/Phil/Culture	3	EDED 3362	3		12
Foreign language	<u>3</u>	Elective	<u>3</u>	[^] Component option B	3		
	15		15	Elective	<u>1</u>		
					16		
						Total Hours Required	120

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF BIOLOGICAL AND HEALTH SCIENCES

Enrique Massa, *Chair*

Biological and Health Sciences Building 101. MSC 158. Extension 3803.

Professors

Baskin, Galloway, Perez-Ballestero, Perrigo

Associate Professors

Massa, Powell, Soto, Xi

Assistant Professors

Bohm, He, Kim, Laughlin, Sung, Velez-Hernandez

Lecturer

Kumro, Patrock, Quazi

Faculty Emeriti

Peacock, Perez, Wood

The mission of the Department of Biological and Health Sciences at Texas A&M University-Kingsville is to provide excellence in teaching, research and service in a unique biotic and cultural region of Texas. The strong research and teaching base of our faculty allows us to provide the latest information in biology, including strong programs in biomedical science, field biology, and animal physiology. Our commitment, as always, is to the success of our students.

Students must earn a *C* or better in English 1302 to meet the department's communication skills requirement. See chair for alternative exam.

BIOLOGY (BIOL)

1106. General Biology Laboratory I. (BIOL 1106) 1(0-3)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes an understanding of the cell structure, energy transformation, reproduction and genetic variability. Pre- or corequisite: BIOL 1306.

1107. General Biology Laboratory II. (BIOL 1107) 1(0-3)

Experimental and observational techniques used to study plant and animal life at the organismal, population and community levels including morphology, physiology, reproduction and ecology. Pre- or corequisite: BIOL 1307.

1111. Introductory Botany Laboratory. (BIOL 1111) 1(0-2)

A laboratory experience that reinforces an understanding of plant form, function and identification. Pre or corequisite: BIOL 1311.

1113. Introductory Zoology Laboratory. (BIOL 1113) 1(0-2)

A laboratory experience that reinforces an understanding of animal form, function and identification. Pre or corequisite: BIOL 1313.

1306. General Biology I. (BIOL 1306) 3(3-0-1)

Survey of contemporary biology that covers the chemical basis of life, structure, function and physiology of the cell, molecular biology and microevolution. Three lecture hours and one discussion hour a week for one semester. Concurrent enrollment in BIOL 1106 recommended.

1307. General Biology II. (BIOL 1307) 3(3-0-1)

Continuation of a two-semester course in biological concepts; will emphasize organismal diversity and comparative anatomy, reproduction, physiology, ecology, behavior and evolution. Three lecture hours and one discussion hour a week for one semester. Concurrent enrollment in BIOL 1107 recommended. Prerequisite: BIOL 1306.

1311. Introductory Botany. (BIOL 1311) 3(3-0)

Survey of the plant kingdom with emphasis on the evolution and diversity of form, function followed by a survey of plant diversity and ecology. Concurrent enrollment in BIOL 1111 is recommended. Prerequisites: exemption from

or credit in READ 0300 and WRIT 0300.

1313. Introductory Zoology. (BIOL 1313) 3(3-0)
Survey of the animal kingdom with emphasis on the evolution, structure and function followed by a survey of animal diversity and ecology. Concurrent enrollment in BIOL 1113 is recommended. Prerequisites: exemption from or credit in READ 0300 and WRIT 0300.

1372. Biological Connections. 3(3-0)
Role of biological sciences in issues of world concern. Some experience in biology assumed (either one year of high school biology or credit or registration in BIOL 1306). Prerequisite: ENGL 1301.

2375. Life Science. 3(3-2)
A survey of the basic concepts of biology. Emphasizes cell structure, energy transformation, plant and animal structures and functions, diversity and classification.

2401. Human Anatomy and Physiology I. (BIOL 2401) 4(3-3)
Gross and microscopic anatomy and physiology of the cells and tissues, integument, skeletal, muscular and nervous systems. Six hours of chemistry recommended.

2402. Human Anatomy and Physiology II. (BIOL 2402) 4(3-3)
Gross and microscopic anatomy and physiology of the circulatory, respiratory, digestive, excretory, endocrine and reproductive systems. Prerequisites: BIOL 2401; 6 hours of chemistry recommended.

2421. Elementary Microbiology. (BIOL 2421) 4(3-3)
Fundamental principles of the relationship of microorganisms to the life of human beings, including their morphology, growth, nutrition and study. Prerequisites: C or better in both BIOL 1306 and BIOL 1106; 6 hours of chemistry recommended.

3112. Genetics Lab. 1(0-3)
Fundamental experiments to demonstrate the concepts of inheritance, including cytogenetics techniques, quantitative Mendelian genetics, biochemistry of genetics, linkage and DNA mapping and protein electrophoresis of population and speciation genetics.

3301. Evolutionary Theory. 3(3-0)
A study of Darwinism, mechanisms of evolutionary change and a history of life in the context of contemporary biology. Prerequisite: 12 semester hours of biology.

3375. Economic Entomology. 3(3-0)
The characteristics, life history and identification of insects important to man, with particular reference to agriculture. Stress will be on control measures for harmful species. Prerequisite: 12 semester hours of biology.

3401. Invertebrate Zoology. 4(3-3)
Classification, anatomy, life history and evolution of invertebrates exclusive of insects. Prerequisite: 12 semester hours of biology.

3402. Genetics. 4(3-3)
Fundamental concepts of heredity, including cell reproduction, transmission genetics, biochemistry of genetics, gene structure and function and genetics of population. Lecture and recitation meetings. Prerequisites: 12 semester hours of biology; 6 semester hours of chemistry recommended.

3403. Plant Taxonomy. 4(3-3)
An introductory course concerned with developing skill in recognition and identification of seed plants at the species and family levels. Emphasis will be placed on collection, use of keys and manuals and herbarium techniques. Prerequisite: 12 semester hours of biology.

- 3405. Vertebrate Zoology.** 4(3-3)
Anatomy, classification and natural history of the vertebrates; methods of collecting, preserving and identifying local vertebrates. Prerequisite: 12 semester hours of biology.
- 3407. Ecology.** 4(3-3)
Ecology of water and land forms of South Texas. Prerequisite: 12 semester hours of biology.
- 3408. Animal Physiology.** 4(3-3)
A study of the fundamental process of the animal systems. Prerequisites: 12 semester hours of biology and 6 semester hours of chemistry.
- 3409. Field Biology I.** 4(20-20)
A study of the ecology and conservation of southern Texas flora and fauna. Prerequisite: 6 semester hours of biology.
- 4102. Seminar. [WI]** 1(1-0)
Current biological literature with critical class reports. Course may be repeated for credit. Prerequisite: 12 semester hours of biology. Assessment Exam Fee, \$21.
- 4304. Research Projects in Biology.** V:1-3
An independent review of literature and a laboratory or field problem yielding a formal report on the research. Variable credit dependent upon the project. May be repeated not to exceed accumulated total of 3 semester hours applicable to requirements for the major in biology. Prerequisites: advanced standing and prior approval of the problem by the supervising instructor.
- 4332. Pathophysiology.** 3(3-0)
Fundamental concepts of pathophysiology, including changes at the cellular, organ, systems, and whole-organism levels during the disease state. Prerequisites: BIOL 1306/1106, BIOL 1307/1107, BIOL 2421, and BIOL 3402. BIOL 2402 and BIOL 2402, or BIOL 3408 is recommended.
- 4334. Cellular and Molecular Neurobiology.** 3(3-0)
Fundamental concepts of molecular genetics, including neuronal electric signaling, synaptic transmission, signal transduction, neurotransmitter diversity, neural development, and synaptic plasticity. Prerequisites: BIOL 1306/1106, BIOL 1307/1107, BIOL 2421, and BIOL 3402. Either BIOL 2401 and BIOL 2402, or BIOL 3408 is recommended.
- 4335. Molecular Genetics.** 3(3-0)
Fundamental concepts of molecular genetics, including gene structure and diversity, chromatin organization, nucleosomes, gene expression, and epigenetics. Prerequisites: BIOL 1306/1106, BIOL 1307/1107, BIOL 2421, and BIOL 3402.
- 4355. Topics in Biology.** 3(3-0)
Lectures in selected topics. May be repeated for credit once under a different topic. Prerequisite: 12 semester hours of biology or equivalent.
- 4401. Molecular Biology.** 4(3-3)
The application of modern molecular techniques to manipulate the replication and expression of genes. The laboratory will introduce basic and advanced molecular techniques. Prerequisites: 12 semester hours of biology and BIOL 3402.
- 4402. Vertebrate Embryology.** 4(3-3)
Embryonic development of the frog, chick and pig. Prerequisite: 12 semester hours of biology.
- 4406. Bacteriology.** 4(3-3)
Survey of medical, public health, water, sewage and milk bacteriology. Bacteriological technique is emphasized. Prerequisites: 12 semester hours of biology, including BIOL 2421; 6 semester hours of chemistry recommended.

- 4408. Immunology.** 4(3-3)
Experimental studies in the principles of infection and immunity. Prerequisite: 12 semester hours of biology, including BIOL 4406; organic chemistry recommended.
- 4410. Topics in Biology.** 4(3-3)
Lectures, literature investigation and research in selected topics. May be repeated for credit once under different topic. Prerequisite: 12 semester hours of biology or equivalent.
- 4411. Plant Physiology.** 4(3-3)
The study of the physiological functions of vascular plants including water relations, photosynthesis, respiration, hormone synthesis. Prerequisites: 12 hours of biology including BIOL 1307/BIOL 1107.
- 4413. Non-flowering Plants.** 4(3-3)
The study of structure, physiological function, life cycles and the economical and biological importance of algae, bryophytes, lichens, ferns and gymnosperms. Prerequisites: 12 hours of biology including BIOL 1307/BIOL 1107.
- 4425. Ornithology.** 4(3-3)
Classification, structures, physiology, natural history and field identification of birds. Prerequisite: 12 semester hours of biology.
- 4426. Cellular Physiology.** 4(3-3)
Physiochemical function at the cellular level. Prerequisites: 12 semester hours of biology and CHEM 3323/3123, CHEM 3325/3125; PHYS 1301/1101 and PHYS 1302/1102 recommended.
- 4427. Herpetology.** 4(3-3)
Classification, anatomy, life history and distribution of reptiles and amphibians with special emphasis on local forms. Prerequisite: 12 semester hours of biology.
- 4429. Mammalogy.** 4(3-3)
Classification, distribution, life histories, economic importance, techniques of field study, methods of collection and preservation of mammals. Prerequisite: 12 semester hours of biology.
- 4430. Parasitology.** 4(3-3)
Introduction to parasitism with special reference to human and other vertebrate hosts. Prerequisite: 12 semester hours of biology.
- 4431. Ichthyology.** 4(3-3)
Classification, anatomy, life history and distribution of fishes, with special emphasis on local fresh water forms. Prerequisite: 12 semester hours of biology.
- 4433. Histology.** 4(3-3)
Fundamental concepts of histology, including microanatomy of tissues, organ systems, and organ physiology. Prerequisites: BIOL 1306/1106, BIOL 1307/1107, BIOL 2421, and BIOL 3402.

Degree Requirements
Bachelor of Arts
Biology*

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	BIOL 3402	4	BIOL 3301	3
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 3407	4	BIOL 3408, BIOL 4411	4
ENGL 1301	3	ENGL 1302	3	CHEM 3323/3123	4	or BIOL 4426	
HIST 1301	3	HIST 1302	3	Foreign language	<u>3</u>	CHEM 3325/3125	4
UNIV 1101	<u>1</u>	UNIV 1102	1		15	Foreign language	<u>3</u>
	15	[^] <i>Social/Behavioral</i>	<u>3</u>				14
			18				
Sophomore Year				Senior Year			
BIOL 2421	4	POLS 2302	3	BIOL 4102	1	BIOL, adv.	4
MATH 1316	3	[^] <i>Communications</i>	3	BIOL, adv.	8	Elective, adv.	3
POLS 2301	3	[^] <i>Creative arts</i>	3	Minor	<u>5</u>	Minor, adv.	<u>6</u>
[^] <i>Lang/Phil/Culture</i>	3	BIOL, elective	3		14		13
Foreign language	<u>3</u>	Foreign language	<u>3</u>				
	16		15				
						Total Hours Required	120

Note: Choice of minor will result in some variation in course sequence and total hours on the degree.
Consult departmental chair for information on minor programs.

Degree Requirements
Bachelor of Science
Biology*

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	BIOL 3402	4	BIOL 3301	3
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 3408, BIOL 4411	4	BIOL 3407	4
ENGL 1301	3	ENGL 1302	3	or BIOL 4426		Minor	4
HIST 1301	3	HIST 1302	3	BIOL, adv.	3	Minor or elective	<u>4</u>
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	Minor	<u>4</u>		15
	15		15		15		
Sophomore Year				Senior Year			
POLS 2301	3	MATH 1316	3	BIOL 4102	1	BIOL, adv.	4
[^] <i>Communications</i>	3	POLS 2302	3	STAT 1342, STAT 4301	3	Minor, adv.	4
BIOL, elective	4	[^] <i>Creative arts</i>	3	or STAT 4303		Elective, adv.	<u>7</u>
Minor or elective	4	[^] <i>Lang/Phil/Culture</i>	3	BIOL, adv.	8		15
	14	[^] <i>Social/Behavioral</i>	<u>3</u>	Minor, adv.	<u>4</u>		
			15		16		
						Total Hours Required	120

Note: Choice of minor will result in some variation in course sequence and total hours on the degree. Consult departmental chair for information on minor programs.

Students planning to enter a graduate program in the biological sciences should minor in Chemistry (including CHEM 3323/CHEM 3123 and CHEM 3325/CHEM 3125) and take PHYS 1301/PHYS 1101 and PHYS 1302/PHYS 1102.

Students planning a career in environmental and/or field biology should minor in Animal Science, Range and Wildlife, Environmental Science or Geographic Information Systems and take at least two of the following organismal courses: BIOL 3403, BIOL 3405, BIOL 3409, BIOL 4425, BIOL 4427, BIOL 4429.

Students planning a career in an allied health field (e.g., physical therapy, nursing) should also take BIOL 2401, BIOL 2402 and BIOL 2421.

Students planning to enter a medical, dental or pharmacy school, should follow the B.S. in Biomedical Sciences degree program.

Non-advanced courses may be substituted for those marked "adv." provided the student will otherwise complete 45 advanced hours including those required in a minor.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Biology with Teaching Certification**

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	BIOL 3402	4	BIOL 3301	3
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 3407	4	BIOL 3408	4
COMS 1311	3	ENGL 1302	3	EDED 3310	3	BIOL 4102	1
ENGL 1301	3	MATH 1316	3	BIOL, elective	3	EDED 3302	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>		14	EDED 3333	3
	15		15			BIOL, adv.	<u>4</u>
							18
Sophomore Year				Senior Year			
HIST 1301	3	HIST 1302	3	EDED 3332	3	EDED 4623	6
PHYS 1301/1101	4	PHYS 1302/1102	4	EDED 3362	3	EDRG 4314	3
POLS 2301	3	POLS 2302	3	BIOL, adv.	8	EDSE 4349	3
^Creative arts	3	SOCI 2361	3		14		12
^Lang/Phil/Culture	<u>3</u>	STAT 1342	<u>3</u>				
	16		16				
						Total Hours Required	120

**Degree Requirements
Bachelor of Science
Biomedical Sciences***

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	BIOL 3402	4	BIOL 4401	4
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 3408	4	CHEM 3325/3125	4
ENGL 1301	3	ENGL 1302	3	CHEM 3323/3123	4	STAT 4301	3
MATH 2413	4	UNIV 1102	1	Minor or elective	3	Minor or elective	3
UNIV 1101	<u>1</u>	^Creative arts	<u>3</u>		15		14
	16		15				
Sophomore Year				Senior Year			
BIOL 2421	4	HIST 1302	3	BIOL 4426	4	BIOL 4355***	3
HIST 1301	3	PHYS 1302/1102	4	BIOL, adv.*	3	BIOL, adv.*	3
PHYS 1301/1101	4	POLS 2302	3	BIOL 4102	1	Electives, adv.	3
POLS 2301	3	^Lang/Phil/Culture	3	Electives	4	Minor, adv.**	3
^Communications	<u>3</u>	^Social/Behavioral	<u>3</u>	Minor, adv.**	3		12
	17		16		15		
						Total Hours Required	120

*Student pursuing the pre-professional option may choose from any approved biology electives. Students pursuing the research track are required to enroll once in BIOL 4304. All other advanced biology electives for the research track may be chosen from any approved biology electives.

**Students pursuing the pre-professional option may choose from approved minor electives in any suitable field. Students pursuing the research track are required to minor in Chemistry in accordance with specific requirements for the chemistry minor.

***BIOL 4355 is a topics course; it must be taken with a topic of Molecular Genetics.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Biomedical Sciences
Pre-Professional Option**

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	BIOL 3402	4	BIOL 4401	4
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 3408	4	CHEM 3325/3125	4
ENGL 1301	3	ENGL 1302	3	CHEM 3323/3123	4	STAT 4301	3
MATH 2413	4	UNIV 1102	1	Minor or elective	<u>3</u>	Minor or elective	<u>3</u>
UNIV 1101	<u>1</u>	^Creative arts	<u>3</u>		15		14
	16		15				
Sophomore Year				Senior Year			
BIOL 2421	4	HIST 1302	3	BIOL 4426	4	BIOL 4335	3
HIST 1301	3	PHYS 1302/1102	4	BIOL 4102	1	BIOL, adv.**	3
PHYS 1301/1101	4	POLS 2302	3	BIOL, adv.**	3	Electives, adv.	3
POLS 2301	3	^Lang/Phil/Culture	3	Electives, adv.	4	Minor, adv.*	<u>3</u>
^Communications	<u>3</u>	^Social/Behavioral	<u>3</u>	Minor, adv.*	<u>3</u>		12
	17		16		15		

Total Hours Required 120

*Student pursuing the pre-professional option may choose from any approved minor electives in any suitable field.

**Students pursuing the pre-professional option (medicine, veterinary medicine, dentistry, pharmacy, physician's assistant, optometry, physical therapy and occupational therapy) may choose from approved biology electives that are biomedically relevant courses, below:

Approved Biomedical Sciences Electives

		<u>Sem. Hrs</u>
BIOL 2401	Human Anatomy and Physiology I	4
BIOL 2402	Human Anatomy and Physiology II	4
BIOL 3112	Genetics Lab	1
BIOL 3301	Evolutionary Theory	3
BIOL 3407	Ecology	4
BIOL 4304	Research Projects in Biology	3
BIOL 4332	Pathophysiology	3
BIOL 4334	Cellular and Molecular Neurobiology	3
BIOL 4355	Topics in Biology	3
	Approved topics are: Epigenetics, Immunology, Genetics of Human Disease, Systems Neurobiology, Ecology and Human Disease or Understanding Human Physiology	
BIOL 4402	Vertebrate Embryology	4
BIOL 4406	Bacteriology	4
BIOL 4408	Immunology	4
BIOL 4410	Topics in Biology	4
	Approved topics are: Forensic Science, Advanced Forensic Science, Ecology of Human Disease, Functional Neuroanatomy or Human Ecology and Health	
BIOL 4430	Parasitology	4
BIOL 4433	Histology	4

Organismal biology classes including BIOL 3375 (Economic Entomology), 3401 (Invertebrate Zoology), 3403 (Plant Taxonomy), 3405 (Vertebrate Zoology), 3409 (Field Biology I), 4413 (Non-flowering Plants), 4425 (Ornithology), 4427 (Herpetology), 4429 (Mammalogy), 4431 (Ichthyology), 4355 (Special Topics: Tropical Ecology, Tropical Bid. Field Tech.), 4410 (Special Topics: Marine Ecology, Marine Biology) are not suitable courses for biomedical electives. New courses will be reviewed and approved by the department Biomedical Curriculum Committee.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science
General Biomedical Sciences Option
(Minor in Chemistry)

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	BIOL 3402	4	BIOL 4401	4
CHEM 1311/1111	4	CHEM 1312/1112	4	BIOL 3408	4	CHEM 3325/3125	4
ENGL 1301	3	ENGL 1302	3	CHEM 3323/3123	4	STAT 4301	3
MATH 2413	4	UNIV 1102	1	Minor or elective	<u>3</u>	Minor or elective	<u>3</u>
UNIV 1101	<u>1</u>	<i>^Creative arts</i>	<u>3</u>		15		14
	16		15				
Sophomore Year				Senior Year			
BIOL 2421	4	HIST 1302	3	BIOL 4102	1	BIOL 4304	3
HIST 1301	3	PHYS 1302/1102	4	BIOL 4426	4	BIOL 4335	3
PHYS 1301/1101	4	POLS 2302	3	CHEM 4341 or	3	CHEM 4342	3
POLS 2301	3	<i>^Lang/Phil/Culture</i>	3	CHEM 4345		Elective, adv.	<u>3</u>
<i>^Communications</i>	<u>3</u>	<i>^Social/Behavioral</i>	<u>3</u>	BIOL, adv.	3		12
	17		16	Elective, adv.	<u>4</u>		
					15		
						Total Hours Required	120

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

PRE-HEALTH PROFESSIONS PROGRAMS

J. Eric Winterbottom, *Pre-Health Sciences Academic Coordinator and JAMP Faculty Director*

Alfonso Ramos, *Advisor*

Kleberg Hall 124. MSC 117. Extension 3797

The Texas A&M University-Kingsville Pre-Health Professions Advising Office provides information and assistance to prospective, current and former students of Texas A&M University-Kingsville interested in pursuing health-related careers. Services include one-on-one academic, career and admissions advising, information on professional school selection, seminars on various health professions, access to summer enrichment programs and much more. Interested students should contact the Pre-Health Professions Advising Office as early in their academic careers as possible to take full advantage of the myriad of opportunities available.

Programs and Majors

Although a student may major in any field and if qualified, be accepted into a health professional school, the Bachelor of Science degree in either Biomedical Science or Biology from Texas A&M University-Kingsville provides for the vast majority of prerequisite courses for the following graduate degree programs:

Medicine (M.D.), Doctor of Osteopathic Medicine (D.O.), Dentistry (D.D.S.), Doctor of Pharmacy (Pharm.D.), Physical Therapy (D.P.T.), Occupational Therapy (O.T.D.), Physician Assistant (P.A.), Doctor of Chiropractic (D.C.) and Doctor of Optometry (O.D.).

Texas A&M University-Kingsville also offers the prerequisite courses for several undergraduate, pre-health professions degrees available at other South Texas institutions such as:

Nursing (B.S.N.), Associate Degree in Nursing (A.D.N.), Clinical Laboratory Sciences, Physical Therapy Assistant (P.T.A.), Occupational Therapy Assistant (O.T.A.), Radiology Technician (C.R.T.), Dental Hygiene, Respiratory Care Therapist and many other allied health fields.

Early Admissions Programs

Dental School Early Admissions Programs

Texas A&M University-Kingsville offers 3+4 Early Admissions Programs in dentistry with University of Texas Health Science Center-San Antonio Dental School, Texas A&M University System Health Science Center-Baylor College of Dentistry and University of Texas Health Science Center at Houston Dental Branch. These programs provide early acceptance to dental school for qualified students during the spring semester of their freshman year and are called 3+4 because students typically spend three years at Texas A&M University-Kingsville meeting the basic degree requirements and then spend the required four years in dental training. Students who complete the program will receive a B.S. from Texas A&M University-Kingsville and a D.D.S. from one of the Texas Dental Schools in seven rather than eight years. The requirements for each of these programs are unique to each institution. Interested students should contact the Pre-Health Professions Adviser for specific information.

Partnership for Primary Care (PPC)

[Texas A&M University System Health Science Center Partnership for Primary Care Program Webpage](#)

The Partnership for Primary Care Program is available for qualified students. Texas A&M University System Health Science Center-College of Medicine will award Texas A&M University-Kingsville students early acceptance into its medical school prior to the start of the undergraduate freshman year or at the end of the undergraduate freshman year provided:

- the student's legal residence is in a federally-recognized, medically underserved region in the State of Texas,
- the student graduates in the top 10% of his/her high school graduating class,
- the student earns a minimum high school grade point average of a 3.5 on a 4.0 scale,
- the student scores a 1200 SAT or 26 ACT,
- the student demonstrates commitment to the medical profession
- and the student maintains a 3.5 or better college grade point average each year of enrollment at Texas A&M University-Kingsville.

Joint Admission Medical Program (JAMP)

<http://www.utsystem.edu/jamp/>

The Joint Admission Medical Program (JAMP) provides services to support and encourage **highly qualified economically disadvantaged students** pursuing a medical education. Students selected from JAMP will receive undergraduate and graduate scholarships and summer stipends; JAMP also guarantees the admission of those students who are qualified to a participating Texas medical school provided they satisfactorily complete all program requirements (See Pre-Health Professions Adviser for specific regulations). Qualified students must meet the following criteria:

- be a Texas resident
- apply for admission to one of the participating universities and enter college as a first-time freshman immediately following graduation from high school,
- take the SAT or ACT and earn a score not less than the mean for the State of Texas and provide the scores to the participating university,
- complete and submit the FASFA and be eligible to receive a Pell Grant in the student's freshman year of college and
- complete 30 hours of undergraduate credit during the fall and spring semester of his/her freshman year with a 3.25 GPA or higher (no more than 3 hours of AP credit can be counted toward this requirement).

Summer Enrichment Programs

Various summer enrichment programs designed to facilitate and enhance the students' entry into professional school are available to Texas A&M University-Kingsville students. These programs provide stipends, academic enrichment, clinical experience, admissions counseling, rigorous standardized entrance exam preparation and the opportunity for the professional school faculty and staff to become familiar with their particular strengths well in advance of their application. A sample of the available programs typically attended by pre-health professions students include:

- The University of Texas Medical Branch/UT Pan American Academic Enrichment Program
- The University of Texas Medical Branch Medical School Familiarization Program
- Minority Medical Education Program
- Texas A&M University System Health Science Center-College of Medicine Bridge to Medicine MCAT Preparatory Program
- The University of Texas-Houston Health Science Center Medical School Summer Enrichment Program
- Baylor College of Medicine Honors Premedical Academy
- Johns Hopkins University School of Medicine Human Anatomy Course for Undergraduates
- The University of Texas Health Science Center-San Antonio Dental School Summer Dental Research Program
- Texas A&M University System Health Science Center-Baylor College of Dentistry Pre-Dental Summer Enrichment Program
- The University of Texas Dental Branch at Houston Summer Enrichment Program
- Texas Tech University Health Sciences Center Rural Pre-Health Professional Summer Academy

Required Course Prerequisites for Medical and Dental Schools in Texas:

In addition to the General Educational and Specific Degree Requirements as the vast majority of students accepted to medical and dental school earn a baccalaureate degree prior to acceptance, the following courses represent the minimum requirements for acceptance as declared by the medical and dental schools in Texas. However, numerous additional courses and nonacademic activities are just as critical to be a successful pre-medical or pre-dental student. Frequent consultation with the Pre-Health Professions Adviser is very important. The Medical College Admissions Test (MCAT) and Dental Admissions Test (DAT) are also required for medicine and dentistry, respectively.

NOTE: Graduate schools in medicine and dentistry differ greatly in their entrance requirements. After deciding on a school or schools, the student should write to the Director of Admissions for the latest catalog and follow the program outlined as nearly as possible.

Academic Area	Course Numbers	Total Semester Hours
Biology	required: BIOL 1306/1106, BIOL 1307/1107, 6 SCH Adv. BIOL strongly recommended: BIOL 2401, BIOL 2402, BIOL 3408, BIOL 4401, BIOL 4402, BIOL 4406, BIOL 4408, BIOL 4426	14-16
Chemistry	required: CHEM 1311/1111, CHEM 1312/1112, CHEM 3323/3123, CHEM 3325/3125 strongly recommended: CHEM 4341* and CHEM 4342 *CHEM 4341 is required for Dental School	16-19
English	ENGL 1301, ENGL 1302 *courses in literature strongly recommended	6
Mathematics	MATH 2413 (may require completion of MATH 1314, MATH 1316, MATH 1348 if student has not earned CLEP or AP credit)	4
(not required for Dental School)		
Physics	PHYS 1301/1101 or PHYS 2325/2125, PHYS 1302/1102 or PHYS 2326/2126	8
Math-based Statistics	STAT 4301	3

Pre-Pharmacy Generic Curriculum

The Pre-Pharmacy Curriculum consists of at least two years of college credit; however, the number of students gaining acceptance to pharmacy school that complete at least three years of college or a baccalaureate degree prior to entry is growing rapidly as the general applicant pool becomes more competitive every year. The following courses represent the combined minimum requirements for acceptance as declared by pharmacy schools in Texas. Students are encouraged to complete the prerequisites to apply to all pharmacy schools in Texas in order to increase their overall chances of acceptance. However, students should consult with the Pre-Health Professions Adviser for requirements specific to each school. The applicant will be evaluated on the quality of overall academic performance, letters of recommendation and interviews. The Pharmacy College Admission Test (PCAT) is also required.

Note: Students attending institutions other than Texas A&M University-Kingsville for their undergraduate studies that wish to apply for admission to the Texas A&M Health Science Center Irma Lerma Rangel College of Pharmacy should consult with the School of Pharmacy staff and the Pre-Health Professions Adviser at their parent institution for the specific courses at that institution that meet the prerequisites specific to the Texas A&M Health Science Center Irma Lerma Rangel College of Pharmacy.

Academic Area	Course Numbers	Total Semester Hours
Biology*	required: BIOL 1306/1106 and BIOL 1307/1107, BIOL 2421, BIOL 3402 recommended: BIOL 2401, BIOL 2402, BIOL 3408, BIOL 4406, BIOL 4408, BIOL 4426	16
Chemistry	required: CHEM 1311/1111, CHEM 1312/1112, CHEM 3323/3123, CHEM 3325/3125 recommended: CHEM 4341, CHEM 4342	16
Physics*	PHYS 1301/1101 or PHYS 2325/2125	4
Mathematics	MATH 2413 (may require completion of MATH 1314, MATH 1316, MATH 1348 if student has not earned CLEP or AP credit)	4
Statistics	STAT 1342	3
English*	ENGL 1301, ENGL 1302, ENGL 2342 or ENGL 2362	9
History	HIST 1301, HIST 1302	6
Political Science	POLS 2301, POLS 2302	6
Social/Behavioral Science*	PSYC 2301 or SOCI 1301 or ECON 2301	3
Visual/Performing Arts*	(examples of; not inclusive) ARTS, MUSI or THEA 2301, ARTS 1303, ARTS 1304 or any 3 hour lab or studio course from ARTS, MUSI or THEA	3
Communications	COMS 1311 or COMS 1315	3

**Hours vary depending on the specific pharmacy college.*

Pre-Optometry, Pre-Physical Therapy, Pre-Occupational Therapy, Pre-Physician Assistant, Pre-Clinical Lab Sciences Generic Curriculum:

Students interested in the careers listed above must complete the General Education Requirements in addition to the following courses. However, there are variations in those requirements for each institution offering the respective graduate degrees. The listing below itemizes only the common courses required of all four careers listed in this section. Additional courses and nonacademic activities are just as critical in order to be successful. Therefore, frequent consultation with the Pre-Health Professions Adviser is very important. The Optometry Admissions Test (OAT) is required for optometry school. The Graduate Record Examination (GRE) is required for physical therapy, occupational therapy and physician assistant schools.

Academic Area	Course Numbers	Total Semester Hours
Biology*	BIOL 1306/1106, BIOL 1307/1107, BIOL 2401, BIOL 2402, BIOL 2421	26
Chemistry	*BIOL 2421 is not required for Physical or Occupational Therapy CHEM 1311/1111, CHEM 1312/1112, CHEM 3323/3123	12-19
Physics (not required for Physician Assistants)	*CHEM 3325/3125 and CHEM 4341 are also required for Optometry PHYS 1301/1101 or PHYS 2325/2125, PHYS 1302/1102 or PHYS 2326/2126	8
Additional Mathematics (only required for Optometry)	MATH 2413 (may require completion of MATH 1314, MATH 1316, MATH 1348 if student has not earned CLEP or AP credit)	3
Statistics	STAT 1342	3
Additional English** (only required for Physical Therapy)	ENGL 2314	3
Psychology*	PSYC 2301, PSYC 4315 (TOPIC: Developmental Psychology), one additional advanced PSYC	3-9
Sociology*	SOCI 1301	3

**Hours and specific courses vary depending on the specific program*

***A Medical Terminology course may also be required for some graduate schools (usually available as an Internet course from various institutions).*

Pre-Nursing Generic Curriculum

The curriculum for a nursing degree depends on whether a student is interested in applying to a two-year nursing program (Associate Degree in Nursing) or a four-year nursing program (Bachelor of Science in Nursing). Students interested in pursuing a two-year degree in nursing are not required to complete the general education courses, though it is recommended. Schools of nursing differ greatly in their entrance requirements. After deciding on a school or schools, the student should write to the Director of Admissions for the latest catalog and follow the program outlined as nearly as possible. Students should consult the Pre-Health Professions Adviser for specific course programs.

DEPARTMENT OF CHEMISTRY

Christine Hahn, *Chair*

Nierman Science Hall 100. MSC 161. Extension 2914.

Regents Professors

Castro

Professor

Bashir, Bhattacharya, Chi, Gonzalez-Garcia, Liu

Associate Professors

Hahn, Sanchez

Assistant Professors

Francis, Hobbs

Faculty Emeritus

Olivares

The aim of the Department of Chemistry is to provide (a) certain service courses for other departments whose subject matter is based, in part, on the fundamentals of chemistry; (b) a cultural background for those who are interested in science and who desire the Bachelor of Science (B.S.) or Bachelor of Arts (B.A.) degree but do not expect to become professional chemists; and (c) proper education for those who wish to become professional chemists.

The Department of Chemistry also offers a Master of Science (M.S.) degree in Chemistry through the Thesis, Project, or Course-work tracks; each track can be taken with a general chemistry, a biochemistry, or a biopharmaceutical emphasis.

Undergraduate students majoring in chemistry can pursue one of the following tracks: B.A. in Chemistry with Teaching Certification; American Chemical Society (ACS) Certified B.S. in Chemistry; ACS Certified B.S. in Chemistry with Biochemistry track; B.S. in Chemistry, Pre-health track; and B.S. in Chemistry, Pharmaceutical Chemistry track.

The Department of Chemistry offers an undergraduate-level certificate in Nano Materials Science and Engineering. Students will receive the certificate upon completing all courses (B or better) stated in course requirements. Consult the chair of the department for details.

CHEMISTRY (CHEM)

1111. General Inorganic Chemistry Laboratory I. (CHEM 1111) 1(0-3-1)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes an understanding of the principles of stoichiometry, gases, liquids, solutions and energy. One hour of recitation. Pre- or corequisite: CHEM 1311.

1112. General Inorganic Chemistry Laboratory II. (CHEM 1112) 1(0-3-1)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes an understanding of the principles of stoichiometry, gases, liquids, solutions and energy. One hour of recitation. Prerequisite: CHEM 1311 and CHEM 1111; Pre- or corequisite: CHEM 1312.

1311. General Inorganic Chemistry I. (CHEM 1311) 3(3-0)

The first course for students majoring in a field of science, engineering or agriculture. Principles of stoichiometry, thermochemistry, atomic and molecular structures, gases, liquids, solids and solutions and the chemistry of the elements and their compounds. Prerequisite: MATH 1314 and either one year of high school chemistry or CHEM 1481.

1312. General Inorganic Chemistry II. (CHEM 1312) 3(3-0)

The second course for students majoring in a field of science, engineering or agriculture. Principles of chemical kinetics, chemical equilibrium, thermodynamics, electrochemistry and the chemistry of the elements and their compounds. Prerequisites: CHEM 1111 and CHEM 1311.

- 1376. Elementary Chemistry.** 3(3-2)
A survey of fundamental concepts of chemistry. Topics include atomic structure, elements and the periodic table, nuclear chemistry, acids and bases and organic, inorganic and biochemical compounds. Prerequisite: PHYS 1375.
- 1405. General Introduction to Chemistry.** (CHEM 1405) 4(3-2)
Elementary studies in chemistry for those students not majoring in science. Emphasizes body chemistry and physiological action of drugs, foods, nutrients, poisons, cancer-causing agents, etc. Includes environmental, social, political, historical and agricultural aspects of the science.
- 1407. General Introduction to Chemistry.** (CHEM 1407) 4(3-2)
The second course in elementary studies for those students not majoring in science. Emphasizes body chemistry and physiological action of drugs, foods, nutrients, poisons, cancer-causing agents, etc. Includes environmental, social, political, historical and agricultural aspects of the science.
- 1481. Elementary Principles of Chemistry.** 4(3-2)
A course for students who must take CHEM 1311, but whose background does not include a satisfactory command of mathematics or chemistry as determined by placement examinations. May not be counted as part of the general science requirements for a major or minor in chemistry.
- 2401. Inorganic Quantitative Analysis.** 4(3-4)
Principles and methods of separation and analysis. Includes standard volumetric and gravimetric methods and an introduction to instrumental methods. Prerequisites: CHEM 1112 and CHEM 1312.
- 2421. Elementary Organic Chemistry.** 4(3-3)
Aliphatic and aromatic compounds with a special emphasis given to aliphatic compounds. Prerequisite: CHEM 1112 and CHEM 1312.
- 3123. Organic Chemistry Laboratory I.** 1(0-4)
Introduction to laboratory practices and procedures in organic chemistry, with emphasis on hydrocarbon chemistry. Pre- or corequisite: CHEM 3323.
- 3125. Organic Chemistry Laboratory II.** 1(0-4)
Introduction to laboratory practices and procedures in organic chemistry, with emphasis on hydrocarbon chemistry. Pre- or corequisite: CHEM 3325.
- 3181. Chemical Literature.** 1(1-0)
Prerequisite: at least 3 semesters of chemistry.
- 3323. Organic Chemistry I.** 3(3-0)
Introduction to the important concepts and principles in the bonding and reactions of organic molecules, with intensive study of the chemistry of non-aromatic hydrocarbons. Prerequisites: CHEM 1312, CHEM 1112. To count for a major or minor in chemistry, CHEM 3123 must also be taken.
- 3325. Organic Chemistry II.** 3(3-0)
Continuation of CHEM 3323. An intensive study of the reactions and mechanisms of aromatic hydrocarbons and the main non-hydrocarbon functional groups. Prerequisites: CHEM 3323, CHEM 3123. To count for a major or minor in chemistry, CHEM 3125 must also be taken.
- 3331. Physical Chemistry I.** 3(3-0)
Study of physical and chemical phenomena. Thermodynamics, including thermodynamics laws, thermal chemistry, phase transitions, electrochemistry and chemical equilibrium. Prerequisites: one semester each of physics and calculus.
- 3332. Physical Chemistry II.** 3(3-0)
Study of physical and chemical phenomena. Chemical kinetics, quantum mechanics, spectroscopy, statistical thermodynamics and molecules in motion. Prerequisites: two semesters each of physics and calculus.

- 3333. Biophysical Chemistry.** 3(3-0)
A fundamental approach to the study of physical and chemical phenomena. Biophysical-chemistry focus on thermodynamics, including several laws of thermodynamics. Examples illustrate how these principles are applied to fundamental problems in biology and biochemistry. Prerequisites: one semester each of physics and calculus; CHEM 1312 recommended.
- 3385. Undergraduate Research. [WI]** V:1-3
Supervised individual journal-quality research involving advanced chemical concepts and a variety of experimental techniques and instruments. May be taken for a maximum of 6 semester hours. Prerequisites: at least one semester of chemistry and prior approval of research project director.
- 3451. Environmental Chemistry.** 4(3-3)
Sources and causes of land, water and air pollution; the methods of measurement and abatement. May not be counted as part of the minimum requirements for a major in chemistry. Prerequisites: CHEM 1112, CHEM 1312 and two additional 3- or 4-credit hour courses in either biology or geology or more advanced chemistry.
- 4131-4132. Physical Chemical Measurements.** 2(0-4)
A laboratory course on the techniques and apparatus used in the measurement of properties of chemical systems. Attention is also given to the limits of accuracy and the sources of error in a given technique. Required of chemistry majors. Prerequisite: CHEM 2401. Prerequisite or corequisite: CHEM 3331 and CHEM 3332.
- 4141. Biochemistry Laboratory.** 1(1-3)
An introduction to the biochemical techniques (methods used for protein purification, for protein characterization and for analysis of other important biomolecules). Prerequisite: CHEM 4341.
- 4181. Chemical Seminar.** 1(1-0)
Prerequisites: at least 6 semesters of chemistry and CHEM 3181.
- 4303. Forensic Chemistry.** 3(3-0)
Theory, concepts and application of forensic chemistry to complex problem solving related to crime detection and solving of crime via chemical means. Mass spectrometry, chromatography, and spectroscopy. Prerequisite: CHEM 2401 or equivalent level analytical or bioanalytical chemistry course.
- 4311. Advanced Inorganic Chemistry.** 3(3-0)
Prerequisite: at least 6 semesters of chemistry including CHEM 2401 and physical chemistry.
- 4312. Coordination Chemistry and Catalysis.** 3(3-0)
Characterization, synthesis, structure and chemical analysis of coordinated materials used in catalysis. Kinetics, reaction theory, catalyst characterization, solid catalysts, surface reactivity and catalysis in practice with an emphasis on energy generations. Prerequisites: junior standing and approval of instructor.
- 4313. Chemistry and Nanoscience.** 3(3-0)
Chemical, optical, electronic, and magnetic interactions produced by nanomaterials, the relationship between microstructural scale and its influence on physical mechanism, and appropriate applications such as solar devices, fuel cells or biomedical agents. Prerequisites: junior standing and approval of the instructor.
- 4341. Biochemistry I.** 3(3-0)
Introduction to the important concepts, nomenclature and compounds of biochemistry with special emphasis on the chemical interpretation of the structures and functions of biological macromolecules. Prerequisite: CHEM 3325
- 4342. Biochemistry II.** 3(3-0)
An introduction to the major biochemical cycles and pathways in living organisms, including reaction steps, regulation and mechanisms. Prerequisite: CHEM 4341.

- 4344. Polymer Chemistry.** 3(3-0)
Basic polymer theory: synthesis approaches using click chemistries; common acid/base synthetic approaches; and application of polymeric materials. Methods of using green chemistry. Prerequisites: CHEM 3323 and CHEM 3325.
- 4345. Principles of Biochemistry.** 3(3-0)
A one-semester presentation of the major areas of biochemistry, emphasizing the structure and function of biomolecules and major metabolic activities of living organisms, including humans. Prerequisites: CHEM 2421 or CHEM 3325.
- 4351. Medicinal Chemistry.** 3(3-0)
Medicinal chemistry, including the synthesis, structure-activity relationships, mode of action, and metabolism of some major therapeutic agents. Drug classification, major routes to their site of action, and the major metabolic transformations. Mode of action of major antimicrobial and antiviral agents. Prerequisite: CHEM 3325.
- 4352. Green Chemistry in Pharmaceutical Industry.** 3(3-0)
Introduction to the tools required to minimize the environmental impact of chemistry and to the processes in the pharmaceutical industry. Design environmentally friendly pharmaceutical processes to be economically and technologically feasible. Measurement and metrics analysis, green chemistry concepts and principles illustrated with real-life case studies. Prerequisite: CHEM 3325.
- 4363. Chemical and Morphological Analysis.** 3(3-0)
State-of-the-art techniques commonly employed in modern materials characterization. Characterization, structure and chemical analysis of materials. Techniques include microscopy, spectroscopy, and X-ray diffraction. Prerequisite: junior standing and approval of the instructor.
- 4381. Selected Topics in Chemistry.** V:1-3
Literature and research in areas of chemistry not otherwise treated in depth in available courses. May be repeated when topic changes for a maximum of 6 semester hours of credit.
- 4385. Senior Research. [WI]** V:1-3
Supervised individual journal-quality research involving advanced chemical concepts and a variety of experimental techniques and instruments. May be taken for a maximum of 6 semester hours. Prerequisites: CHEM 3331 and CHEM 3332, senior standing and prior approval of the research project director.
- 4401. Modern Methods of Instrumental Analysis.** 4(3-4)
Introduction to the theory and practice of optical and electro-analytical methods of analysis. Prerequisites: CHEM 2401 or CHEN 2371; and either CHEM 3331 and CHEM 3332, or only CHEM 3333, as specified by the appropriate degree plan.
- 4402. Vertebrate Embryology.** 4(3-3)
Embryonic development of the frog, chick and pig. Prerequisite: 12 semester hours of biology.
- 4421. Advanced Chemical Synthesis.** 4(2-6)
Introduction to advanced and sophisticated synthesis of organic, biochemical and inorganic compounds. Laboratory includes multi-step syntheses, stereochemical problems, literature-searching techniques, etc. Prerequisites: CHEM 3323/3123 and CHEM 3325/3125.

**Degree Requirements
Bachelor of Arts
Chemistry with Teaching Certification***

Freshman Year				Junior Year			
CHEM 1311/1111	4	CHEM 1312/1112	4	CHEM 3331	3	CHEM 3332	3
ENGL 1301	3	ENGL 1302	3	CHEM 4131	1	CHEM 4132	1
MATH 1348	3	MATH 2413	4	HIST 1302	3	EDED 3302	3
UNIV 1101	1	POLS 2301	3	[^] <i>Creative arts</i>	3	EDED 3310	3
Foreign language+	<u>3</u>	UNIV 1102	1	[^] <i>Social/Behavioral</i>	3	EDED 3333	3
	14	Foreign language	<u>3</u>	Foreign language	<u>3</u>	Foreign language	<u>3</u>
			18		16		16
Sophomore Year				Senior Year			
CHEM 2401	4	CHEM 3325/3125	4	EDED 3332	3	EDED 4623	6
CHEM 3323/3123	4	HIST 1301	3	EDED 3362	3	EDRG 4314	<u>3</u>
MATH 2414	4	PHYS 1302/1102	4	EDSE 4349	3		9
PHYS 1301/1101	<u>4</u>	POLS 2302	3	CHEM, adv.**	<u>5</u>		
	16	[^] <i>Communications</i>	<u>3</u>		14		
			17				
Total Hours Required						120	

*An additional 9 hours of approved advanced chemistry courses plus three hours of an appropriate computer course would qualify a graduate for certification to the American Chemical Society as a chemist meeting the professional standards of that organization.

**Advanced Chemistry: approval of chair required.

+ Course selected must satisfy Language, Philosophy and Culture core curriculum component.

**Degree Requirements
Bachelor of Science
Chemistry
Certified by the American Chemical Society**

Freshman Year				Junior Year			
BIOL 1306	3	CHEM 1312/1112	4	CHEM 2401	4	CHEM 3332	3
CHEM 1311/1111	4	ENGL 1302	3	CHEM 3331	3	CHEM 4421	4
ENGL 1301	3	MATH 2413	4	HIST 1301	3	HIST 1302	3
MATH 1348	3	UNIV 1102	1	[^] <i>Creative arts</i>	3	[^] <i>Lang/Phil/Culture</i>	3
UNIV 1101	<u>1</u>	[^] <i>Communications</i>	<u>3</u>	Elective, adv.*	<u>3</u>	Minor	<u>3</u>
	14		15		16		16
Sophomore Year				Senior Year			
CHEM 3323/3123	4	CHEM 3181	1	CHEM 4131	1	CHEM 4132	1
MATH 2414	4	CHEM 3325/3125	4	CHEM 4311	3	CHEM 4181	1
PHYS 2325/2125	4	ENGL 2314	3	CHEM 4341	3	CHEM 4401	4
POLS 2301	<u>3</u>	PHYS 2326/2126	4	CHEM 4381	1	Elective, adv.*	3
	15	POLS 2302	<u>3</u>	[^] <i>Social/Behavioral</i>	3	Elective, adv.*	3
			15	Minor, adv.	<u>3</u>	Minor, adv.	<u>3</u>
					14		15
Total Hours Required						120	

*Approval of chair required.

This program qualifies a graduate for certification to the American Chemical Society as a chemist meeting the professional standards of that organization. Consult departmental chair for information on minor programs.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science
Chemistry - Biochemistry
 Certified by the American Chemical Society
Minor in Biology

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1312/1112	4	CHEM 2401	4	BIOL 2421	4
CHEM 1311/1111	4	ENGL 1302	3	CHEM 3331	3	CHEM 3332	3
ENGL 1301	3	MATH 2414	4	CHEM 4341	3	CHEM 4342	3
MATH 2413	4	UNIV 1102	1	HIST 1302	3	STAT 4301	3
UNIV 1101	<u>1</u>	<i>^Communications</i>	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>		13
	16		15		16		
Sophomore Year				Senior Year			
BIOL 1307/1107	4	CHEM 3181	1	BIOL 3402	4	BIOL 4426	4
CHEM 3323/3123	4	CHEM 3325/3125	4	CHEM 4131	1	CHEM 4132	1
PHYS 2325/2125	4	HIST 1301	3	CHEM 4311	3	CHEM 4181	1
POLS 2301	<u>3</u>	PHYS 2326/2126	4	CHEM 4381	1	CHEM 4401	4
	15	POLS 2302	<u>3</u>	<i>^Creative arts</i>	3	Elective, adv.*	<u>5</u>
			15	<i>^Social/Behavioral</i>	<u>3</u>		15
					15		
Total Hours Required							120

*This program qualifies a graduate for certification to the American Chemical Society as a chemist meeting the professional standards of that organization. Consult departmental chair for information on minor programs.

**Advanced electives: Students must select at least five hours of advanced Chemistry electives. Please note: CHEM 3385 and CHEM 4385 are variable-hour, WI courses that are both suitable for electives.

Degree Requirements
Bachelor of Science
Chemistry – Pharmaceutical Chemistry

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1312/1112	4	BIOL 1372	3	BIOL 2421	4
CHEM 1311/1111	4	ENGL 1302	3	CHEM 2401	4	CHEM 4342	3
ENGL 1301	3	MATH 2413	4	CHEM 3331	3	CHEM 4351	3
MATH 1348	3	UNIV 1102	1	CHEM 4341	3	STAT 4310	3
UNIV 1101	<u>1</u>	<i>^Communication</i>	<u>3</u>	HIST 1302	<u>3</u>	Elective, adv.*	<u>3</u>
	15		15		16		16
Sophomore Year				Senior Year			
BIOL 1307/1107	4	CHEM 3181	1	BIOL 3402	4	BIOL 4355	3
CHEM 3323/3123	4	CHEM 3325/3125	4	CHEM 4131	1	CHEM 4181	1
PHYS 1301/1101	4	HIST 1301	3	<i>^Social/Behavioral</i>	3	CHEM 4352	3
POLS 2301	<u>3</u>	PHYS 1302/1102	4	<i>^Creative arts</i>	3	CHEM 4402	4
	15	POLS 2302	<u>3</u>	Elective, adv.*	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>
			15		14		14
Total Hours Required							120

*Approval of chair required.

Consult departmental chair for information on additional courses for certification to the American Chemical Society or minor programs.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science
Chemistry – Pre-Health
Minor in Biology

Freshman Year				Junior Year			
BIOL 1306/1106	4	CHEM 1312/1112	4	CHEM 2401	4	BIOL 2421	4
CHEM 1311/1111	4	ENGL 1302	3	CHEM 3333	3	BIOL 3402	4
ENGL 1301	3	MATH 2413	4	CHEM 3385	3	CHEM 4345	3
MATH 1348	3	UNIV 1102	1	HIST 1302	3	STAT 4310	3
UNIV 1101	<u>1</u>	<i>^Communications</i>	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>	Elective	<u>1</u>
	15		15		16		15
Sophomore Year				Senior Year			
BIOL 1307/1107	4	CHEM 3181	1	CHEM 4181	1	CHEM 4181	1
CHEM 3323/3123	4	CHEM 3325/3125	4	CHEM 4341	3	CHEM 4401	4
PHYS 1301/1101	4	HIST 1301	3	SOCI 1301 or	3	BIOL, adv.	3
POLS 2301	<u>3</u>	PHYS 1302/1102	4	PSYC 2301		Elective	3
	15	POLS 2302	<u>3</u>	<i>^Social/Behavioral</i>	3	Elective, adv.*	<u>3</u>
			15	Elective, adv.*	<u>4</u>		14
					14		
Total Hours Required							120

*Advanced Electives: Students select two advanced CHEM courses from CHEM 3451, CHEM 4303, CHEM 4381, CHEM 4385, CHEM 4401, and CHEM 4421 or an additional 3 SCH from CHEM 3385, plus unrestricted elective hours (indicated in 2nd terms, Junior and Senior) to give a total of 13 SCH of electives, at least 9 SCH advanced. Other options require departmental approval.

Consult department chair for information on additional courses for certification to the American Chemical Society or minor programs.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF CLINICAL HEALTH SCIENCES

Darin Hoskission, *Interim Chair*

Manning Hall 100A. MSC 177A. Extension 3493.

Professor

Ball, Oller, Tallant

Associate Professors

Guerrero, Villa, Swartz, Faulkner

Associate Professor of Practice

Gonzalez, Seitel

Assistant Professor

Fiestas, Gilkey, Kollara, Krestar, Sunil, Young

Assistant Professor of Practice

Boone, Hernandez-Perez, Iyescas

COMMUNICATION SCIENCES AND DISORDERS (CSDO)

Communication Sciences and Disorders Clinic

Manning Hall 108. MSC 177A. Extension 3493

The Bachelor of Science in Communication Sciences and Disorders requires a minimum of 120-121 hours for graduation with a minor in psychology. An overall GPA of 2.75 is the required minimum for any CSDO undergraduate major. In addition, by the completion of the first four core major classes (CSDO 2302, 2325, 3321, and 3333), a *B* average (3.0 GPA) must be maintained in CSDO major courses. Students must have adequate written and oral communication skills (see CSDO 4223) prior to graduation. Students with less than a 3.0 grade point average in CSDO major classes must petition the CSDO faculty before enrollment in any subsequent class will be permitted.

The undergraduate program in Communication Sciences and Disorders prepares students with background knowledge and training to apply for a graduate program in audiology and speech-language pathology (SLP) or to work as a speech language pathology assistant upon completion of clinical practicum with an employer after graduation. A Master's Degree in communication sciences and disorders is required in order to be a licensed speech-language pathologist in the State of Texas.

Students in communication sciences and disorders have the opportunity to gain practical experience in the Communication Sciences and Disorders Clinic.

Students should be advised that the Texas State Board of Examiners for Speech-Language Pathology and Audiology may deny a license to an applicant because of conviction for a felony or misdemeanor if the crime directly relates to the professional duties of a speech-language pathologist, assistant in speech-language pathology or audiologist.

2302. Introduction to Communication Disorders. 3(3-0)

Cause, diagnosis and therapies of communication disorders, delays or differences.

2325. Phonetics. 3(3-0)

Training in the use of the International Phonetic Alphabet and practice in the transcription of normal and disordered speech.

3122. Clinical Observation in Speech Pathology and Audiology. 1(0-2)

Observation of clinical practice in speech pathology and audiology. Satisfactory completion required before the student can begin clinical practice. May be repeated for a total of 2 semester hours. Prerequisite: grade of *C* in, or concurrent registration in, CSDO 2302. Credit/Non-credit.

3313. Introduction to Audiology. 3(3-1.5)

Basic audiological concepts and their applicability to instrumentation and educational procedures utilized in the habilitation and/or rehabilitation of the pre-school and school aged child. Prerequisite: CSDO 3321; GPA 2.75

overall, 3.0 GPA in CSDO courses.

3321. Anatomy of the Auditory and Vocal Mechanisms. 3(3-0)

Designed to acquaint the student with the physiology and functions of the vocal and auditory mechanisms. Prerequisite: CSDO 3305, GPA 2.75 overall, 3.0 GPA in CSDO courses.

3333. Normal Language Acquisition. 3(3-0)

Symbolic system used by humans to communicate; role of learning in perception, comprehension and expression of linguistic codes; sequential development of normal language skills. Prerequisite: one COMS course.

4223. Clinical Practice in Speech/Language Pathology. 2(0-4)

Administration of speech/language therapy and diagnostic evaluation under direct supervision. May be repeated once. Attendance required at weekly clinical conference. Prerequisites: CSDO 3333, CSDO 4321, and completion of or enrollment in CSDO 4390; an overall grade point average of 3.0; a grade point average of 3.0 in all CSDO courses; and senior standing in CSDO.

4321. Articulatory and Phonological Disorders. 3(3-0)

Development of speech sounds, etiologies of articulation and phonological disorders, assessment, procedures and therapeutic approaches for working with individuals with articulation disorders. Demonstration and simulated practice. Students will complete a minimum of 5 hours of observation to be completed via video observation or in person of therapy targeted to articulation/phonology therapy in the Communication Disorders Clinic. Prerequisites: CSDO 2302 and CSDO 2325; GPA 2.75 overall, 3.0 GPA in CSDO courses.

4327. Diagnostics in Speech/Language Pathology. [WI] 3(3-0)

Diagnostic processes in Communication Disorders. Knowledge of test protocols and assessment methods in language, articulation, voice and stuttering disorders. Written reports and observations, researched essay. A minimum of 5 hours of observation of diagnostics evaluations in the Communication Disorders Clinic. Prerequisites: CSDO 2302, CSDO 2325, CSDO 3321, CSDO 3333, CSDO 4321, CSDO 4329, and CSDO 4335; GPA 2.75 overall, 3.0 GPA in CSDO courses required.

4329. Voice and Fluency Disorders. 3(3-0)

Symptoms and etiologies of voice and fluency disorders. Diagnostic and therapeutic procedures. Students will complete a minimum of 5 hours of observation to be completed via video observation or in person therapy targeted to voice/fluency therapy in the Communication Disorders Clinic. Prerequisites: CSDO 2302 and CSDO 3321; GPA 2.75 overall, 3.0 GPA in CSDO courses.

4331. Speech and Hearing Science. 3(3-0)

Physical properties of sound, sound measurement, basic auditory function, acoustic and physiological phonetics and the perception of speech. Prerequisites: CSDO 3321; GPA 2.75 overall, 3.0 GPA in CSDO courses.

4335. Communication Disorders in Children. 3(3-0)

Interventions (principles and methods) for developmentally delayed or disordered language; specific procedures for planning and implementation of therapy. Students will complete a minimum of 5 hours of observation to be completed via video observation or in person of therapy targeted to child speech/language therapy in the Communication Disorders Clinic. Prerequisites: CSDO 3333; GPA 2.75 overall, 3.0 GPA in CSDO courses.

4336. Communication Disorders in Adults. 3(3-0)

Adult disordered communicative processes. Signs and symptoms, etiology, clinical course and vocational-social impact of these disorders. Principles of assessment and intervention. Students will complete a minimum of 5 hours of observation to be completed via video observation or in person of therapy targeted to adult/language therapy in the Communication Disorders Clinic. Prerequisites: CSDO 2302, CSDO 2325, and CSDO 3321; GPA 2.75 overall, 3.0 GPA in CSDO courses.

4390. Clinical Methodologies.

(3-1)

Designed to acquaint the student with clinical methods in speech-language pathology before beginning clinical practice. Topics include target behaviors, treatment methods and controlling and maintaining target behaviors. Prerequisites: CSDO 2302, CSDO 2325, CSDO 3321, CSDO 3333, CSDO 4321, CSDO 4335 and CSDO 4329; GPA 2.75 overall and GPA 3.0 for CSDO courses.

SOCIAL WORK (SCWK)

Social Work Program Office
Manning Hall 152. MSC 177. Extension 4990.

The profession of social work is based on the values of service, social and economic justice, dignity and worth of the person, importance of human relationships and integrity and competence in practice. With these values as defining principles, the primary mission of the social work program at Texas A&M University-Kingsville is to prepare graduates to provide competent, entry-level, generalist social work to diverse populations. The social work program is committed to promoting professional social work values, ethics and practice in the development of social work knowledge and responsive social service delivery systems. In Texas and other states, jobs with the title of social worker can be filled only by individuals with a professional license to practice social work at the BSW, MSW, or clinical licensing level.

Accreditation

The Bachelor of Social Work (B.S.W.) degree program at Texas A&M University-Kingsville is accredited by the Council on Social Work Education.

Degree Requirements

The B.S.W. degree requires the completion of 120 semester credit hours including 54 hours in social work and 66 semester credit hours in liberal arts and related courses. The major in social work does not require the student to have a minor.

Admission to the Program

Students admitted to the university may declare Pre-Social Work as their major and initiate a general academic program preparatory to this objective. Successful completion of the introductory social work course, The Social Work Profession I (SCWK 2331), is required for formal admission consideration into the B.S.W. degree program. Students must pass this course with a *C* grade or better in order to be considered for the social work major. The qualifications for admission to the B.S.W. degree program are as follows:

1. Completion of 41 semester hours of coursework including the following courses, or their equivalent, with an overall college grade point average of 2.50 or better.
 - BIOL 1306/1106 and BIOL 2401
 - ENGL 1171, ENGL 1301, ENGL 1302 and ENGL 2342 or ENGL 2362
 - HIST 1301 and HIST 2302
 - POLS 2301 and POLS 2302
 - UNIV 1101 and UNIV 1102
 - University Mathematics requirement
 - University Creative Arts requirement
 - University Communication requirement
2. Completion of PSYC 2301, SOCI 1301 and SCWK 2331 with a *C* or better and a 2.5 grade point average in these three courses.
3. Completion of 20 hours of social or human service work approved by the Social Work Program.
4. Submission of an acceptable personal narrative paper as outlined by the Social Work Program.
5. Submission of an Application for Admission into the B.S.W. degree program on forms provided by the Social Work Program and in accordance with the policies and procedures set forth in the Social Work Student Handbook, which is available in the program office and online at the program website.

Retention in the Program

A student may be advised to consider another major at any point after achieving admission into the B.S.W. degree program based on social work faculty's assessment of student's performance and/or professional performance and suitability for the social work profession. The social work faculty continually assesses B.S.W. degree students' academic progress and suitability for the major. B.S.W. degree students must maintain at least a 2.50 grade point average overall in their major and earn a grade of C or higher in all social work major courses. The social work program at Texas A&M University-Kingsville also expects students to adhere to the social work profession's Code of Ethics and all students are required to become a student member of the social work professional organization, the National Association of Social Workers (NASW) prior to field practicum admission.

Social Work Minor

An academic minor is offered in social work. In Texas and other states, applicants for social work licensure are required to have a CSWE accredited B.S.W. or M.S.W. degree; an academic minor in social work is insufficient for licensure in social work. Students who desire an academic minor in social work are required to complete 18 semester credit hours in social work including: SCWK 2331, SCWK 3325, SCWK 3329, SCWK 3335 and six hours from the following – SCWK 4306, SCWK 4311, SCWK 4313, SCWK 4315, SCWK 4317, SCWK 4319.

2331. The Social Work Profession I. (SOCW 2361) 3(3-0)
Survey of the social work profession, including history, philosophy, ethics and relevance to current social issues. Participation with service agencies to assess interest in pursuing social work as a career.

3325. Human Behavior in the Social Environment I. 3(3-0)
A multidimensional approach to examining the behavior of individuals, families, groups, organizations, communities and society as a whole. Theories and research of human behavior across system levels are critically evaluated as applications are made to social work practice. Prerequisite: SCWK 2331.

3329. Social Welfare: Policy and Advocacy I. 3(3-0)
Historical and current survey of the social service delivery system as a response to human need. History, mission and philosophy of social welfare. Prerequisite: SCWK 2331.

3331. Social Work Practice I. 3(3-0)
Social work practice from a generalist perspective with emphasis on the acquisition of values, knowledge and skills necessary for working with clients at the micro and mezzo system levels of practice. Prerequisites: SCWK 2331 and admission to the B.S.W. degree program.

3333. Social Work Research and Evaluation I. [WI] 3(3-0)
Principles and methods of evidence-based practice and research design in social work. Emphasis is placed on the use of research findings to improve practice, policy and social service delivery. Prerequisites: SCWK 2331, admission to the B.S.W. degree program, and credit or registration in PSYC 3381 or SOCI 3381.

3335. Human Behavior in the Social Environment II. 3(3-0)
Includes the study of individuals as they biologically, psychologically, socially, culturally and spiritually develop over the human life course within their environment. Theories and research of human development within environmental context are critically evaluated as applications are made to social work practice. Prerequisite: SCWK 3325.

3339. Social Welfare: Policy and Advocacy II. 3(3-0)
Critical analysis of the legislative process, policy analysis and policy implementation in social work practice with an emphasis on client advocacy. Prerequisites: SCWK 3329 and admission to the B.S.W. degree program.

3341. Social Work Practice II. 3(3-0)
Social work practice from a generalist perspective with emphasis on the acquisition of values, knowledge and skills necessary for working with clients at the mezzo and macro system levels of practice. Prerequisites: SCWK 3331 and admission to the B.S.W. degree program.

- 3343. Social Work Research and Evaluation II.** 3(3-0)
Principles and methods of measurement and program evaluation in social work. Emphasis is placed on measurement in program and practice evaluation to improve practice, policy and social service delivery. Prerequisites: SCWK 3333 and admission to the B.S.W. degree program.
- 4306. Selected Topics in Social Work.** 3(3-0)
Literature and research in areas of social work not otherwise treated in depth in available courses. May be repeated once as topics change. Prerequisite: SCWK 2331.
- 4311. Principles of Youth and Family Social Work.** 3(3-0)
Principles and methods of generalist social work with children, adolescents and families across system levels and practice settings. Prerequisite: SCWK 2331.
- 4313. Principles of Mental Health Social Work.** 3(3-0)
Principles and methods of generalist social work in the area of mental health across system levels and practice settings. Prerequisite: SCWK 2331.
- 4315. Principles of Health Social Work.** 3(3-0)
Principles and methods of generalist social work in the area of health care across system levels and practice settings. Prerequisite: SCWK 2331.
- 4317. Principles of Forensic Social Work.** 3(3-0)
Principles and methods of generalist social work in the areas of criminal and juvenile justice across system levels and practice settings. Prerequisite: SCWK 2331.
- 4319. Principles of Geriatric Social Work.** 3(3-0)
Principles and methods of generalist social work in the area of gerontology across system levels and practice settings. Prerequisite: SCWK 2331.
- 4321. Principles of School of Social Work.** 3(3-0)
Social work generalist practice in school environments. Emphasis is on social work intervention methods: knowledge and skills related to strengths-based, client-centered, and family-focused approaches. Roles of school social worker, emphasizing person in the school environment; social work practice with vulnerable children and youth, families, teachers, and administrators. Prerequisite: SCWK 2331.
- 4323. Social Work with Diverse Populations.** 3(3-0)
Cultural competence when working with individuals of varying socio-cultural backgrounds. Problems and evidence-based strategies associated with social and cultural constructions, as well as discussions related to culturally competent and responsive practice approaches. Prerequisite: SCWK 2331
- 4327. Basic Case Management.** 3(3-0)
Fundamentals of case management within human services, social services, and non-profit organizations. Case management techniques in health, mental health, geriatrics, criminal justice, and/or child welfare. Prerequisite: junior standing.
- 4331. The Social Work Profession II. [WI]** 3(3-0)
Capstone course in social work, reinforcing students' social work identity, life-long learning and career development. Includes the B.S.W. degree program exit exam, social work career development, licensure preparation and emphasizes life-long learning. Prerequisites: SCWK 4641 and registration or credit in SCWK 4643.
- 4386. Directed Research in Social Work.** V:1-3
Individual instruction in supervised research experience in social work. May entail library research, data collection, data entry, statistical analysis and/or assistance in planning and conducting parts of a research project. A paper on the research experience is required. May be repeated for a maximum of 3 semester credit hours. Prerequisites: SCWK 3335, SCWK 3339, SCWK 3341, SCWK 3343, consent of the instructor and admission to the B.S.W. program.

4641. Social Work Practicum I.

6(2-16)

First in a sequence of two field practicums. Educationally directed and professionally supervised direct service activities providing practical experience in the application of social work values; knowledge and skills acquired in social work foundation courses. Two hundred (200) clock hours of field placement and a weekly seminar of two hours. Prerequisites: SCWK 3335, SCWK 3339, SCWK 3341, SCWK 3343, good standing in the B.S.W. degree program and permission of the Social Work Program Director and Field Education Coordinator.

4643. Social Work Practicum II.

6(2-16)

The second in a sequence of two field practicums. Educationally directed and professionally supervised direct service activities providing practical experience in the application of social work values, knowledge and skills acquired in social work foundation courses. Two hundred (200) clock hours of field placement and a weekly seminar of two hours. Prerequisites: SCWK 4641, good standing in the B.S.W. degree program and permission of the Social Work Field Education Coordinator.

**Degree Requirements
Bachelor of Science
Communication Sciences and Disorders
Minor in Psychology**

Freshman Year			Junior Year		
COMS 1311/ COMS 1315	3	ENGL 1302	3	CSDO 3321	3
ENGL 1301	3	HIST 1301	3	CSDO 3333	3
UNIV 1101	1	PSYC 2301	3	CSDO 4321	3
[^] Mathematics	3	UNIV 1102	1	Elective	3
*Science	<u>4</u>	[^] Creative arts	3	PSYC, adv.	<u>3</u>
	14	*Science	<u>4</u>		15
			17		
Sophomore Year			Senior Year		
CSDO 2305	3	CSDO 2325	3	CSDO 4336	3
ENGL 2314	3	ENGL 1171	1	CSDO 4390	3
HIST 1302	3	ENGL 2342 or	3	PSYC, adv.	3
POLS 2301	3	ENGL 2362	3	Electives	<u>6</u>
PSYC	<u>3</u>	POLS 2302	3	**Electives, adv.	<u>6</u>
	15	Elective	1		15
		PSYC Elective	<u>3</u>		
			14		
Total Hours Required					120

*Students will choose one Biology from BIOL 1306/BIOL 1106 or BIOL 2401; and CHEM 1405 or PHYS 1375 or PHYS 1471. If PHYS 1375 is chosen, one hour satisfying Component Area Option B must be taken in place of the fourth hour of science to compete the Core and 120 hours requirements for a baccalaureate degree.

**Consider CSDO 4223 and ENGL 4310 as electives.

**Degree Requirements
Bachelor of Social Work**

Freshman Year			Junior Year		
ENGL 1301	3	ENGL 1302	3	PSYC 3381 or	3
HIST 1301	3	HIST 1302	3	SOCI 3381	3
SOCI 1301	3	PSYC 2301	3	SCWK 3325	3
UNIV 1101	1	UNIV 1102	1	SCWK 3329	3
[^] Mathematics	3	[^] Communications	3	SCWK 3331	3
Elective	<u>3</u>	[^] Creative arts	<u>3</u>	SCWK 3333	<u>3</u>
	16		16		15
Sophomore Year			Senior Year		
BIOL 2401	4	BIOL 2402	4	SCWK 4641	6
ENGL 2342 or	3	ENGL 1171	1	SCWK, adv.*	3
ENGL 2362	3	POLS 2302	3	SCWK, adv.*	3
POLS 2301	3	Elective	<u>7</u>	SCWK, adv.*	<u>3</u>
SCWK 2331	3		15		12
Elective	<u>3</u>				
	16				
Total Hours Required					120

*SCWK 4306, SCWK 4311, SCWK 4313, SCWK 4315, SCWK 4317, SCWK 4319 or SCWK 4386.

†This course includes the B.S.W. degree program exit examination.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF HISTORY, POLITICAL SCIENCE AND PHILOSOPHY

Jeffrey Glick, *Chair*

Rhode Hall 330. MSC 165. Extension 3501.

Regents Professor

Hunter

Professors

Baker, Carranza, Ferguson, Goswami, Knight, Melendy, Price, Tuller

Associate Professors

Badici, Glick, Greenspan, Houf

Assistant Professors

Bowen, Braidwood, Cooke, K. Hulbert, Robinson, Rodriguez, Rosenbaum

Lecturers

Fey, Getz, Godines-Garza, M. Hulber, Kawa, Lorenzini, Paxton, Williams, Yancey

Faculty Emeriti

Albro, Chandler, Davis, Hartwig, Hunter, Phaup

A Bachelor of Arts in Criminal Justice prepares students for careers in law, law enforcement and corrections.

A major in Criminal Justice requires completion of 33 semester hours in Criminal Justice. A minor in Criminal Justice requires completion of 18 semester hours in Criminal Justice. Three specific courses are required: CRIJ 1301, CRIJ 1313 and CRIJ 4301; plus one of the following: CRIJ 1310, CRIJ 2313 or CRIJ 2328; plus two additional advanced courses in Criminal Justice.

A Bachelor of Arts degree in History prepares students for careers in law, education, government, business and the military and for study culminating in an advanced or professional degree.

A major in History requires completion of 33 semester hours in History, consisting of six required courses and five advanced elective courses.

A minor in History requires completion of 18 semester hours in History, consisting of three required courses (HIST 1302, HIST 2321 and HIST 2322) and three advanced elective courses.

Students majoring or minoring in History must complete the introductory courses, HIST 1301-1302 and HIST 2321-2322. Students majoring in History are advised to complete HIST 4301 prior to or concurrently with their first upper-level elective course.

Upper-level courses are grouped into five areas of study: United States, European, Latin American, and Non-Western (Africa, Asia and Middle East), and World. Majors must take at least one upper-level course in each of three of these five major areas of study. Majors must also complete HIST 4397 Advanced Seminar Topics, in which they will produce a significant research paper which will serve as a senior thesis.

A Political Science (POLS) major provides a broad, liberal arts education for students with the following career objectives: 1) law school; 2) graduate school; 3) a wide range of local, state and national government jobs; 4) international positions; 5) employment in the private sector (which also deals with public policy, government and politics) and 6) high school teaching. A POLS major requires 30 semester credit hours; a POLS minor requires 18 semester credit hours.

The department has a communication skills requirement for graduation. Students must contact their department for communication skills requirement.

CRIMINAL JUSTICE (CRIJ)

1301. Introduction to Criminal Justice.

3(3-0)

Introduction to the operation of the U.S. criminal justice system including an overview of law enforcement, the judiciary and corrections.

1310. Fundamentals of Criminal Law.

3(3-0)

Study of criminal law, its philosophical and historical development, major definitions and concepts, classifications and elements of crime, penalties using Texas statutes as illustrations and criminal responsibility. Prerequisite: CRIJ 1301.

1313. Juvenile Justice System.

3(3-0)

Introductory overview of the juvenile justice system in the United States, to include common law roots, case law and evolution of juvenile courts and corrections. Prerequisite: CRIJ 1301.

2313. Correctional Systems and Practices.

3(3-0)

Introductory overview of modern corrections including its history and current correctional issues and practices. Prerequisite: CRIJ 1301.

2314. Criminal Investigation.

3(3-0)

Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation as they apply to the field of criminal justice. Prerequisite: CRIJ 1301.

2323. Legal Aspects of Law Enforcement.

3(3-0)

Study of the procedural rules for judicial enforcement of the substantive criminal law and analysis of constitutional law as it relates to the criminal justice system. Prerequisite: CRIJ 1301.

2328. Police Systems and Practices.

3(3-0)

Introductory overview of the U.S. system of policing including its history, development and methods of policing. Prerequisite: CRIJ 1301.

3250. Forensic Psychology and Psychiatry.

2(2-0)

Examination of psychology of human behavior as it relates to crime and mental health. Processes of psychological conditioning that lead individuals to commit crimes. Roles of forensic psychologists and psychiatrists. Prerequisites: junior standing and completion of social/behavioral component requirement.

3304. Research Methods in Criminal Justice.

3(3-0)

Examination of various research, planning and evaluation methods as they apply to the field of criminal justice. Prerequisites: CRIJ 1301 and 6 hours of Criminal Justice.

3350. Seminar in Forensic Behavioral Sciences and Practice.

3(3-0)

Application of forensic behavioral sciences and mental health concepts relating to the practice of criminal justice, including civil commitment of sex offenders, review of criminal defendants' competence to stand trial, and defenses to culpability based upon mental disorder, behavioral profiling, and offender diagnosis and treatment. Prerequisites: junior standing and completion of either the social/behavioral component or CRIJ 1301.

4301. Criminal Justice Theory.

3(3-0)

Survey of the origins and subfields of criminology/criminal justice, how crime is defined and measured, issues affecting victims of crime and leading theories that attempt to explain crime. Prerequisites: CRIJ 1301 and 6 hours of criminal justice.

4302. Criminal Justice Ethics.

3(3-0)

Examination of the philosophical ideals of ethics that arise in the criminal justice context. Prerequisites: CRIJ 1301 and 6 hours of criminal justice.

- 4304. Organization and Management in Criminal Justice.** 3(3-0)
Overview of the various management and organization theories as applied to the criminal justice context. Prerequisites: CRIJ 1301 and 6 hours of criminal justice.
- 4305. Seminar in Criminal Justice. [WI]** 3(3-0)
Intensive seminar in Criminal Justice, culminating in the production of a significant research paper. Prerequisites: 6 semester hours of CRIJ and PSYC 3381 or SOCI 3381.
- 4320. Law and Society.** 3(3-0)
In-depth examination of law and society through the philosophy and evolution of legal systems and legal institutions. The major functions of law as agents of social control, dispute resolution and societal engineering are addressed. Prerequisites: SOCI 1301 and 3 semester hours of criminal justice, criminology or sociology. (Credit may not be obtained in more than one of CRIJ 4320, CRIM 4320 and SOCI 4320.)
- 4331. Constitutional Law I. [WI]** 3(3-0)
Survey of American constitutional law, using leading cases, both historic and contemporary, of the Supreme Court of the United States. Establishment of the federal political system for which the Constitution provided and the judicial allocations of political and economic power within that system. Prerequisites: 6 semester hours of political science. (Credit may not be obtained in more than one of CRIJ 4331, POLS 4331 and CRIM 4331.)
- 4332. Constitutional Law II. [WI]** 3(3-0)
Survey of American constitutional law using leading cases, both historic and contemporary, of the Supreme Court of the United States. Matters of rights and liberties, their recognition and definition, policies of rights developed by the Supreme Court of the United States. Prerequisites: 6 semester hours of political science. (Credit may not be obtained in more than one of CRIJ 4332, POLS 4332 and CRIM 4332.)
- 4333. The American Judicial Process.** 3(3-0)
Federal judicial system in terms of structure, function and process with stress on court interaction at both intracourt and intersystem levels. Prerequisites: 6 semester hours of political science. (Credit may not be obtained in more than one of CRIJ 4333, POLS 4333 and CRIM 4333.)
- 4338. Topics in Criminal Justice.** 3(3-0)
Focused study of an issue in Criminal Justice. May be repeated for credit when the topic changes. Prerequisite: 6 semester hours of criminal justice.
- 4343. International Law.** 3(3-0)
Introduction to the study of international law. Examines the definition, object and sources of international law as well as its relationship to domestic law and to the study of international relations. Prerequisites: 6 semester hours of political science. (Credit may not be obtained in both CRIJ 4343 and POLS 4343.)
- 4345. Victimology.** 3(3-0)
Examination of the historical role of crime victims, nature of victimization in modern society, the victimization process, solutions to victimization and victim's rights. Emphasis given to the social, legal, psychological and societal aspects of victimization. Victim-offender interaction and societal response to victimization will also be treated. Prerequisites: 6 semester hours of social science. (Credit may not be obtained in both CRIJ 4345 and CRIM 4345.)

HISTORY (HIST)

- 1301. American History to 1877. (HIST 1301)** 3(3-0)
A survey of the United States from the era of exploration through the period of Reconstruction (1877).
- 1302. American History Since 1877. (HIST 1302)** 3(3-0)
A survey of the United States from the period of Reconstruction (1877) to the present.

- 2321. World History to 1500.** (HIST 2321) 3(3-0)
The history of world civilizations from pre-literary times to 1500 CE. Emphasis is on the political, religious, economic and cultural characteristics of these civilizations and their contributions to the contemporary world.
- 2322. World History Since 1500.** (HIST 2322) 3(3-0)
The history of world civilizations from 1500 to the present. Emphasis is on the political, religious, economic and cultural characteristics of these civilizations and their contributions to the contemporary world.
- 4301. Methods of Historical Research.** 3(3-0)
Procedures and methods of historical research. Introduction to types of historical data, the analysis of sources, the use of computer techniques in historical research and the methods of historical writing. Prerequisite: 6 semester hours of history.
- 4305. History Internship.** 3(3-0)
Allows students to gain practical experience in an area of public history while earning class credit. Prerequisite: 6 semester hours of history.
- 4307. Public History Practices.** 3(3-0)
Different ways public history is practiced. Curatorship, research practices, docentship and historical restoration. Prerequisite: 6 semester hours of history.
- 4309. Topics in Public History.** 3(3-0)
Issues in public history not otherwise covered. May be repeated when the topic changes. Prerequisite: 6 semester hours of history.
- 4312. Europe in the Middle Ages.** 3(3-0)
Political, economic and cultural developments in Europe from the fall of the Roman Empire to the Renaissance. Prerequisite: 12 semester hours of history and/or political science.
- 4313. Early Modern Europe. [WI]** 3(3-0)
Study of themes in European history focusing on the Renaissance and Reformation and religious change; expansion of state power and resistance; new scientific understandings; changing economic and gender roles; the development of Enlightenment ideas. Prerequisite: 12 semester hours of history and/or political science.
- 4316. Nineteenth-Century Europe.** 3(3-0)
European industrialization and imperial expansion; rise of nationalism as well as ideologies of resistance; gender and class relations in an industrializing society; development of institutions of control and liberation in the long nineteenth century. Prerequisite: 12 semester hours of history and/or political science.
- 4317. French Revolution and Napoleon.** 3(3-0)
Study of the actors and events of the French Revolution and its impact upon European history concluding with analysis of the role and significance of Napoleon and the Napoleonic Wars. Prerequisite: 12 semester hours of history and/or political science.
- 4318. Twentieth-Century Europe.** 3(3-0)
Political, social and cultural developments in Europe from the Belle Époque through the end of the Cold War. Prerequisite: 12 semester hours of history and/or political science.
- 4332. American Controversy and Conflict, 1816 to 1850.** 3(3-0)
Major questions of the period; sectionalism, national rights versus states' rights, the slavery issue, expansion in the continental United States. Prerequisite: 12 semester hours of history and/or political science.
- 4334. The Civil War and Reconstruction.** 3(3-0)
Secession, formation of the Confederacy, military campaigns and Reconstruction. Prerequisite: 12 semester hours of history and/or political science.

- 4336. America's Rise to World Power.** 3(3-0)
Progressivism, World War I, the 1920s, the Great Depression and World War II. Prerequisite: 12 semester hours of history and/or political science.
- 4338. The United States Since 1945.** 3(3-0)
Post-war abundance, the Cold War, social and cultural changes, the Vietnam era and the post-Nixon years. Prerequisite: 12 semester hours of history and/or political science.
- 4340. United States Social and Cultural History.** 3(3-0)
The development of American society and culture with emphasis on religious trends, ethnic groups and the family. Prerequisite: 12 semester hours of history and/or political science.
- 4345. The American West.** 3(3-0)
History of the Trans-Mississippi West and its influence upon political, economic, social and cultural development from the earliest habitation to the present. Prerequisite: 12 semester hours of history and/or political science.
- 4346. Texas History.** 3(3-0)
Spanish background, Anglo-American settlement, the Revolution and Republic and statehood; economic, cultural and political development. Prerequisite: 12 semester hours of history and/or political science.
- 4348. History of the Mexican-American in the Southwest.** 3(3-0)
A survey from the first Spanish settlers to the present. Prerequisite: 12 semester hours of history and/or political science.
- 4350. Latin America.** 3(3-0)
Historical background of contemporary Latin America. Prerequisite: 12 semester hours of history and/or political science.
- 4356. Mexico.** 3(3-0)
Political, economic and social history of Mexico from pre-Columbian times to the present. Emphasis on the last century. Prerequisite: 12 semester hours of history and/or political science.
- 4358. Asian History.** 3(3-0)
An introduction to political, social, cultural and economic Asian history from antiquity to the present. Emphasis on the study not only of important Asian leaders, cultures and societies, but also of the various religions and philosophies which originated in Asia. Prerequisite: 12 semester hours of history and/or political science.
- 4360. Women in History.** 3(3-0)
Investigation of women's historical place in global themes such as patriarchy, sexual politics, work, religion, peace, colonization and the body. Prerequisite: 12 semester hours of history and/or political science. (Credit may not be obtained in both HIST 4360 and WGST 4360.)
- 4365. Comparative Genocide.** 3(3-0)
Investigation of the history of the Holocaust and of other world genocides in a comparative context. Prerequisite: 12 semester hours of history and/or political science.
- 4370. Crucial Topics in European History. [WI]** 3(3-0)
Intensive seminar on a specialized topic in European history, culminating in the production of a significant research paper. May be repeated for credit as the topic changes. Prerequisite: 12 semester hours of history and/or political science.
- 4380. Crucial Topics in United States History. [WI]** 3(3-0)
Intensive seminar on a specialized topic in United States history, culminating in the production of a significant research paper. May be repeated for credit as topic changes. Prerequisite: 12 semester hours of history and/or political science.

4392. Crucial Topics in Latin American History. [WI] 3(3-0)
Intensive seminar on a specialized topic in Latin American history, culminating in the production of a significant research paper. May be repeated for credit as the topic changes. Prerequisite: 12 semester hours of history and/or political science.

4394. Crucial Topics in World History. [WI] 3(3-0)
Seminar on specialized topics in World History culminating in the production of a significant research paper. May be repeated for credit as the topic changes. Prerequisite: 12 semester hours of history and/or political science.

4396. Crucial Topics in Non-Western History. [WI] 3(3-0)
Intensive seminar on specialized topics in Non-Western history, culminating in the production of a significant research paper. May be repeated for credit as the topic changes. Prerequisite: 12 semester hours of history and/or political science.

4397. Advanced Seminar Topics. 3(3-0)
Capstone experience for history majors, focusing on one of the major fields of the department: United States, Latin American, European, Non-Western, and World. Completion of this seminar with a minimum grade of C is required of all history majors prior to graduation. May be repeated as needed. Prerequisite: 12 semester credit hours in history.

PHILOSOPHY (PHIL)

1301. Introduction to Philosophy. (PHIL 1301) 3(3-0)
Inquiries into the nature of the self, the universe and society as they relate to various definitions of reality, truth and value with readings from major works of classical and modern philosophers.

2303. Introduction to Logic. 3(3-0)
Surveys formal methods to deductive and inductive logic with an emphasis on syllogistics, truth-functional logic and quantification logic. Topics include Venn Diagrams, truth tables, quantifiers, rules of inference, formal proofs and probabilistic reasoning.

3311. Foundations of Professional Ethics. 3(3-0)
Overview of traditional and contemporary theories in ethics and the associated application to current ethical problems in representative professional fields.

3313. Applied Ethics. 3(3-0)
Introduction to contemporary moral issues: corporate responsibility, abortion, capital punishment, drug legalization, animal rights, gay marriage, economic quality, free speech, etc.

3315. Philosophy of Religion. 3(3-0)
A philosophical examination of issues basic to religion, including the relation of faith to symbols and language, religious understandings of the nature of man, the traditional proofs for God's existence, the relationship of religion to philosophy, to culture, to science and to morality.

3321. History of Western Philosophy: Ancient and Medieval. 3(3-0)
A study of significant Western philosophers and philosophies from the pre-Socratics through the Medieval period.

3322. History of Western Philosophy: Modern and Contemporary. 3(3-0)
A study of significant Western philosophers and philosophies from the Renaissance through the contemporary philosophers of the late 20th Century.

3323. Non-Western Philosophy. 3(3-0)
Historical and critical study of non-European philosophical traditions with emphasis on South and East Asia.

3346. Symbolic Logic. 3(3-0)
Surveys propositional and quantificational logic. Topics include translations between formal languages and English, logical consequence, formal methods of proof and elements of metatheory. Prerequisite: 3 semester hours of PHIL

or MATH or consent of instructor.

4303. Philosophy of Mind. 3(3-0)
Surveys the nature of consciousness and the mind-body problem. Topics include the question whether computers could think, dualism, functionalism, mental causation and mental representation. Prerequisite: 3 semester hours of PHIL or PSYC or consent of instructor.

4305. Epistemology. 3(3-0)
Surveys theories of knowledge and skepticism. Topics include a priori knowledge foundationalism, coherentism, theories of perception, externalism and contextualism. Prerequisite: 3 semester hours of PHIL or consent of instructor.

4337. Philosophy of Language. 3(3-0)
Surveys topics such as speech acts, trust and meaning, proper names, demonstratives, propositional attitudes, conversational implicature and private languages. Prerequisite: 3 semester hours of PHIL.

4394. Special Problems in Philosophy. 3(3-0)
Special studies in philosophy. Course may be repeated for credit, if different topic is offered.

POLITICAL SCIENCE (POLS)

2301. The Government and Politics of the United States. (GOVT 2305) 3(3-0)
A survey of the structures, functions and processes of the political system of the United States. Fulfills 3 semester hours of the legislative degree requirement of 6 hours.

2302. The Government and Politics of Texas. (GOVT 2306) 3(3-0)
A survey of the structures, functions and processes of the Texas political system. Fulfills 3 semester hours of the legislative degree requirements of 6 hours.

2304. Introduction to Political Science. (GOVT 2304) 3(3-0)
Development of political science as an academic discipline; the scientific method; major research approaches to the study of political phenomena with emphasis upon the contributions of behaviorialists, policy scientists and traditional political scientists.

2340. World Politics. 3(3-0)
Analysis of the contemporary state system and forces shaping the world in which we live. Students will be given a framework within which to analyze global political issues and international institutions and their impact on American politics and government.

3302. Research and Analysis in Political Science. 3(3-0)
The practice of political science. The construction of research designs; major research tools; methods of political analysis; political science writing. Prerequisite: 6 semester hours of political science.

4311. Voting Behavior and Public Opinion. 3(3-0)
The relation of public opinion and voting behavior to democratic government; techniques employed in analyzing political attitudes and voting behavior. Prerequisite: 6 semester hours of political science.

4312. Interest Groups and Political Parties. 3(3-0)
Formation, structure and functions of interest groups and political parties within the political system. Prerequisite: 6 semester hours of political science.

4313. The President and Congress. [WI] 3(3-0)
Structure, functions and policy roles of the national executive and legislative branches of government. Prerequisite: 6 semester hours of political science.

- 4314. State and Local Government and Administration.** 3(3-0)
Structure and functions of governmental institutions; administrative practices of state and local governments. Prerequisite: 6 semester hours of political science.
- 4315. Urban Politics.** 3(3-0)
A study of urban political processes and major public problems confronting urban areas. Prerequisite: 6 semester hours of political science.
- 4317. Nuclear Proliferation and U.S. Non-Proliferation Policies.** 3(3-0)
Causes of and U.S. responses to, nuclear proliferation in Third World regions, focusing on “problem countries.” Topics include the non-proliferation regime, the “nuclear repentants,” nuclear arms control and the threat of nuclear terrorism. Prerequisite: 6 semester hours of political science or consent of instructor.
- 4321. Political Theory: Ancient and Medieval.** 3(3-0)
The theories of the major thinkers of the periods and of their development. Prerequisite: 6 semester hours of political science.
- 4322. Political Theory: Early Modern and Modern.** 3(3-0)
Theories of the major thinkers and the related intellectual and political movements. Prerequisite: 6 semester hours of political science.
- 4324. Technology and Society. [WI]** 3(3-0)
A study of technology and society from the perspective of social values, ethics, sociology, social environment, politics and economics. Prerequisite: 6 semester hours of political science and six semester hours of history.
- 4331. Constitutional Law I. [WI]** 3(3-0)
A survey of American constitutional law, using leading cases, both historic and contemporary, of the Supreme Court of the United States. Establishment of the federal political system for which the Constitution provided and the judicial allocations of political and economic power within that system. Prerequisite: 6 semester hours of political science. (Credit may not be obtained in both POLS 4331 and CRIM 4331.)
- 4332. Constitutional Law II. [WI]** 3(3-0)
A survey of American constitutional law using leading cases, both historic and contemporary, of the Supreme Court of the United States. Matters of rights and liberties, their recognition and definition, policies of rights developed by the Supreme Court of the United States. Prerequisite: 6 semester hours of political science. (Credit may not be obtained in both POLS 4332 and CRIM 4332.)
- 4333. The American Judicial Process.** 3(3-0)
The federal judicial system in terms of structure, function and process with stress on court interaction at both intracourt and intersystem levels. Prerequisite: 6 semester hours of political science. (Credit may not be obtained in both POLS 4333 and CRIM 4333.)
- 4341. International Relations.** 3(3-0)
The underlying principles governing political relations among sovereign states and the application of these principles to contemporary international problems. Prerequisite: 6 semester hours of political science.
- 4342. International Organization. [WI]** 3(3-0)
Basic features, functions and problems of international organizations through the League of Nations, the United Nations and its specialized agencies and other important regional organizations in the context of the world situation. Prerequisite: 6 semester hours of political science.
- 4343. International Law.** 3(3-0)
An introduction to the study of international law. This course examines the definition, object and sources of international law as well as its relationship to domestic law and to the study of international relations. Prerequisite: 6 semester hours of political science.

- 4351. Comparative Politics.** 3(3-0)
The structures, functions and processes of selected political systems. May be repeated once for credit. Prerequisite: 6 semester hours of political science.
- 4354. The Government and Politics of Latin America.** 3(3-0)
The structures, functions and processes of the political systems of the nations of Central America, the Caribbean and South America. Prerequisite: 6 semester hours of political science.
- 4355. The Government and Politics of Mexico.** 3(3-0)
The structures, functions and processes of the political system of Mexico. Prerequisite: 6 semester hours of political science.
- 4361. Public Administration.** 3(3-0)
The place of public administration in government; the relations of the bureaucracy to other government institutions and the public. Prerequisite: 6 semester hours of political science.
- 4363. Policy and Policy-Making in the United States.** 3(3-0)
Public policy and its formation through the interaction of political groups and governmental institutions in selected areas of public policy; relevant comparisons to other national systems. Prerequisite: 6 semester hours of political science.
- 4367. Gender, Politics and Citizenship.** 3(3-0)
Investigation of how political institutions and processes shape norms of citizenship, focusing on social identifiers such as gender, race/ethnicity and sexuality. Prerequisite: 6 semester hours of political science and/or sociology. Credit may be obtained in only one of POLS 4367, SOCI 4367 or WGST 4367.
- 4370. Special Studies in Political Science.** V:1-3
An intensive examination of special topics of study in political science. Course may be repeated for credit when the topic of study changes. Prerequisite: 6 semester hours of political science or consent of the instructor.

**Degree Requirements
Bachelor of Arts
Criminal Justice**

Freshman Year			Junior Year		
CRIJ 1301	3	CRIJ 1313	3	CRIJ 3304	3
ENGL 1301	3	ENGL 1302	3	CRIJ 4301	3
HIST1301	3	HIST 1302	3	PSYC 3381 or	3
POLS 2301	3	MATH 1314	3	SOCI 3381	3
UNIV 1101	1	POLS 2302	3	Elective	3
[^] Creative arts	<u>3</u>	UNIV 1102	<u>1</u>	Foreign language	<u>3</u>
	<u>16</u>		<u>16</u>		<u>15</u>
Sophomore Year			Senior Year		
ENGL 2342	3	CRIJ 1310, CRIJ 2313	3	CRIJ, adv.	3
GEOG 1303	3	or CRIJ 2328	3	CRIJ, adv.	3
POLS 2304	3	PHIL 3313	3	CRIJ, adv.	3
[^] Life/Physical sciences	3	[^] Communications	3	Minor, adv.	3
Foreign language	<u>3</u>	[^] Life/Physical sciences	3	Minor, adv.	<u>3</u>
	<u>15</u>	Foreign language	3		<u>13</u>
			<u>15</u>		
Total Hours Required					120

**Degree Requirements
Bachelor of Arts
History**

Freshman Year			Junior Year		
ENGL 1301	3	COMS 1311	3	HIST 4301	3
HIST 1301	3	ENGL 1302	3	Elective, adv.	6
UNIV 1101	1	HIST 1302	3	Electives	4
[^] Mathematics	3	UNIV 1102	1	HIST, adv.	3
Foreign language (1 st)	<u>3</u>	[^] Social/Behavioral	3	Minor	<u>6</u>
	<u>13</u>	Foreign language (2 nd)	<u>3</u>		<u>15</u>
			<u>16</u>		
Sophomore Year			Senior Year		
ANTH 2303	3	BIOL 2375	3	HIST 4397	9
ENGL 2342	3	HIST 2322	3	Elective, adv.	6
HIST 2321	3	POLS 2302	3	Minor, adv.	3
POLS 2301	3	[^] Creative arts	3		<u>6</u>
Foreign language (3 rd)	<u>3</u>	Foreign language (4 th)	<u>3</u>		<u>15</u>
	<u>15</u>		<u>15</u>		
Total Hours Required					120

Summer Session work may be advisable to reduce term loads.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Arts
History with Teaching Certification**

Freshman Year				Junior Year			
ENGL 1301	3	ANTH 2303	3	EDED 3310	3	EDED 3302	3
HIST 1301	3	ENGL 1302	3	HIST 4301	3	EDED 3333	3
UNIV 1101	1	HIST 1302	3	HIST 4346	4	HIST, adv.*	6
^ <i>Mathematics</i>	3	UNIV 1102	1	HIST, adv.*	3	Minor	3
Foreign language (1 st)	<u>3</u>	^ <i>Creative arts</i>	3	Minor	<u>6</u>	Minor, adv.	<u>3</u>
	13	Foreign language (2 nd)	<u>3</u>		18		18
			16				
Sophomore Year				Senior Year			
BIOL 2375	3	COMS 1311	3	EDED 3332	3	EDED 4623	6
ENGL 2342	3	HIST 2322	3	EDED 3362	3	EDRG 4314	<u>3</u>
HIST 2321	3	POLS 2302	3	EDSE 4349	3		9
POLS 2301	3	^ <i>Social/Behavioral</i>	3	HIST 4397	3		
Foreign language (3 rd)	<u>3</u>	Foreign language (4 th)	3	HIST, adv.*	3		
	15	Minor	<u>3</u>	Minor, adv.	<u>3</u>		
			18		18		
						Total Hours Required	125

Summer Session work may be advisable to reduce term loads.

*Advanced History must be from approved listing for certification.

**Degree Requirements
Bachelor of Arts
History with Social Studies Teaching Certification**

Freshman Year				Junior Year			
ENGL 1301	3	COMS 1311	3	EDED 3310	3	EDED 3302	3
HIST 1301	3	ECON 2301	3	GEOG 1303	3	EDED 3333	3
UNIV 1101	1	ENGL 1302	3	HIST 4301	3	HIST 4346	3
^ <i>Creative arts</i>	3	HIST 1302	3	*POLS 2340	3	#HIST, adv.	6
^ <i>Mathematics</i>	3	UNIV 1102	1	#HIST, adv.	6	**POLS, US, adv.	<u>3</u>
Foreign language (1 st)	<u>3</u>	Foreign language (2 nd)	<u>3</u>		18		18
	16		16				
Sophomore Year				Senior Year			
ENGL 2342	3	ECON 2302	3	EDED 3332	3	EDED 4623	6
GEOG 1301/1101	4	GEOG 1302/1102	4	EDED 3362	3	EDRG 4314	<u>3</u>
HIST 2321	3	HIST 2322	3	EDSE 4349	3		9
POLS 2301	3	POLS 2302	3	HIST 4397	3		
Foreign language (3 rd)	<u>3</u>	Foreign language (4 th)	<u>3</u>	**POLS, US, adv.	3		
	16		16	***Social Science, adv.	<u>3</u>		
					18		
						Total Hours Required	127

Summer Session work may be advisable to reduce term loads.

#Advanced History must be from approved listing for certification.

*Approved alternatives are POLS 4321, POLS 4322 and POLS 4351.

**Students may choose from POLS 4313, POLS 4314, POLS 4317, POLS 4331, POLS 4332, POLS 4333 and POLS 4363.

***Students may choose from ANTH 3301, ANTH 3302, GEOG 3310, GEOG 3331, PSYC 3301, PSYC 3313, SOCI 4307, SOCI 4362 and SOCI 4364.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Arts
Political Science**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	ECON 2301	3	ECON 2302	3
HIST 1301	3	HIST 1302	3	PHIL 3346 or	3	Minor	3
POLS 2304	3	MATH 1314 or	3	Elective, adv.#		Minor, adv.	3
UNIV 1101	1	MATH 1334		POLS 3302	3	POLS, adv.	3
^Creative arts	3	POLS 2302	3	BUAD 3355+ or	3	POLS, adv.	<u>3</u>
Elective	<u>1</u>	UNIV 1102	1	SOCI 3381			15
	<u>14</u>	Foreign language	<u>3</u>	Foreign language	<u>3</u>		
			16		15		
Sophomore Year				Senior Year			
ENGL 2342 or	3	ENGL 2362 or	3	Minor, adv.*	3	Minor, adv.	3
ENGL 2314		ENGL 2314		Minor, adv.*	3	Minor, adv.	3
GEOG 1303	3	POLS 2340	3	POLS, adv.	3	POLS, adv.	3
POLS 2301	3	^Communications	3	POLS, adv.	3	Elective, adv.*	<u>6</u>
^Life/Physical sciences	3	^Life/Physical sciences	3	Elective, adv.*	<u>3</u>		15
Foreign language	<u>3</u>	Foreign language	<u>3</u>		15		
	<u>15</u>		15				

Total Hours Required 120

Total hours may vary depending on the requirements of the minor chosen (see the list of Recognized Minors in the College of Arts and Sciences section of the current catalog), but must be at least 120, including 45 advanced hours.

Majors must complete the department's written communications skills requirement.

+All except business minors should take SOCI 3381; business minors will also need to elect MATH 1325, a prerequisite for BUAD 3355.

#Pre-law students should take PHIL 3346.

*These courses may be non-advanced if additional advanced courses are included elsewhere in the program.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

INTERNATIONAL STUDIES

Nirmal Goswami, *Director*

Rhode Hall 339. MSC 165. Extension 3506.

International Studies will enable students to add an international component to their major field of study and expose them to a variety of disciplines and to international applications of their field of study.

An interdisciplinary minor in International Studies requires 18 hours not counted for the student's major, with at least 12 hours at the advanced level, distributed as follows:

- 3 hrs from courses below, which contain substantive global components, or additional courses as approved by Director.:
 - ENGL 2331
 - HIST 2321, HIST 2322
 - POLS 2304, POLS 2340
 - SPAN 1373

- 3 hrs from GEOG/ENGL/FREN/SPAN:
 - GEOG 1302, GEOG 2472, GEOG 3305
 - ENGL 4380
 - FREN 4310
 - SPAN 3321, SPAN 3361, SPAN 4319, SPAN 4320

- 3 hrs from ANTH/SOCI/PHIL/ARTS:
 - ANTH 4303, ANTH 4308
 - ARTS 1303, ARTS 1304
 - PHIL 3323
 - SOCI 2361

- 6 hrs Elective
An elective approved by the Director of International Studies in the College of Arts and Sciences

- 3 hrs Study abroad, other approved foreign experience or a research project with an international focus or theme

DEPARTMENT OF LANGUAGE AND LITERATURE

Michelle Johnson-Vela, *Chair*

Fore Hall 110. MSC 162. Extension 2516.

Regents Professors

Thomas

Professors

Downs, Roberson, Thomas, Vela Córdova

Associate Professors

Johnson-Vela, Marin, Tucker

Assistant Professors

Corbett, Meyer, Mukhopadhyay, Paul, Price, Wright

Lecturers

Chapa, Felán, A. García, R. García, Hardin, Hernández, Hinojosa, Íñiguez-Alba, Orozco, Shaner, Singer, Smith, Vinson

Faculty Emeriti

Gunn, Sabrio, Smith

The department provides instruction in the fields of English, French and Spanish. It also houses minors in English, French, Spanish and Writing. The Writing Minor is discussed later in this section.

College Readiness

Developmental Education. Provide pre-college instruction in reading and writing. The developmental education program is designed to prepare students for successful entry into regular academic courses in a comprehensive program providing computer-assisted instruction, Supplemental Instruction, tutoring and mentoring. A required Attendance Policy is associated with developmental education courses and will be distributed at the beginning of each developmental education course.

Writing: A Writing minor consists of 18 semester hours of writing courses, 12 of which must be advanced. These must include 3 hours from ENGL 4310 or ENGL 4311; 9-12 hours from ENGL 2314, ENGL 2374, ENGL 3300 and ENGL 3340; and 3-6 hours from ENGL 4376, ENGL 4370 (with writing topic) and ENGL 4390. New courses created from the listed Topics courses shall also be options. English majors may not count any course toward both major and minor requirements. *Note:* With approval of the Language and Literature Chair, 3 semester hours may be from 3000 or 4000 level writing courses offered in departments outside Language and Literature. *Consult with Language and Literature Chair for course selection.*

Special Notations for French and Spanish:

1. Students who have successfully completed a 2000- or 3000-level course in the same language with a grade of C or better may not take a less advanced course in the same language for credit.
2. Students who completed their secondary education in an institution where a foreign language was the principal language of instruction cannot enroll in elementary or intermediate courses in that language.
3. A maximum of 12 semester hours of college credit in first or second level for previously completed work in foreign languages may be allowed. Credit may be obtained in one of three ways: (1) by achieving an acceptable score in the CEEB Advanced Placement Examination (this examination must be taken prior to first registration at Texas A&M University-Kingsville; see "Credit by Advanced Placement Examination [CEEB]" for details); (2) by local examination (see "Credit by Local Examination" for details); or (3) by obtaining an acceptable score in the MLS Cooperative Foreign Language Test.
4. During the first week of classes of each long semester, all students will be assessed by local examination and by the course instructor, in order to determine the track to be followed by each student. Students whose passive or spoken knowledge of Spanish meets specific requirements by local examination, and/or by the evaluation of an instructor, are required to enroll in sequence SPAN 1373, SPAN 2301, SPAN 2302, and one junior- or senior-level Spanish course. Students who do not meet the specific requirements of the local examination or instructor

evaluation are required to enroll in the sequence SPAN 1313, SPAN 1314, SPAN 2311, and SPAN 2312. Any exceptions must be approved by the Spanish Undergraduate Program Coordinator.

ENGLISH (ENGL)

1171. Information Literacy. 1(1-0)

Concepts and practices associated with information literacy and research skills; the search for, use of and documentation of information, especially electronic.

1301. Rhetoric and Composition. (ENGL 1301) 3(3-0)

Intensive study of and practice in writing processes, from invention to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices; sensitivity to writing's purpose, arrangement, style, and audience. Focus on academic writing as a vehicle for learning, communication, and critical analysis. Required of all freshmen.

1302. Rhetoric and Composition. (ENGL 1302) 3(3-0)

Continuation of ENGL 1301. Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusions through academic writing. Prerequisite: ENGL 1301.

2307. Introduction to Creative Writing. 3(3-0)

Practical experience in the techniques of imaginative writing. Student writers may expect to practice their writing in the genres of fiction, (creative) nonfiction, poetry, screenwriting, and/or drama. Prerequisite: ENGL 1301.

2314. Technical Writing. 3(3-0)

Scientific writing style and technical methods of exposition: definition, description, process, analysis and interpretation. Prerequisites: ENGL 1301 and ENGL 1302.

2331. Global Issues in Literature. (ENGL 2331) 3(3-0)

Study of literature by world authors to reveal commonalities and diversity among cultures and global perspectives on ethics. Assignments focus on multiple cultures and allow further practice in writing and information literacy. Prerequisite: ENGL 1302.

2342. Readings in Poetry and Novel. (ENGL 2322) 3(3-0)

Study of multiple literary genres by American, British and world authors, emphasizing the characteristics of each genre and further refining writing skills. Prerequisites: ENGL 1301 and ENGL 1302.

2362. Readings in Short Story and Drama. (ENGL 2323) 3(3-0)

Study of short stories and plays by American, British and world authors emphasizing the characteristics of each genre and further refining writing skills. Prerequisites: ENGL 1301 and ENGL 1302.

2374. Professional Communication. 3(3-0)

Communication skills for the professional. Writing of reports, letters, proposals, etc. Oral presentations in the form of group problem-solving, design reviews, requests for funding and/or public testimony/hearing. Use of presentation media to support oral communication. Prerequisite: ENGL 1302. (Credit may not be obtained in both ENGL 2374 and COMS 2374.)

2376. Introduction to Film Criticism. 3(3-0)

World films as a literary genre. Ideas and terms that spring from the film genre, and those of literary criticism. Film as cultural artifact, commodity and visual rhetoric. Practice in writing essays in film criticism. Prerequisites: ENGL 1301 and ENGL 1302.

3300. Special Topics in Writing. 3(3-0)

Practice and refinement of the writing process with emphasis on audience, purpose and form, paying attention to rhetorical invention, arrangement and style appropriate to the particular topic. May be repeated when a different

topic is scheduled. Prerequisite: 3 semester hours of sophomore English or permission of instructor.

3301. Advanced Composition. 3(3-0)

Advanced practice with college-level writing skills such as summary; analysis and synthesis; critique; information literacy; and research, with emphasis on analyzing rhetorical features of discourse and on a process approach to developing strategies for invention, organization, drafting, revision, and editing. Prerequisites: ENGL 1301 and ENGL 1302.

3304. Histories of Rhetoric. 3(3-0)

Survey of major works in Rhetoric and their theoretical elements; may include political, geographical, or cultural elements that shape language use. Prerequisite: ENGL 2342.

3314. Professional Writing Style and Stylistics. 3(3-0)

Principles of professional writing style with extensive practice in writing, analyzing, and editing technical prose. Examination of the syntactical and semantic choices necessary to produce technical prose suitable for any purpose, audience, and type of document in professional/industrial settings. Prerequisite: ENGL 1302.

3331. Survey of Global Literatures. 3(3-0)

Study of world literature in multiple genres, exploring global perspectives on major issues in the Humanities. Prerequisite: ENGL 2342.

3332. Survey of British Literature. 3(3-0)

Study of British literature, emphasizing on characteristics of different genres and historical periods and further refining writing skills. Prerequisite: ENGL 2342.

3333. Survey of American Literature. 3(3-0)

Study of American literature, emphasizing the characteristics of different genres and historical periods and further refining writing skills. Prerequisite: ENGL 2342.

3334. Literacy Theory. 3(3-0)

Study of literacy critical theory and its application to literature and culture, with an emphasis on twentieth and twenty-first century theories. Prerequisite: ENGL 2342.

3340. Creative Writing and Publication. 3(3-0)

Workshop environment for composing and reading creative works in progress. Basic instruction in graphics software and definition of terminology associated with fiction and poetry composition, page layout and printing. Active participation in the creation of TAMU-K's literary magazine. Prerequisite: 3 semester hours of sophomore English or permission of instructor.

3373. Children's Literature. 3(3-0)

Books for children from nursery school through middle school. Students participate in writing poetry, choral reading, book reviewing, storytelling and responding to books in a variety of ways. Prerequisite: 3 semester hours of sophomore English or permission of instructor.

3376. Mythology. 3(3-0)

Greek and Roman mythology; epics of Western Europe, as background for the study of literature in the English language. Prerequisite: 3 semester hours of sophomore English or permission of instructor.

3399. Intermediate Topics in Literature or Language. 3(3-0)

Readings in special topics such as science fiction, detective novels, Chicano literature, African-American literature, women's studies or the dialects of American English. May be repeated once when topics change. (Credit may not be obtained in both ENGL 3399, when taught from a women and gender studies perspective, and WGST 3399.) Prerequisite: 3 semester hours of sophomore English or permission of instructor.

- 4114. Senior Portfolio Project.** 1(0-2)
Guided creation and presentation of the final senior portfolio. Students should register for ENGL 4114 before the final semester of the Bachelor of Arts. Prerequisite: senior standing in English. Credit/Non-credit.
- 4303. Advanced Creative Writing.** 3(3-0)
Advanced practice with the elements of creative writing, such as plot, character development, and setting. Focuses on a process approach to developing strategies for invention, organization, drafting, revision, and editing. Prerequisites: ENGL 2307, ENGL 2342, and junior standing, or permission of instructor.
- 4310. Introduction to Linguistics.** 3(3-0)
An introduction to the scientific study of language. Prerequisite: 6 semester hours of sophomore English.
- 4311. English Grammar and Usage.** 3(3-0)
The structure of the present-day English language, with attention to its varieties and history. Prerequisite: 6 semester hours of sophomore English.
- 4314. Internship in Professional Writing.** V(1-3)
On- or off-campus internship. Professional experience in writing, editing, and/or designing documents in government, institutional, business, or industry settings. Prerequisites: 6 hours in English at the 3xxx level and permission of instructor.
- 4322. British Literature of the Middle Ages.** 3(3-0)
Selected readings in translation from Old English to Middle English poetry and prose, with emphasis on *Beowulf*, the Arthurian legends and the *Canterbury Tales*. Prerequisite: 6 semester hours of sophomore English.
- 4325. Literature of the British Renaissance.** 3(3-0)
Selected readings in poetry, prose and non-Shakespearean drama of the 16th and 17th centuries. Prerequisite: 6 semester hours of sophomore English.
- 4327. Restoration and Eighteenth-Century British Literature.** 3(3-0)
The period from 1660 to 1800 with representative works of the major writers in verse, prose and drama. Prerequisite: 6 semester hours of sophomore English.
- 4331. The Major Plays of Shakespeare.** 3(3-0)
A close analysis of representative comedies and histories and the major tragedies. Prerequisite: 6 semester hours of sophomore English.
- 4340. Special Topics in British Literature.** 3(3-0)
Selected topics in British literature. A topic for intensive investigation will be selected for each offering of the course. May be repeated once when topic changes. Prerequisite: 6 semester hours of sophomore English. (Credit may not be obtained in both ENGL 4340, when topic is taught from a women's studies perspective, and WGST 4340.)
- 4341. Studies in the British Novel.** 3(3-0)
Study of significant British novels, with emphasis upon such authors as Fielding, Richardson, Eliot, Hardy, Burgess and Joyce. Prerequisite: 6 semester hours of sophomore English.
- 4343. Nineteenth-Century British Literature. [WI]** 3(3-0)
Major writers of the Romantic and Victorian periods. Cultural background and representative works, including poetry and nonfiction prose. Prerequisite: 6 semester hours of sophomore English.
- 4346. Twentieth Century British Literature.** 3(3-0)
Chief modern British writers of poetry, prose and drama. Prerequisite: 6 semester hours of sophomore English.

- 4360. Special Topics in American Literature.** 3(3-0)
Selected topics in literature from the United States. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topics, but no more than 6 semester credit hours may count toward major or minor requirements. Prerequisite: 6 semester hours of sophomore English. (Credit may not be obtained in both ENGL 4360, when topic is taught from a women's studies perspective, and WGST 4361.)
- 4361. Studies in the American Novel.** 3(3-0)
Study of significant American novels. Emphasis may be on historical development, certain periods, special topics treated by American novelists or varieties of American fiction. Prerequisite: 6 semester hours of sophomore English.
- 4365. Colonial and Nineteenth-Century American Literature. [WI]** 3(3-0)
Survey of the chief nineteenth-century poets and prose writers, with some attention to their colonial predecessors. Prerequisite: 6 semester hours of sophomore English.
- 4366. Twentieth-Century American Literature.** 3(3-0)
Survey of the chief twentieth-century American poets and prose writers. Prerequisite: 6 semester hours of sophomore English.
- 4372. Studies in the American Short Story.** 3(3-0)
Study of short fiction by American authors. Emphasis may be on historical development, certain periods, special topics treated by American writers, formal invention and style or schools of fiction writing. Prerequisite: 6 semester hours of sophomore English.
- 4374. Literature of the American Southwest.** 3(3-0)
Survey of Southwestern American Literature from the period of exploration to contemporary authors with emphasis on what makes their works characteristically "Southwestern." Prerequisite: 6 semester hours of sophomore English.
- 4376. Social Class and Language.** 3(3-0)
How social class, race and/or gender affect English language usage are placed under intense investigation. Home languages of students are compared with linguistic requirements of formal education systems. Prerequisite: 6 semester hours of sophomore English.
- 4380. Special Topics in World Literature.** 3(3-0)
Selected topics in world literature written in English or in English translation. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topics, but no more than 6 semester credit hours may count toward major or minor requirements. Prerequisite: 6 semester hours of sophomore English. (Credit may not be obtained in both ENGL 4380, when topic is taught from a women's studies perspective, and WGST 4380.)
- 4384. Studies in Drama.** 3(3-0)
Selected topics in American, British or Continental drama. Emphasis may be on historical development, certain periods or some other approach to the study of drama. May be repeated once when a different topic is scheduled. Prerequisite: 6 semester hours of sophomore English.
- FRENCH (FREN)**
- 1311. Elementary French I.** 3(3-0)
For students without previous knowledge of the language. An introductory course teaching the fundamentals of French in order to develop listening, speaking, reading and writing abilities. Language laboratory required.
- 1312. Elementary French II.** 3(3-0)
Continuation of FREN 1311. Language laboratory required. Prerequisite: FREN 1311 or departmental approval.
- 2311. Intermediate French. (FREN 2311)** 3(3-0)
Continuation of FREN 1312. Emphasis on speaking and listening abilities. Language laboratory required. Prerequisite: FREN 1312 or two or more years of high school French with departmental approval.

2312. Intermediate French. (FREN 2312) 3(3-0)
Continuation of FREN 2311. Emphasis on reading and writing abilities. Language laboratory available. Prerequisite: FREN 1312 or two or more years of high school French with departmental approval.

2315. French and Francophone Culture. 3(3-0)
Aspects of culture in France and other French-speaking countries and how they express and affect human experiences. Prerequisites: FREN 1311 and FREN 1312.

3301. Advanced Grammar and Composition. 3(3-0)
The basic principles and formal study of grammar. Prerequisite: 12 semester hours of French.

3321. French Literature to 1800. 3(3-0)
History of French literature in the Middle Ages, Renaissance and classical period through the 18th century. Conducted in French. Prerequisite: 12 semester hours of French.

3322. French Literature from 1800. 3(3-0)
History of French literature from 1800 through contemporary literature. Conducted in French. Prerequisite: 12 semester hours of French.

4301. Advanced Written and Oral Composition. 3(3-0)
Written and oral presentations: expository, persuasive, narrative and descriptive. Prerequisite: 3 semester hours of advanced French.

4310. Selected Topics in French Civilization and Literature. 3(3-0)
Topics include aspects of French civilization such as art, music and cinema and themes presented through all literary genres such as changing roles in society, education, religion and justice. Conducted in French. May be repeated for credit as topic changes. Prerequisite: 6 semester hours of advanced French.

INTEGRATED READING AND WRITING (INRW)

0300. Integrated Reading and Writing. 3(3-0)
Integration of critical reading and academic writing skills. Course fulfills TSI requirements for reading and/or writing. Required of students deemed not college-ready in reading and writing skills. Credit/Non-credit.

READING (READ)

0300. Developmental Reading. 3(3-2)
Improvement of reading skills through individualized development of flexible speed, comprehension, vocabulary and study skills. Required of all students deficient in reading skills. Students must be concurrently enrolled in a reading laboratory.

SPANISH (SPAN)

1313. Elementary Spanish I. 3(3-1)
Open only to students with little or no previous contact with the Spanish language. An introductory course teaching the fundamentals of Spanish in order to develop listening, speaking, reading and writing abilities. Language laboratory required.

1314. Elementary Spanish II. 3(3-1)
Continuation of SPAN 1313. Language laboratory required. Prerequisite: SPAN 1313 or departmental approval.

1373. Spanish for Heritage Speakers. 3(3-1)
Introductory course designed for students whose greatest exposure to Spanish has been in the home or community rather than the classroom. Building on the linguistic knowledge that heritage speakers already bring to the classroom, the course stresses reading and writing skills. Language laboratory required. Prerequisite: departmental approval.

- 2301. Intermediate Spanish I.** 3(3-0)
A review of Spanish grammar and expansion of basic language skills. Selected readings by Hispanic writers. Conducted in Spanish. Language laboratory available. Prerequisite: SPAN 1314 or two or more years of high school Spanish with departmental approval.
- 2302. Intermediate Spanish II.** 3(3-0)
Continuation of SPAN 2301. Language laboratory available. Prerequisite: SPAN 2301 or SPAN 2311.
- 2311. Intermediate Spanish I. (SPAN 2311)** 3(3-1)
A review of Spanish grammar and expansion of basic language skills. Language laboratory required. Prerequisite: SPAN 1314 or three or more years of high school Spanish with departmental approval.
- 2312. Intermediate Spanish II. (SPAN 2312)** 3(3-0)
Continuation of SPAN 2311. Language laboratory required. Prerequisite: SPAN 2311.
- 3300. Mexican American Literature.** 3(3-0)
Selected Mexican American literature and its accompanying thought covering various periods and the following genres: poetry, the short story, the novel, the theater and the essay. Conducted in Spanish and English.
- 3301. Advanced Spanish Grammar.** 3(3-0)
A review of the basic principles of Spanish grammar to be followed by a detailed study of the finer points of grammar and syntax. Prerequisite: SPAN 2302 or SPAN 2312.
- 3302. Spanish Composition.** 3(3-0)
Literary and technical writing and composition; instruction and practice in basic writing; analysis of different literary prose pieces as models for writing. Conducted in Spanish. Prerequisite: SPAN 2302 or SPAN 2312.
- 3311. Professional Spanish.** 3(3-0)
Enables students to interact and work effectively with the international and domestic Spanish-speaking medical, legal and business worlds. Emphasizes interaction between both English-speaking and Spanish-speaking professional communities and within the Spanish-speaking professional community. Prerequisite: SPAN 2302 or SPAN 2312.
- 3321. Survey of Spanish Peninsular Literature. [WI]** 3(3-0)
The history of Spanish literature from its beginning to the present. Conducted in Spanish. Prerequisite: SPAN 2302 or SPAN 2312.
- 3361. Survey of Spanish-American Literature.** 3(3-0)
The history of Spanish-American literature from its beginning to the present. Conducted in Spanish. Prerequisite: SPAN 2302 or SPAN 2312.
- 4311. Spanish Linguistics.** 3(3-0)
A detailed linguistic study of Spanish and a contrastive comparison with English. Prerequisite: SPAN 2302 or SPAN 2312.
- 4319. Hispanic Culture.** 3(3-0)
Survey of Hispanic culture. Main aspects of culture as found in Spain, Spanish America and the Hispanic communities in the U.S.A. Conducted in Spanish. Prerequisite: SPAN 2302 or SPAN 2312.
- 4320. Topics in Spanish Literature.** 3(3-0)
Topics in Spanish American and Spanish Peninsular literature. Conducted in Spanish. May be repeated as topics change. Prerequisite: SPAN 2302 or SPAN 2312.

Writing (WRIT)

0300. Developmental Writing.

3(3-1)

Intensive review of basic grammar and usage, study of various sentence and paragraph patterns leading to theme composition, development of vocabulary and reading skills. Recommended for all students deficient in basic English skills. Students must be concurrently enrolled in a writing laboratory.

**Degree Requirements
Bachelor of Arts
English**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	ENGL 3301 or	3	ENGL 4310/	3
FREN 1311 or	3	FREN 1312 or	3	ENGL 3334	3	ENGL 4311	3
SPAN 1313/SPAN 1373*	3	SPAN 1314/ SPAN 2301*	3	Elective	3	PHIL 1301	3
HIST 1301	3	HIST 1302	3	Minor	6	ENGL, adv.‡	6
UNIV 1101	1	UNIV 1102	1	Rhetoric or	3	Minor, adv.	3
^Mathematics	3	^Creative arts	3	Literature Survey†	15		15
	<u>13</u>	^Social/Behavioral	<u>3</u>				
			<u>16</u>				
Sophomore Year				Senior Year			
ENGL 2342	3	ENGL 2314 or	3	ENGL 4114	1	ENGL, adv. ‡	3
FREN 2311 or	3	ENGL 2307	3	ENGL 4331	3	ENGL, adv. ‡	3
SPAN 2311/SPAN 2302*	3	FREN 2312 or	3	ENGL, adv. ‡	3	Elective, adv.	3
POLS 2301	3	SPAN 2312/SPAN, adv.*	3	Elective, adv.	3	Elective, adv.	3
^Component option A	3	POLS 2302	3	ENGL, adv.	3	Minor, adv.	3
^Life/Physical sciences	3	^Life/Physical sciences	3	Minor, adv.	3		3
	<u>15</u>	Rhetorical or	<u>3</u>		<u>16</u>		
		Literature Survey†	<u>15</u>				

Total Hours Required 120

*Students studying Spanish are placed in one or two tracks by examination, heritage and non-heritage. The course sequence for non-heritage-track students is SPAN 1313, SPAN 1314, SPAN 2311, and SPAN 2312. The course sequence for heritage-track students is SPAN 1373, SPAN 2301, SPAN 2302, plus one advanced Spanish (junior- or senior-level) of the student's choice.

†Students may choose one of ENGL 3304, 3331, 3332, or 3333.

‡ENGL, advanced: At least 9 hours must be at the 4xxx level.

All courses must be approved by the department.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Arts
English with Teaching Certification**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	EDED 3302	3	EDED 3332	3
FREN 1311 or SPAN 1313/SPAN 1373*	3	FREN 1312 or SPAN 1314/SPAN 2301	3	EDED 3310	3	EDED 3362	3
HIST 1301	3	HIST 1302	3	EDED 3333	3	EDRG 3344	3
UNIV 1101	1	UNIV 1102	1	EDRG 3314	3	EDRG 4307	3
[^] Mathematics	<u>3</u>	[^] Communications	3	ENGL 3301 or	3	ENGL 4311	3
	13	[^] Creative arts	<u>3</u>	ENGL 3334		ENGL, adv.§	<u>3</u>
			16	Rhetoric or Literature Survey‡	<u>3</u>		18
					18		
Sophomore Year				Senior Year			
ENGL 2342	3	ENGL 2314 or	3	EDRG 3321	3	EDED 4623	6
FREN 2311 or SPAN 2301/SPAN 2302	3	ENGL 2307†		EDRG 4314	3	EDSE 4349	3
POLS 2301	3	FREN 2312 or SPAN 2302/SPAN, adv.	3	EDRG 4330	3	ENGL, adv.§	<u>3</u>
[^] Life/Physical sciences	3	POLS 2302	3	ENGL 4331	3		12
[^] Social/Behavioral**	<u>3</u>	[^] Life/Physical sciences	3	ENGL, adv.§	<u>3</u>		
	15	Rhetoric or Literature Survey‡	<u>3</u>		15	Total Hours Required	122
			15				

*Students studying Spanish are placed in one or two tracks by examination, heritage and non-heritage. The course sequence for non-heritage-track students is SPAN 1313, SPAN 1314, SPAN 2311, and SPAN 2312. The course sequence for heritage-track students is SPAN 1373, SPAN 2301, SPAN 2302, plus one advanced Spanish (junior- or senior-level) of the student's choice.

**SOCI 2361 is suggested to fulfill the Social/Behavioral requirement.

†Students who choose ENGL 2307 must take an additional course from the list of [^]Component Area Options, which appear on an earlier page of this catalog.

‡Students may choose one of ENGL 3304, 3331, 3332, or 3333.

§ENGL, adv.: All courses must be at the 4xxx level.

Note: Apply for admission to the Teacher Education Program after completing 60 academic hours.

**Degree Requirements
Bachelor of Arts
Spanish**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	SPAN 3301	3	SPAN 3302 or	3
HIST 1301	3	HIST 1302	3	SPAN 3321	3	SPAN 3311	
SPAN 1313 or SPAN 1373	3	SPAN 1314	3	Elective, adv.	6	SPAN 3361	3
UNIV 1101	1	UNIV 1102	1	Minor	<u>3</u>	Elective, adv.	3
[^] Mathematics	<u>3</u>	[^] Communications	3		15	Minor	3
	13	[^] Creative arts	<u>3</u>			PHIL**	<u>3</u>
			16				15
Sophomore Year				Senior Year			
ENGL 2342 or ENGL 2362	3	ENGL 2314 or ENGL 2331	3	SPAN 4320	3	Elective, adv.	6
POLS 2301	3	ENGL 2342 or	3	Elective, adv.	3	Minor, adv.	6
SPAN 2301 or SPAN 2311	3	ENGL 2362	3	Minor	6	SPAN, adv.	<u>3</u>
[^] Life/Physical sciences	3	POLS 2302	3	SPAN, adv.	<u>3</u>		15
[^] Social/Behavioral*	<u>3</u>	SPAN 2302 or	3		15		
	15	SPAN 2312				Total Hours Required	120
		[^] Life/Physical sciences	3				
		Elective	<u>1</u>				
			16				

*To be chosen from PSYC 2301, SOCI 1301, SOCI 1306, or SOCI 2361.

**Any course in Philosophy.

All courses must be approved by the department.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Arts
Spanish with Teaching Certification**

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	EDED 3310	3	EDED 3302	3
HIST 1301	3	ENGL 2314 or	3	SPAN 3301	3	EDED 3333	3
SPAN 1313 or	3	ENGL 2331		SPAN 3321	3	SPAN 3302 or	3
SPAN 1373		HIST 1302	3	Minor	6	SPAN 3311	
UNIV 1101	1	SPAN 1314	3	Minor, adv.	<u>3</u>	SPAN 3361	3
[^] <i>Creative arts</i>	3	UNIV 1102	1		18	Minor, adv.	<u>3</u>
[^] <i>Mathematics</i>	<u>3</u>	[^] <i>Communications</i>	<u>3</u>				15
	16		16				
Sophomore Year			Senior Year				
ENGL 2342 or	3	ENGL 2342 or	3	EDED 3332	3	EDED 4623	6
ENGL 2362		ENGL 2362		EDED 3362	3	EDSE 4349	<u>3</u>
POLS 2301 or	3	POLS 2301 or	3	EDRG 4314	3		9
POLS 2302		POLS 2302		SPAN 4320	3		
SPAN 2301 or	3	SPAN 2302 or	3	SPAN, adv.	<u>3</u>		
SPAN 2311		SPAN 2312			15		
[^] <i>Life/Physical sciences</i>	3	[^] <i>Life/Physical sciences</i>	3				
[^] <i>Social/Behavioral</i>	<u>3</u>	Minor	<u>6</u>				
	15		18				
						Total Hours Required	122

Total hours may vary depending on second teaching field.

EDED courses should follow sequence suggested here.

All courses must be approved by the department. Second teaching field courses must be approved by pertinent department.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF MATHEMATICS

Ravi Agarwal, *Chair*

Rhode Hall 217. MSC 172. Extension 3517.

Professors

Agarwal, Ahangar, Bodjanova, Sedory, Singh, Wang, Wu

Associate Professors

Ahmed, Carroll, Muzheve

Assistant Professors

Hodis

Lecturers

Allred, Conje, Fowler, Ramirez, Salinas, Torres, Wang

Faculty Emeritus

Cecil

The department offers several programs designed to give the student an insight into the structure and applications of mathematics and statistics necessary for industrial or governmental employment, teaching or pursuit of an advanced degree in mathematics and statistics.

The faculty members are committed to educating students in the scientific and engineering environment. Through mathematics courses, students will develop their logical reasoning, critical thinking, technical communication and computational skills.

The department serves students from other disciplines, students in the science, education, engineering and mathematics, as well as the community, by offering a wide range of interdisciplinary courses.

Students are allowed to register for freshman mathematic and statistic courses appropriate to their high school mathematics preparations and/or entrance examination scores as determined by the department.

Undergraduate Certificate in SAS Programming and Data Analysis

Admission Requirements

The certification is open to all degree-seeking undergraduate students as well as those registered as non-degree-seeking (transient) students. A student must be in good academic standing in pursuit of his or her current degree and may not be on academic probation of any kind. A student must have earned a grade of *B* or higher in a 1000-level introductory statistics course or its equivalent (must receive approval of the certificate director). The course offered at TAMU-K that meets this requirement includes STAT 1342. Students who have not taken a 1000-level statistics course or equivalent may enroll in one of two courses, STAT 4301 or STAT 4303, as a prerequisite to the certificate program. Students who have earned a grade of *B* or higher in STAT 4301 or STAT 4303 will also have that course counted toward one of the three elective courses for SAS certification, provided the instructor of these two courses also covers the corresponding SAS material appropriate for these courses.

Application Procedure

Students apply to the certification program via an online form accessible on the department's website. The form is automatically sent to the program director no later than four weeks after the start of the last class in the certificate sequence. A student's standing relative to the certificate requirements will be evaluated and, if the student is qualified, he or she will be sent specific instructions on required evaluation materials to complete certification. In case the student is not qualified or is deemed to be making insufficient progress toward the certificate, he or she will be notified accordingly.

Program of Studies

The undergraduate certificate requires 12 credit hours consisting of one 4000-level core course and three elective courses selected from the list below with a minimum of a *B* grade in each course. All elective courses are at the 4000 level and have a SAS component. Courses in the certificate program are shown below. Most of these courses will initially be taught as STAT 4390: Special Topics.

Core Course (Required):
STAT 4390 Topic Statistical Computing

Elective Courses (Select Three):
STAT 4301 Biostatistics
STAT 4303 Statistical Methods
STAT 4390 Topic Analysis of Research Data

Additional courses will be added as needed.

A minor in Mathematics requires 18 semester hours. MATH 2413, 2414, and 3320 are required (11 hours). Students must take at least seven additional hours, six of which must be advanced Math elective courses at TAMUK. Students must earn a “C” or better in each course to earn the minor.

Math elective course restrictions:

- Only 1 of the MATH 4341, MATH 4373, and MATH 3340 may be used for credit in the minor
- MATH 3352 may not be used for credit

Minor in Mathematical Biology:

The department offers an interdisciplinary minor in Mathematical Biology. This requires 18 credit hours of coursework as specified below:

MATH 2305 Mathematical Methods in Biomedicine
MATH 3372 Mathematical Biology
MATH 3373 Mathematical Physiology
BIOL 1306 General Biology I
BIOL 1307 General Biology II

And any 1 course (3 credit hours) selected from the following list:

MATH 1325 Mathematics for Business and Economics II
MATH 2413 Calculus I
MATH 2414 Calculus II
MATH 3320 Differential Equations
MATH 3340 Linear Algebra with Applications
MATH 3415 Calculus III
MATH 4341 Linear Algebra and Matrix Theory

STAT 1342 Elementary Statistics
STAT 4301 Biostatistics
STAT 4303 Statistical Methods

MATHEMATICS (MATH)

0302. Developmental Algebra.

3(3-0)

The algebra skills necessary for success in college-level mathematics. Topics include real number operations, linear and quadratic equations, graphing linear and nonlinear equations and simplifying polynomial, rational and radical expressions. Course delivery mainly through mathematics learning software. Course does not count toward any degree. Placement is based on analysis of student ACT/SAT, TSI and/or placement test scores. Credit/Non-credit

1314. College Algebra. (MATH 1314)

3(3-0)

College-level topics in algebra including functions, graphs, variation, piecewise defined functions, equations of lines, elementary curve fitting, quadratic equations and functions, systems of linear and nonlinear equations, composition of functions, inverse functions, exponential and logarithmic functions and applications related to these topics. Prerequisite: two years of high school algebra and/or appropriate scores on mathematics placement tests.

- 1316. Trigonometry.** (MATH 1316) 3(3-0)
 Fundamental notions and definitions, functions of angles, logarithms, circular measure, solution of triangles. Required of all engineering students. Prerequisite: two years of high school algebra or MATH 1314 (MATH 1314 and MATH 1316 may be taken concurrently.)
- 1324. Mathematics for Business and Economics I.** (MATH 1324) 3(3-0)
 A course designed for students in business administration. Selected topics from finite mathematics including: linear inequalities, vectors, matrices, linear programming and probability. Prerequisite: two years of high school algebra and/or appropriate scores on mathematics placement tests.
- 1325. Mathematics for Business and Economics II.** (MATH 1325) 3(3-0)
 Applications of the theory of extrema. Area under a curve and its applications. Introduction to statistical measures. Prerequisite: MATH 1314 or MATH 1324.
- 1334. Contemporary Mathematics.** 3(3-0)
 Introduction to several contemporary applications of mathematics for the nonmajor. Emphasis is on the variety of problems which can be modeled and solved by analytic and quantitative means. Topics will vary, but may include such as: applications of graph theory to management problems; encoding and encrypting information; problems of social choice-fair division, voting systems, conflict; topics in geometry; and data analysis. Prerequisites: appropriate scores on mathematics placement tests.
- 1335. Contemporary Mathematics FOCUS.** 3(3-1)
 Introduction to several contemporary applications of mathematics for the nonmajor. Emphasis is on the variety of problems which can be modeled and solved by analytic and quantitative means. Topics will vary, but may include such as: applications of graph theory to management problems; encoding and encrypting information; problems of social choice-fair division, voting systems, conflict; topics in geometry; and data analysis. Requires a one hour noncredit laboratory, which focuses on more extensive applications, as well as mathematics study skills and success strategies. Prerequisite: appropriate scores on mathematics placement tests. Departmental permit required.
- 1348. Analytic Geometry.** 3(3-0)
 Equations and their graphs. Cartesian and polar coordinates, the straight line, circles and conic sections. Operations with vectors, the dot and cross product. Prerequisites: MATH 1314 and MATH 1316.
- 1350. Fundamentals of Mathematics I.** (MATH 1350) 3(3-0)
 Problems from number theory, number systems, systems of operations and proportional reasoning. Requires approaching problems from multiple perspectives, drawing connections among those perspectives and strengthening flexibility and fluency in mathematical thinking and communicating. Not applicable for credit in the physical sciences or engineering. Prerequisite: MATH 1314 or higher.
- 1351. Fundamentals of Mathematics II.** (MATH 1351) 3(3-0)
 Problems from probability, statistics, measurement, geometry and spatial thinking. Requires approaching problems from multiple perspectives, drawing connections among those perspectives and strengthening flexibility and fluency in mathematical thinking and communicating. Not applicable for credit in the physical sciences or engineering. Prerequisite: MATH 1350.
- 2305. Mathematical Methods in Biomedicine.** 3(3-0)
 Formulation of biomedical systems as mathematical systems. Mathematical tools used in the analysis of such models: functions, derivatives, matrices, difference equations, discrete dynamical systems, probability and statistics. Prerequisite: MATH 1325 or MATH 2413.
- 2413. Calculus I.** (MATH 2413) 4(3-0-2)
 Limits and continuity. Definition of the derivative of a function and techniques of differentiation. Derivative of various functions to include rational, exponential, logarithmic, trigonometric and their inverses. Maximizing or minimizing a function, curve sketching and rate of change problems; L' Hospital's rule. Introduction to integration, the Fundamental Theorem of Calculus, applications of areas; introduction to numerical integration. Prerequisite: MATH 1348.

- 2414. Calculus II.** (MATH 2414) 4(3-0-2)
Continuation of MATH 2413. Integration of logarithmic, exponential and trigonometric functions. Techniques of integration. Applications of the integral to problems such as volumes, work, arc length and fluid pressure. Infinite sequences and series, power series expansion of function. Calculus with parametric curves and polar coordinates. Prerequisite: MATH 2413.
- 3320. Differential Equations.** 3(3-0)
The ordinary differential equations of physics, chemistry and engineering; methods for their solution and the properties of their solution. Introduction to partial differential equations. Prerequisite: MATH 2414.
- 3325. An Introduction to Mathematical Proofs. [WI]** 3(3-0)
Principles and techniques of discovering and writing correct mathematical proofs. Independently prove theorems from various areas in mathematics, which may include topics from logic, the structure of the real number system, number theory, geometry and algebra. Prerequisite: MATH 2413.
- 3340. Linear Algebra with Applications.** 3(3-0)
Systems of linear equations, matrices and determinants, vector spaces, subspaces, bases and dimension, linear transformations and their representations by matrices, orthogonality, eigenvectors, and diagonalization. Problem solving using difference equations. Prerequisite: MATH 2413.
- 3352. Applied Fundamentals of Mathematics.** 3(3-0)
Applied projects in selected areas of mathematics, such as number systems, systems of operations, proportional reasoning, probability, statistics, measurement and geometry. Emphasis on understanding pedagogical content for pre-service teachers in mathematics. Planning, implementing and assessing mathematics activities during a two-week summer camp for area youth. Prerequisite: MATH 2413.
- 3360. Modern Geometry.** 3(3-0)
Historical review of set theory logic and applications in Euclidean Geometry, Hilbert's approach and revision of Euclid's postulates, rewriting of Euclid's fifth postulate, Axiomatic approach to modern Geometry, Foundation of non-Euclidean geometry. Prerequisite: MATH 3325.
- 3370. Discrete Mathematics.** 3(3-0)
This course covers many topics in mathematics which are important in computer science. Some of these topics are sets, relations, functions, algorithms, graphs, monoids, lattices, Boolean algebras and graphs. Prerequisite: 3 semester hours of advanced mathematics.
- 3371. Problem Solving with Computers.** 3(3-0)
Brief historical overview of computing and computers; strategies for solving problems by computers; programming in a higher level language. Students will be exposed to problem solving using technology, graphing calculator, and computer algebra system. Prerequisite: MATH 2413.
- 3372. Mathematical Biology.** 3(3-0)
Formulating biological problems as problems in mathematics. Modeling population growth, inter-species dependency, the spread of infectious diseases, biochemical enzyme reactions, and the oscillations of biological systems. How models are initially formulated and subsequently refined. Prerequisites: MATH 1325 or MATH 2413, and BIOL 1306 and BIOL 1307.
- 3373. Mathematical Physiology.** 3(3-0)
Mathematical models to describe the physiology of human organs and their associated systems. Includes circulatory, respiratory, renal, endocrine, and gastrointestinal systems. Models for adequacy in capturing features of the systems and in predicating pathologies. Prerequisites: MATH 1325 or MATH 2413, and BIOL 1306 and BIOL 1307.
- 3390. Selected Topics in Mathematics.** 3(3-0)
Different topics will be covered at varying times. May be repeated for credit with consent of the instructor. Prerequisite: 3 semester hours of advanced mathematics.

- 3415. Calculus III.** 4(3-0-2)
Continuation of MATH 2414. Vector operations in two and three dimensions, lines, planes; vector functions, space curves, partial derivatives, curvature; multivariable calculus, optimization, Lagrange multipliers; multiple integrals; vector fields, theorems of Green, Gauss and Stokes. Prerequisite: MATH 2414.
- 4320. Advanced Calculus.** 3(3-0)
Partial differentiation, Lagrange multipliers, Leibnitz's rule, multiple integrals, vector analysis, infinite series, uniform convergence and Fourier series.
- 4321. Real Variables.** 3(3-0)
The real number system, its structure and properties. Properties of real functions and sequences, including uniform continuity and the Cauchy criterion. Introduction to the theory of sets. Theory and application of the derivative. Introductory concepts of function spaces, norms and metrics. Prerequisite: 6 semester hours of advanced mathematics, including MATH 3325.
- 4340. Modern Algebra.** 3(3-0)
Properties of the Integers: divisibility, prime factorization and congruence. Integral domains, rings and fields. Groups, permutations and cosets. A historical development of these topics is included. Prerequisite: MATH 3325.
- 4341. Linear Algebra and Matrix Theory.** 3(3-0)
Vector spaces and their linear subspaces. Representation of linear transformations by matrices. Normal forms, eigenvalues, special transformations and applications. Prerequisite: 6 semester hours of advanced mathematics.
- 4342. Algebraic Structure.** 3(3-0)
An intensive axiomatic study of groups, rings, polynomial rings, fields and modules, along with their principal substructures. Emphasis on classification and structure theorems. Prerequisite: 6 hours of advanced mathematics.
- 4351. Mathematical Theory of Games.** 3(3-0)
Introduction of game theory. Topics include: combinatorial and strategic games, backward induction, payoffs, cooperative and non-cooperative games, mixed strategies, equilibria, repeated games and finite automata, common knowledge and incomplete information, the prisoner's dilemma. Selected applications to economics, biology, computer science and political science. Prerequisite: MATH 3340 or consent of instructor.
- 4370. Vector Analysis.** 3(3-0)
Vector algebra and geometry. Scalar and vector products. Vector functions and motion in polar coordinates. Scalar and vector fields with applications to line and surface integrals. Prerequisites: MATH 3415 and MATH 3320 or equivalent.
- 4371. Laplace Transformations and Its Applications.** 3(3-0)
An introduction to the theory of the Laplace Transformation. Applications to the solution of ordinary and partial differential equations, integral equations, difference equation and integro-differential equations. An introduction to other types of integral transformations. Prerequisites: MATH 3315 and MATH 3320.
- 4372. Mathematics for Physics and Engineering I.** 3(3-0)
Infinite series, matrix methods, vector analysis, applied multivariate calculus and Fourier series. Prerequisites: MATH 3415 and MATH 3320 or their equivalent.
- 4373. Applications of Matrix Methods.** 3(3-0)
Matrices and their inverses, determinants, eigenvalues and eigenvectors, Jordan canonical forms. Applications to simultaneous linear equations, matrix calculus and linear differential equations. Prerequisites: MATH 3415 and MATH 3320.
- 4374. Numerical Analysis.** 3(3-0)
The mathematical formation of the concepts in numerical analysis. These concepts include the theory of errors, roots of equations, interpolation, linear systems of equations, numerical differentiation and integration and solutions of ordinary differential equations. Prerequisites: MATH 3415 and MATH 3320.

4390. Selected Topics in Mathematics. 3(3-0)
Different topics will be covered at varying times. May be repeated for credit with consent of instructor. Prerequisite: 3 semester hours of advanced mathematics.

4399. Capstone Experience in Mathematics. 3(3-0)
Designed to integrate mathematical standards and skills of mathematics majors. Students will demonstrate their ability to organize and synthesize mathematical knowledge; and design, implement and present an advanced project in mathematics and mathematics education. Prerequisite: senior standing in mathematics.

STATISTICS (STAT)

1342. Elementary Statistics. (MATH 1342) 3(3-0)
Elementary description of tools of statistics inference, including empirical and theoretical distributions, probability, sampling, treatment of both continuous and discrete data, correlation and applications to practical problems. Prerequisite: MATH 1314 or MATH 1324.

2342. Statistical Analytics. 3(3-0)
Foundation course in statistical analysis, with emphasis on methods and interpretation of results, review of probability and common distributions, sampling distributions of mean, proportion, and variance; Central Limit Theorem; hypothesis testing, confidence interval, power of a test, sample-size calculation, contingency tables, chi-squared test, and introduction to ANOVA. Prerequisite: STAT 1342 or equivalent.

3331. Introduction to Nonparametric Statistics. 3(3-0)
The basic foundation for nonparametric statistical methods. Focus on methods and interpretation of the results. Measure of scales (nominal, ratio, and interval) and overview of analyzing data having these scales of measurements using nonparametric methods. Emphasis on one-and-two sample tests of locations using standard nonparametric methods. Prerequisite: STAT 1342 or equivalent.

3332. Introduction to Data Analysis: SAS Certification. 3(3-0)
Statistical computing using SAS (Statistical Analysis Software). Covers all of the objectives tested on the SAS Certification Exam (Base). Topics include importing and exporting raw data files, creating and modifying SAS data sets, identifying and correcting data syntax, programming logic errors, and some common PROCs. Prepares students to take the basic SAS certification exam conducted by the SAS institute. Prerequisite: STAT 1342 or equivalent.

3344. Introduction to Applied Regression and Design of Experiments. 3(3-0)
Basic methods of regression and fundamental principles and techniques in designing experiments. Introduction to correlation, regression, multiple regression, and ANOVA; diagnostics of regression models; and model selection (forward selection, backward elimination, and stepwise selection). Statistical principles in the design and analysis of industrial experiments. Prerequisite: STAT 1342 or equivalent.

4301. Biostatistics. 3(3-0)
For students in biology, health sciences, human sciences and wildlife science. Descriptive and inferential statistics, basic probability concepts, probability distributions, estimation, hypothesis testing, correlation, simple linear regression, principles of epidemiology, statistical vs. clinical significance and quasi-statistical methods. Prerequisite: MATH 1314.

4303. Statistical Methods. 3(3-0)
Calculus-based probability, discrete and continuous random variables, joint distributions, sampling distributions, the central limit theorem, descriptive statistics, interval estimates, hypothesis tests, ANOVA, correlation and simple regression. Prerequisite: MATH 2414.

4350. Probability. 3(3-0)
Sample spaces, combinatorics, independence, conditional probability and Bayes' rule. Discrete and continuous probability distributions, Chebychev's inequality and limit theorems. Prerequisite: MATH 3415.

4351. Mathematics Theory of Statistics.

3(3-0)

Sampling distributions, estimation properties and methods, testing hypothesis, power of tests and likelihood ratios.
Prerequisites: STAT 4350 or the equivalent and 3 semester hours of advanced mathematics.

4390. Selected Topics in Statistics.

3(3-0)

Topics in statistics not adequately covered in other courses. Course may be repeated for credit as topic changes.
Prerequisite: 3 semester hours of advanced mathematics or statistics.

**Degree Requirements
Bachelor of Arts
Mathematics**

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	ENGL 2314 or	3	MATH 3370#	3
HIST 1301	3	HIST 1302	3	ENGL 2362	3	MATH 4321#	3
STAT 1342#	3	MATH 2413#	4	MATH 3320#	3	MATH 4341 or	3
UNIV 1101	1	UNIV 1102	1	MATH 3325#	3	MATH 4373	
[^] Life/Physical sciences	4	[^] Life/Physical sciences+	4	Foreign language	3	Foreign language	3
	14		15	MATH#	3	Minor	3
Sophomore Year			Senior Year				
ENGL 2314 or	3	MATH 3415#	4	MATH/STAT, adv.#	3	Elective/Minor, adv.*	2
ENGL 2342		POLS 2302	3	MATH/STAT, adv.#	3	MATH/STAT, adv.#	3
MATH 2414#	4	[^] Communications	3	Minor	3	MATH/STAT, adv.#	3
POLS 2301	3	[^] Creative arts	3	Minor, adv.#	3	Minor, adv.*	3
[^] Social/Behavioral	3	Foreign language	3	Minor, adv.#	3	Minor, adv.*	3
Foreign language	3		16		15		14
	16						
						Total Hours Required	120

#No mathematics or statistics course may be counted toward the degree unless the grade is at least a C.

*45 semester hours of advanced coursework is required.

+Both Life/physical sciences must be from the same discipline.

**Degree Requirements
Bachelor of Science
Mathematics**

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	ENGL 2342	3	ENGL 2314 or	3
HIST 1301	3	HIST 1302	3	MATH 3320#	3	ENGL 2362	
MATH 1348#	3	MATH 2413#	4	MATH 3325#	3	MATH 3370#	3
UNIV 1101	1	UNIV 1102	1	Minor	3	MATH 4321#	3
[^] Life/Physical sciences	4	[^] Life/Physical sciences+	4	Minor	3	MATH 4341 or	3
	14	same	4		15	MATH 4373#	
		Kinesiology	1			Minor	3
			16				15
Sophomore Year			Senior Year				
MATH 2414#	4	MATH 3415#	4	Elective, adv.*	3	Elective, adv.*	3
POLS 2301	3	POLS 2302	3	MATH/STAT, adv.#	3	Elective, adv.#	3
[^] Creative arts	3	STAT 1342#	3	MATH/STAT, adv.#	3	MATH/STAT, adv.#	3
Kinesiology	1	[^] Communications	3	Minor, adv.*	3	MATH/STAT, adv.#	3
MATH elective#	3	[^] Social/Behavioral	3	Minor/Elective, adv.#	3	Minor, adv.*	3
	14		16		15		15
						Total Hours Required	120

Minor of 18-24 semester hours in one natural science or computer science.

*45 semester hours of advanced course work is required.

#No mathematics or statistics course may be counted toward the degree unless the grade is at least a C.

+Both Life/physical sciences must be from the same discipline.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Mathematics with Teaching Certification**

Freshman Year				Junior Year			
COMS 1311	3	ENGL 1302	3	EDED 3310	3	EDED 3302	3
ENGL 1301	3	HIST 1302	3	ENGL 2314 or	3	EDED 3333	3
HIST 1301	3	MATH 2413#	4	ENGL 2362		MATH 4321#	3
MATH 1348#	3	STAT 1342#	3	MATH 3360#	3	MATH 4340#	3
UNIV 1101	1	UNIV 1102	1	MATH 3415#	4	POLS 2302	<u>3</u>
Kinesiology	<u>1</u>	[^] <i>Creative arts</i>	<u>3</u>	POLS 2301	<u>3</u>		15
	14		17		16		
Sophomore Year				Senior Year			
ENGL 2342	3	MATH 3320#	3	EDED 3332	3	EDED 4623	6
MATH 2414#	4	MATH 3370#	3	EDED 3362	3	EDRG 4314	3
MATH 3325	3	[^] <i>Life/Physical sciences+</i>	4	MATH 4341	3	EDSE 4349	<u>3</u>
[^] <i>Life/Physical sciences</i>	4	[^] <i>Social/Behavioral</i>	3	MATH 4373#			12
Kinesiology	<u>1</u>	MATH#	<u>3</u>	STAT 4303#	3		
	15		16	STAT 4350#	<u>3</u>		
					15		
Total Hours Required							120

#No mathematics or statistics course may be counted toward the degree unless the grade is at least a C.
45 semester hours of advanced course work is required.

NOTE: Apply for admission to the Teacher Education Program after completing 60 hours.

+Both Life/physical sciences must be from the same discipline.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF MUSIC

Paul M. Hageman, *Chair*

Bellamah Music Building 112. MSC 174. Extension 2803.

Regents Professors

Hageman, Sanders

Professors

Diaz, Hoskission, KingSanders, Sanders, Sholtis, Williams

Associate Professors

Brou, Fluman, Fronckowiak, Janzen, Kihle, Reinhuber, Sanchez-Behar

Assistant Professors

Hightower, J. Jones, S. Jones, Lopez, Millsap, Tu

Lecturer

Lee

The department serves three purposes: to provide training to qualified students for the music profession, to supply an area of artistic enrichment for nonmusic majors and to create a genuine musical influence on the entire university family. Students wishing to follow careers in professional teaching or performance should pursue the appropriate program. Students completing the degree with a major in music with teacher certification will qualify to receive the All-level Provisional Certificate, vocal or instrumental. This latter program will qualify successful candidates as teachers of music for all grades in Texas under certification regulations established by the Texas Education Agency. The department is an institutional member of the National Association of Schools of Music.

Department of Music Admissions

In addition to being admitted to the University, all potential music majors (including transfer students) must schedule and perform an entrance audition and interview to be considered for admission to the Department of Music. Students should contact the applied music professor in their instrumental/vocal area to schedule the audition/interview. Acceptance to the university does not guarantee acceptance into the Department of Music.

Minors and Electives

Qualified nonmusic majors may continue their music studies either as elective courses or as minor concentrations in music.

Music Minor -- MUSI 1116, MUSI 1117, MUSI 1316, MUSI 1317, MUSI 2306, MUSI 11XX – Major Ensembles for two semesters, MUSA 11XX – Applied Music for two semesters, Performance Based Music Electives – 3 hours (must be approved by the department chair).

Majors

Degree Offerings

The Music Department offers the following degrees:

Bachelor of Music Degree in the following Concentration Areas:

Teacher Certification

Performance

Performance with a Concentration in Piano Pedagogy

Performance with a Concentration in Jazz Studies

Department Placement Examinations

Entering undergraduate and graduate music majors will be given placement examinations prior to their first registration. These examinations enable the student with an exceptional background or previous college training to proceed on the basis of this experience.

General Requirements

All full-time (12 semester hours or more) music majors are required to:

- a. All students seeking the Bachelor of Music with Teacher Certification degree must register for and participate in their prescribed major ensemble until they student teach.
- b. Register for applied music until degree requirements are completed. The student should have attained at least a 4000-level of proficiency and have satisfied all jury and recital requirements.
- c. Register for and pass a minimum of 4 semester hours of class piano (MUSI 1181, MUSI 1182, MUSI 2181, MUSI 2182). A student may test out of any semester of this requirement by successful completion of a piano proficiency exam. If the proficiency test is not passed at the completion of 4 semester hours of class piano, a student may continue to work independently for the exam. The student also has the option of retaking MUSI 2181 - MUSI 2182 or taking one credit of piano applied until the proficiency exam is successfully completed. This exam must be passed prior to registration for MUSI 3394, Advanced Music Concepts, (if in music with teacher certification) or prior to graduation (if performance major).
- d. Enroll in MUSI 1000, Recital Seminar. To receive credit for this non-tuition course, the student must attend a minimum of twenty approved concerts, recitals or University Interscholastic League approved music events per semester. Students must enroll each term except when student teaching; normally seven semesters credit are required for graduation.
- e. Perform in at least one public recital per semester (if registered at 1000-level or above).
- f. Fulfill solo recital requirements as follows:

	<u>Junior Year</u>	<u>Senior Year</u>
B.M. Performance	Half Recital	Full Recital
B.M. with Teacher Certification		Half Recital

A faculty hearing committee must approve the entire program at least two weeks prior to the recital performance date. The same committee will approve or disapprove the recital itself.

- g. Students majoring in music must make at least a grade of *C* in every music course taken toward the degree. In sequential music courses, a grade of *C* must be made in order to progress to the next music course in the sequence.
- h. At the conclusion of the fourth semester of music theory (MUSI 2317- MUSI 2117), students must take and pass the Sophomore Theory Exam in order to proceed to the upper level theory courses.

Admission to Junior Standing in Music Procedure

Prior to enrolling in 3000-level music courses*, a student must successfully pass an Admission Review to Junior Standing. The initial music review will take place prior to the completion of the sophomore year or at the time a student would normally have completed 60 semester hours. For transfer students, the initial review will take place subsequent to the sophomore placement examination but no later than the end of the second year of enrollment at Texas A&M University-Kingsville.

*Wind Symphony and Jazz Band I are exempt from this requirement.

In order to enroll in 3000 level classes, students must have fulfilled the following:

- a. Completion of MUSI 1316/MUSI 1116, MUSI 1317/MUSI 1117, MUSI 2316/MUSI 2116, MUSI 22317, MUSI 2117, MUSI 2317 with a *C* or better. (First and Second Year Music Theory and Aural Skills).
- b. Completion of MUSI 2306 with a *C* or better. (Introduction to Music History and Literature).
- c. Passage of the Piano Proficiency Examination.
- d. Successful completion of at least four semesters of lessons with at least one at the MUSI 2220 level with a *C* or better.
- e. Successful completion of at least four semesters of the appropriate major ensemble with a *C* or better.
- f. Achievement of cumulative GPA of 2.5.
- g. Successful faculty panel review with three of the four panel members recommending that the student be admitted to junior level in music.

Applied Music (MUSA)

The courses in applied music are designed to meet the requirements and desires of the students who wish to major in performance, to major in music with teacher certification or take applied music as an elective or minor, or to begin study in applied music to use as a teaching tool or as an area of enrichment where public performance is not the goal.

Instruction at the undergraduate and graduate levels is offered in the following areas:

Composition	Trumpet	Violin
Flute	French Horn	Viola
Oboe	Trombone	Cello
Bassoon	Euphonium	Double Bass
Clarinet	Tuba	Piano
Saxophone	Percussion	Voice
Guitar		

Catalog Numbers:

The first of the four digits indicates level (i.e., 1-Freshman; 2-Sophomore; 3-Junior; 4-Senior; 5-Graduate); the second digit (1, 2, 3, or 4) indicates the number of semester hours credit and the minimum hours of daily practice; the third digit indicates the semester and the fourth digit is zero.

Students normally progress to the next higher level each year. Occasionally it may require more than one year of study to accomplish this progress. The progress of a student from one level of applied music to another is dependent on the jury held at the conclusion of each semester.

Music Theory (MUSI)

The sequence for music theory courses is as follows: MUSI 1316-1116, MUSI 1317-1117, MUSI 2316-2116, MUSI 2317-2117, MUSI 4318, MUSI 3312, MUSI 3314, (MUSI 4319 for performance majors only). Students must make a C or better in order to progress to the next course in the sequence.

1116. Introduction to Basic Aural Training. (MUSI 1116) 1(0-3)
Introduction to aural skills fundamentals including emphasis on melodic, harmonic dictation and sight-singing of music of various ethnic origins and historical style periods.

1117. Basic Aural Training. (MUSI 1117) 1(0-3)
Emphasis on dictation and sight-singing of music of various ethnic origins and historical periods. Prerequisite: MUSI 1116 with a grade of C or better, or a satisfactory score on the departmental Placement Exam (Music Theory).

1213. Jazz Theory. 2(2-0)
Harmonic structure, melodic construction and song forms in jazz. Chord and scale building, simple analysis, directed listening and keyboard harmonization. Prerequisites: MUSI 1116, MUSI 1181 and MUSI 1316.

1301. Materials of Music. 3(3-0)
Fundamentals of music with emphasis on developing basic music theoretical skills. May not apply toward music major or minor.

1316. Introduction to Basic Musicianship. (MUSI 1316) 3(3-0)
Introduction to music fundamentals and skills including pitch recognition in various clefs, rhythm competency, basic harmonic construction and recognition, harmonic and melodic usage in various historical style periods.

1317. Basic Musicianship. (MUSI 1317) 3(3-0)
Introduction to the fundamental elements of music (e.g. pitch, intensity, duration and timbre) and their interrelationship as the foundation of tonal harmonic structure. Prerequisite: MUSI 1316 with a grade of C or better or a satisfactory score on the departmental Placement Exam (Music Theory).

- 2116-2117. Intermediate Aural Training.** (MUSI 2116, MUSI 2117) 2(0-3)
Continuation of MUSI 1117.
- 2263. Jazz Improvisation I.** 2(2-0)
Basics of jazz improvisation, using and applying the knowledge and concepts of jazz theory. Prerequisite: MUSI 1213.
- 2264. Jazz Improvisation II.** 2(2-0)
A continuation and practical application of elements of Jazz Improvisation I. Prerequisite: MUSI 2263.
- 2316-2317. Intermediate Musicianship.** 6(3-0)
Continuation of MUSI 1317.
- 3243. Jazz Arranging.** 2(2-0)
Fundamental considerations in arranging music for small and large jazz ensembles. Techniques used by great arrangers. Prerequisite: MUSI 3312.
- 3312. Orchestration.** 3(3-0)
A continuation and practical application of elements of Music Theory and Aural Training. Study of the compass, techniques and color of the instruments of the orchestra and band and their combinations. Projects in scoring in full orchestra, band and small ensembles.
- 3314. Composition.** 3(3-0)
The practical application of creative principles in analysis and original writing of the smaller forms. The course will include 18th Century counterpoint: two, three and four part writing, canon, fugue and double counterpoint. Prerequisites: MUSI 2316, MUSI 2317.
- 4318. Analytical Techniques I. [WI]** 3(3-0)
Aural and visual analysis techniques in all musical styles. All elements in music; form, vocal, piano, chamber and full orchestra scores.
- 4319. Analytical Techniques II.** 3(3-0)
A continuation of MUSI 4318. Required of performance music majors. Prerequisite: MUSI 4318.
- History and Literature of Music (MUSI)**
- 1305. Explorations in Music History.** 3(3-0)
Historically-based exploration of Western musical styles centered on what is broadly referred to as classical music. A focus on musical vocabulary, historical concepts, and critical listening skills equips students to analyze and discuss music intelligently. Outside listening required. For non-music majors; may not be counted toward a Bachelor of Music or Bachelor of Music in Performance degree, or toward a music minor.
- 2301. Structure of the Arts.** 3(2-4)
Art, music and theatre arts are combined in selected problems dealing with arts structure. Creative production is the result of studio activity and critique.
- 2306. Introduction to Music History and Literature.** 3(3-0)
Techniques of intelligent listening with historical perspective. Emphasis on basic concepts in music and their evolution: texture, form, tonality, etc. Listening techniques to develop aural sensitivity to stylistic features. Outside listening required. Designed for music majors.
- 2308. History of Jazz.** 3(3-0)
The study of the history and development of jazz music, including the various styles and influences that have shaped the many trends in jazz music. Jazz artists and recordings from both a musical and a historical perspective. Open to both music and non-music majors.

2310. History of Rock and Roll. 3(3-0)
The history of rock music from its roots to its most recent trends, with the emphasis on rock as a musical style. Musical parameters (rhythm, harmony, melody, form, texture) as they apply to rock music. Thorough historical detail and social context for the various rock styles presented. Open to both music and non-music majors.

2320. Music of Many Cultures. 3(3-0)
Theories, practices and styles of traditional music of various cultures throughout the world such as Sub-Saharan Africa, India, Israel, Thailand, Bali, China, Japan, South America, Polynesia and Native American.

4307-4308. Music History and Literature. 6(3-0)
Development of musical styles, schools of composition, bibliography and evolution of the art of music. Outside listening required. Prerequisite: MUSI 2306.

Music Education (MUSI)

1190. Marching Band Techniques. 1(0-2)
Fundamentals of and the techniques involved in directing a marching band.

3196. Basic Conducting. 1(0-3)
Theory and practice of conducting for both vocal and instrumental groups, with emphasis on dealing with incomplete instrumentation and young performers in vocal and instrumental music. Include conducting techniques, score reading and analysis and rehearsal techniques.

3371. Piano Pedagogy I. 3(3-0)
Fundamentals of piano teaching; the learning process and its application to the beginning piano student. Prerequisites: MUSA 1210, MUSA 1220, MUSA 2210, MUSA 2220 or completed piano proficiency.

3373. Piano Pedagogy II. 3(3-0)
Examination and evaluation of beginning piano methods. Observation and supervised instruction of beginning-level pianists. Prerequisite: MUSI 3371.

3391. Foundations of Music. 3(3-0)
Develop a foundation for music literacy and skills through vocal expression, instrumental playing and movement. The basic elements of music; i.e., beat, rhythm, melody, form, timbre and harmony, will be covered.

3393. Elementary Music Concepts. 3(3-0)
The study of basic musical concepts for application in the elementary classroom through performance and participation. Prerequisite: MUSI 1195.

3394. Advanced Music Concepts. 3(3-0)
Philosophy, content organization and discussion of the modern performance concepts of music. Emphasis placed on evaluation of musical concepts with analysis of consequent problems.

3397. Conducting II. 3(2-2)
Theory and practice of conducting and organizing groups at the secondary school level. Includes refining baton skills, score analysis, arranging/scoring techniques, performance practices of choral and instrumental ensembles, programming, rehearsal techniques and laboratory experience. Prerequisites: MUSI 3312 and MUSI 3196.

4309. Topics in Music: Study Abroad. V:1-3
Faculty-led study abroad program in Music. Topics may center on cultural studies, performance, or music research. Locations of study vary. May be repeated for credit under different topics. Prerequisites: instructor approval and application through the Office of International Studies and Programs.

4330. Introduction to Orff Schulwerk. 3(3-0)
Philosophy and pedagogy of Orff Schulwerk. Emphasis on rhythmic speech, body percussion, singing, playing musical instruments appropriate for use by children, elemental forms, pentatonic folk melodies, soprano recorder and improvisation. Prerequisite: MUSI 3393.

4344. Jazz Pedagogy. 3(3-0)
A pedagogical approach to the analysis of jazz programs, jazz ensembles, rehearsal techniques and rhythm sections. Teaching improvisation in the jazz rehearsal as well as building and maintaining a public school jazz program. Prerequisite: audition.

4371. Piano Pedagogy III. 3(3-0)
Examination and evaluation of mid-level, advanced and adult piano methods. Setting up a private studio. Prerequisite: MUSI 3373.

4373. Piano Pedagogy IV. 3(3-0)
Examination and evaluation of mid-level, advanced and adult piano methods. Supervised piano teaching of students at all levels and group piano. Prerequisite: MUSI 4371.

4399. Special Problems. V:1-3
For advanced students in music who wish to pursue further some special field of learning. May be repeated for a maximum of 6 semester hours when problem changes.

Class Instruction (MUSI)

Classes are designed for the beginner in the various areas of performance. A minimum of two hours individual practice weekly is required.

1162. Diction I. 1(0-2)
Studies and practice in diction of Latin, Italian and English languages through use of vocal literature of the 17th century through the present.

1165. Diction II. 1(0-2)
Studies and practice in diction of Spanish, German and French languages through use of vocal literature of the 17th century through the present.

1166. Woodwinds I. 1(0-2)
Pedagogy and techniques of clarinet and saxophone.

1167. Woodwinds II. 1(0-2)
Pedagogy and techniques of flute and double reed instruments.

1174. High Brass. 1(0-2)
Pedagogy and techniques of trumpet and French horn.

1175. Low Brass. 1(0-2)
Pedagogy and techniques of trombone, euphonium and tuba.

1181. Piano Class. (MUSI 1181) 1(0-2)
Beginning study of piano with emphasis on functional aspects, e.g. basic techniques, scales, chords and simple transpositions. Music majors will be given priority in enrolling.

1182. Piano Class. (MUSI 1182) 1(0-2)
Continuation of MUSI 1181.

1183. Voice Class. (MUSI 1183) 1(0-2)
The rudiments of vocal music, breathing, correct use of body muscle for breath control, diction and the development of tone will be studied. Technical development will include the study of interpretation, tone production, pronunciation and vocal expression.

1188. Percussion Class. (MUSI 1188) 1(0-2)

1189. String Class. 1(0-2)

- 1192. Guitar Class I.** 1(0-2)
Class instruction in guitar including chord formation, elementary chord progressions, time and key signatures, and patterns.
- 1193. Guitar Class II.** 1(0-2)
Intermediate class instruction in guitar including chord formation, intermediate chord progressions and patterns, and note reading. Prerequisite: MUSI 1192.
- 1195. Instruments for Elementary Music.** 1(0-2)
Study of instruments used in the elementary music classroom including various recorders, the Orff instrumentarium (xylophone, metallophone, glockenspiel) and frame drum.
- 2181. Piano Class. (MUSI 2181)** 1(0-2)
Functional piano. Continuation of MUSI 1182.
- 2182. Piano Class. (MUSI 2182)** 1(0-2)
Continuation of MUSI 2181.
- 2185. Piano Sight Reading.** 1(0-2)
Developing proficiency in functional keyboard skills beyond those covered in applied music lessons; sight reading, transposition, harmonization, playing by ear.
- 2189. Piano Accompanying.** 1(0-2)
Introduction to accompanying, including necessary technical skills for accompanying instrumental and vocal repertoire.
- Ensembles (MUSI)**
Ensembles perform on the campus and in various communities throughout Texas. Ensembles may serve as elective courses in any college of the university. A limited number of instruments are available to students who wish to join these groups. Credit in excess of four semesters in a single ensemble will be considered advanced.
- 1000. Recital Seminar.** 0(0-2)
Attend 20 concerts or recitals during the semester. Required of all music majors for seven semesters or until the student teaching experience. Credit/Non-credit.
- 1121. University Band.** 1(0-4)
The University Band performs standard windband literature. Non-music majors are not required to audition.
- 1122. Concert Band.** 1(0-4)
The Concert Band includes in its repertoire major contemporary works composed for the windband as well as marches and transcriptions. Prerequisite: audition.
- 1123. Symphony Orchestra.** 1(0-3)
Highest levels of musicianship demonstrated through performance of respected orchestral literature. Prerequisite: audition.
- 1127. Marching Band.** 1(0-6)
The *Pride of South Texas Marching Band* performs at the half-time of Texas A&M University-Kingsville football games as well as selected other events. Required of all wind and percussion majors.
- 1131. Jazz Workshop.** 1(0-3)
Performance, arranging and composition of music for the stage band in the modern jazz idiom.
- 1132. Chamber Music.** 1(0-3)
The study, preparation and performance of small-ensemble music in like-instrument groupings, mixed-instrument ensembles and vocal ensembles.

- 1133. Mariachi.** 1(0-3)
The study of mariachi music through instrumental and vocal performance.
- 1134. Latin Jazz Ensemble.** 1(0-3)
Performance, arranging and improvisation of music for stage band in the Latin jazz idiom. Prerequisite: audition.
- 1141. Concert Choir.** 1(0-4)
Choral ensemble mixed voices (soprano, alto, tenor and bass). Study and performance of choral literature from the Renaissance to the present. Open to all students. An audition is required for appropriate assignment. Meets the large ensemble requirement for voice majors.
- 1142. Women's Chorus.** 1(0-4)
A choral ensemble of women's voices (soprano and alto). Study and performance of choral literature for the Renaissance to the present. Open to all majors. An audition is required for appropriate assignment. This course meets the large ensemble requirement for voice majors.
- 1151. Chamber Singers.** 1(0-3)
A select small mixed ensemble that performs music especially written for a vocal chamber group. Music performed includes that from the Renaissance to the present and may include contemporary styles, musical theater, and jazz vocal. Open by audition to all students.
- 1157. Opera Workshop.** 1(0-5)
Study and performance of scenes and acts from operas as well as full operas. Practical experience in opera production including dramatic aspects of staged music-drama. Emphasis on integration of music, acting and staging.
- 1159. Musical Theatre.** 1(0-5)
Study and performance of works from the musical theatre repertoire.
- 3120. Wind Symphony.** 1(0-4)
Highest levels of musicianship are demonstrated through performance of respected windband literature. Prerequisite: audition.
- 3127. Advanced Marching Band.** 1(0-6)
The *Pride of South Texas Marching Band* performs at the halftime of Texas A&M University-Kingsville football games as well as selected other events. Leadership skills and marching band teaching techniques are stressed. Prerequisite: completion of two semester of MUSI 1127.
- 3130. Jazz Combo.** 1(0-3)
Jazz music in the small ensemble setting. Experience in improvisation by arranging, rehearsing and performing jazz music as a combo. Prerequisite: audition.
- 3131. Jazz Band I.** 1(0-3)
The premiere instrumental jazz performance ensemble, Jazz Band I performs the highest level of jazz literature stressing improvisation and various styles of jazz. Prerequisite: audition.
- 3132. Advanced Chamber Music.** 1(0-3)
The advanced study, preparation and performance of small-ensemble music in like-instrument groupings, mixed-instrument ensembles and vocal ensembles. Prerequisite: junior standing.

Degree Requirements
Bachelor of Music
Music-Instrumental with Teaching Certification

Freshman Year				Junior Year			
ENGL 1301	3	COMS 1311	3	EDED 3310	3	MUSA 3220	2
HIST 1301	3	ENGL 1302	3	MUSA 3210	2	MUSI 1000	0
MUSA 1110	1	MATH 1314	3	MUSI 1000	0	MUSI 3120*	1
MUSI 1000	0	MUSA 1120	1	MUSI 3127*	1	MUSI 3312	3
MUSI 1116	1	MUSI 1000	0	MUSI 3196	1	MUSI 3394	3
MUSI 1127*	1	MUSI 1117	1	MUSI 3393	3	MUSI 3397	3
MUSI 1181	1	MUSI 1121 or	1	MUSI 4307	3	MUSI 4308	3
MUSI 1183	1	MUSI 1122*	1	MUSI 4318	3	POLS 2301	3
MUSI 1316	3	MUSI 1182	1	Sec. Inst.	<u>1</u>	Sec. Inst.	<u>1</u>
UNIV 1101	<u>1</u>	MUSI 1195	1		17		19
	15	MUSI 1317	3				
		UNIV 1102	<u>1</u>				
			18				
Sophomore Year				Senior Year			
ENGL 2342 or	3	MUSA 2220	2	EDED 3332	3	EDED 4623	6
ENGL 2362		MUSI 1000	0	EDED 3333	3	EDRG 4314	3
HIST 1302	3	MUSI 1121 or	1	MUSA 4210	2	EDSE 4349	<u>3</u>
MUSA 2210	2	MUSI 1122*		MUSI 1000	0		12
MUSI 1000	0	MUSI 2117	1	MUSI 3127*	1		
MUSI 1127*	1	MUSI 2182	1	POLS 2302	3		
MUSI 2116	1	MUSI 2306	3	SOCI 2361	3	Total Hours Required	133
MUSI 2181	1	MUSI 2317	3	Sec. Inst.	1		
MUSI 2316	3	PHYS 1471	4	<i>^Component B</i>	<u>2</u>		
<i>^Life/Physical sciences</i>	3	Sec. Inst.	<u>1</u>		18		
Sec. Inst.	<u>1</u>		16				
	18						

*String majors will substitute MUSIC 1123 for major ensemble.

Degree Requirements
Bachelor of Music
Music-Vocal with Teaching Certification

Freshman Year				Junior Year			
ENGL 1301	3	COMS 1311	3	EDED 3310	3	MUSA 3220	2
HIST 1301	3	ENGL 1302	3	MUSA 3210	2	MUSI 1000	0
MUSA 1110	1	MATH 1314	3	MUSI 1000	0	MUSI 1141	1
MUSI 1000	0	MUSA 1120	1	MUSI 1141	1	MUSI 3312	3
MUSI 1116	1	MUSI 1000	0	MUSI 1157	1	MUSI 3394	3
MUSI 1141	1	MUSI 1117	1	MUSI 3196	1	MUSI 3397	3
MUSI 1162	1	MUSI 1141	1	MUSI 3393	3	MUSI 4308	3
MUSI 1181	1	MUSI 1165	1	MUSI 4307	3	Sec. Inst.	<u>1</u>
MUSI 1195	1	MUSI 1182	1	MUSI 4318	3		16
MUSI 1316	3	MUSI 1317	3	Sec. Inst.	<u>1</u>		
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>		18		
	16		18				
Sophomore Year				Senior Year			
ENGL 2342 or	3	MUSA 2220	2	EDED 3332	3	EDED 4623	6
ENGL 2362		MUSI 1000	0	EDED 3333	3	EDRG 4314	3
HIST 1302	3	MUSI 1141	1	MUSA 4210	2	EDSE 4349	<u>3</u>
MUSA 2210	2	MUSI 2117	1	MUSI 1000	0		12
MUSI 1000	0	MUSI 2182	1	MUSI 1141	1		
MUSI 1141	1	MUSI 2306	3	POLS 2302	3		
MUSI 2116	1	MUSI 2317	3	SOCI 2361	3	Total Hours Required	134
MUSI 2181	1	PHYS 1471	4	Sec. Inst.	1		
MUSI 2316	3	POLS 2301	<u>3</u>	<i>^Component option B</i>	<u>2</u>		
<i>^Life/Physical sciences</i>	3		18		18		
Sec. Inst.	<u>1</u>						
	18						

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Music
Performance-Instrumental**

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	MUSA 3410	4	MUSA 3420	4
MATH 1314	3	HIST 1301	3	MUSI 1000	0	MUSI 1000	0
MUSA 1210	2	MUSA 1220	2	MUSI 3120*	1	MUSI 3120*	1
MUSI 1000	0	MUSI 1000	0	MUSI 3131 or	1	MUSI 3131 or	1
MUSI 1116	1	MUSI 1117	1	MUSI 3132		MUSI 3132	
MUSI 1121 or	1	MUSI 1121 or	1	MUSI 3196	1	MUSI 3312	3
MUSI 1122*		MUSI 1122*		MUSI 4307	3	MUSI 3397	3
MUSI 1131 or	1	MUSI 1131 or	1	MUSI 4318	3	MUSI 4308	<u>3</u>
MUSI 1132		MUSI 1132		<i>^Communications</i>	<u>3</u>		15
MUSI 1181	1	MUSI 1182	1		16		
MUSI 1316	3	MUSI 1317	3				
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>				
	16		16				
Sophomore Year			Senior Year				
HIST 1302	3	MUSA 2220	2	MUSA 4410	4	MUSA 4420	4
MUSA 2210	2	MUSI 1000	0	MUSI 1000	0	MUSI 1000	0
MUSI 1000	0	MUSI 1121 or	1	MUSI 3120	1	MUSI 3120*	1
MUSI 1121 or	1	MUSI 1122*		MUSI 3131 or	1	MUSI 3131 or	1
MUSI 1122*		MUSI 1131 or	1	MUSI 3132		MUSI 3132	
MUSI 1131 or	1	MUSI 1132		POLS 2301	3	MUSI 4319	3
MUSI 1132		MUSI 2117	1	<i>^Lang/Phil/Culture</i>	3	POLS 2302	<u>3</u>
MUSI 2116	1	MUSI 2182	1	<i>^Social/Behavioral</i>	3		12
MUSI 2181	1	MUSI 2306	3	<i>^Component option B</i>	<u>2</u>		
MUSI 2316	3	MUSI 2317	3		17		
<i>^Life/Physical sciences</i>	<u>3</u>	PHYS 1471	<u>4</u>				
	15		16				
Total Hours Required						123	

*Keyboard majors may substitute MUSI 1141, and string majors MUSIC 1123, for MUSI 1121, MUSI 1122, or MUSI 3120.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Music
Performance Instrumental-Jazz Studies

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	MUSA 3210	2	MUSA 3220	2
MATH 1314	3	MUSA 1220	2	MUSI 1000	0	MUSI 1000	0
MUSA 1210	2	MUSA 1000	0	MUSI 3130	1	MUSI 2308	3
MUSI 1000	0	MUSI 1117	1	MUSI 3131	1	MUSI 3130	1
MUSI 1116	1	MUSI 1122 or	1	MUSI 3196	1	MUSI 3131	1
MUSI 1122 or	1	MUSI 3120		MUSI 3312	3	MUSI 3243	2
MUSI 3120		MUSI 1131 or	1	MUSI 4307	3	MUSI 4308	3
MUSI 1131 or	1	MUSI 3131		<i>^Communications</i>	3	MUSI 4318	<u>3</u>
MUSI 3131		MUSI 1182	1	<i>^Life/Physical sciences</i>	<u>3</u>		15
MUSI 1181	1	MUSI 1213	2		17		
MUSI 1316	3	MUSI 1317	3				
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>				
	16		15				
Sophomore Year				Senior Year			
HIST 1301	3	HIST 1302	3	MUSA 4210	2	MUSA 4420	2
MUSA 2210	2	MUSI 2220	2	MUSI 1000	0	MUSI 1000	0
MUSI 1000	0	MUSI 1000	0	MUSI 3130	1	MUSI 3130	1
MUSI 1122 or	1	MUSI 1122 or	1	MUSI 3131	1	MUSI 3131	1
MUSI 3120		MUSI 3120		PHYS 1471	4	MUSI 4344	<u>3</u>
MUSI 1131 or	1	MUSI 1131 or	1	POLS 2301	3	POLS 2302	<u>3</u>
MUSI 3131		MUSI 3131		<i>^Social/Behavioral</i>	3	<i>^Lang/Phil/Culture</i>	<u>3</u>
MUSI 2116	1	MUSI 2117	1	<i>^Component option B</i>	<u>2</u>		13
MUSI 2181	1	MUSI 2182	1		16		
MUSI 2263	2	MUSI 2264	2				
MUSI 2316	<u>3</u>	MUSI 2306	3				
	14	MUSI 2317	<u>3</u>				
			17				
						Total Hours Required	123

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Music
Performance Instrumental-Piano Pedagogy

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	MUSA 3410	4	MUSA 3420	4
MATH 1314	3	HIST 1301	3	MUSI 1000	0	MUSI 1000	0
MUSA 1210	2	MUSA 1220	2	MUSI 3371	3	MUSI 3312	3
MUSI 1000	0	MUSI 1000	0	MUSI 4307	3	MUSI 3373	3
MUSI 1116	1	MUSI 1117	1	MUSI 4318	3	MUSI 4308	3
MUSI 1122 or MUSI 1141	1	MUSI 1122 or MUSI 1141	1	[^] Lang/Phil/Culture	<u>3</u>	[^] Social/Behavioral	<u>3</u>
MUSI 1131 or MUSI 1132	1	MUSI 1131 or MUSI 1132	1		16		16
MUSI 1316	3	MUSI 1317	3				
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>				
	15		15				
Sophomore Year				Senior Year			
HIST 1302	3	MUSA 2220	2	MUSA 4410	4	MUSA 4420	4
MUSA 2210	2	MUSI 1000	0	MUSI 1000	0	MUSI 1000	0
MUSI 1000	0	MUSI 1122 or MUSI 1141	1	MUSI 4371	3	MUSI 4319	3
MUSI 1122 or MUSI 1141	1	MUSI 1131 or MUSI 1132	1	POLS 2301	3	MUSI 4373	3
MUSI 1131 or MUSI 1132	1	MUSI 2117	1	[^] Communications	3	POLS 2302	<u>3</u>
MUSI 2116	1	MUSI 2189	1	[^] Component option B	<u>2</u>		13
MUSI 2185	1	MUSI 2306	3		15		
MUSI 2316	3	MUSI 2317	3				
[^] Life/Physical sciences	<u>3</u>	PHYS 1471	<u>4</u>			Total Hours Required	121
	15		16				

*Credits for Component Option B must equal to 3 semester credit hours.

Degree Requirements
Bachelor of Music
Performance-Voice

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	MUSA 3410	4	MUSA 3420	4
MATH 1314	3	HIST 1301	3	MUSI 1000	0	MUSI 1000	0
MUSA 1210	2	MUSA 1220	2	MUSI 1141	1	MUSI 1141	1
MUSI 1000	0	MUSI 1000	0	MUSI 1151	1	MUSI 1151 or MUSI 1157	1
MUSI 1116	1	MUSI 1117	1	or MUSI 1157		MUSI 1157	
MUSI 1141	1	MUSI 1141	1	MUSI 3196	1	MUSI 3312	3
MUSI 1162	1	MUSI 1165	1	MUSI 4307	3	MUSI 3397	3
MUSI 1181	1	MUSI 1182	1	MUSI 4318	3	MUSI 4308	<u>3</u>
MUSI 1316	3	MUSI 1317	3	[^] Communications	<u>3</u>		15
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>		16		
	16		16				
Sophomore Year				Senior Year			
HIST 1302	3	MUSA 2220	2	MUSA 4410	4	MUSA 4420	4
MUSA 2210	2	MUSI 1000	0	MUSI 1000	0	MUSI 1000	0
MUSI 1000	0	MUSI 1141	1	MUSI 1141	1	MUSI 1141	1
MUSI 1141	1	MUSI 1151 or MUSI 1157	1	MUSI 1151 or MUSI 1157	1	MUSI 1151 or MUSI 1157	1
MUSI 1157	1	MUSI 2117	1	POLS 2301	3	MUSI 4319	3
MUSI 2116	1	MUSI 2182	1	[^] Life/Physical sciences	3	POLS 2302	<u>3</u>
MUSI 2181	1	MUSI 2306	3	[^] Social/Behavioral	3		12
MUSI 2316	3	MUSI 2317	3	[^] Component option B	<u>2</u>		
[^] Lang/Phil/Culture*	<u>3</u>	PHYS 1471	<u>4</u>		17	Total Hours Required	123
	15		16				

*Students must take a foreign language course to satisfy the *Language/philosophy/culture* component.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF PHYSICS AND GEOSCIENCES

Lionel D. Hewett, *Chair*

Hill Hall 113. MSC 175. Extension 2618.

Regents Professor Emeritus

Norwine

Professors

Hewett, McGehee

Associate Professor

Su

Assistant Professors

Albataineh, Ford, Hedquist, Sanchez, Schneider, Yelisetti

Lecturers

Kaim, Keerthisinghe, Nelson

The Department of Physics and Geosciences serves the needs of three types of students: those majoring in geology or physics and those minoring in geography, geology or physics; technical or pre-professional students; and students who take physics and geoscience courses out of interest or to satisfy science requirements. The department seeks to prepare students who are majoring in geology or physics minoring in geography, geology or physics to compete with graduates from other institutions for industrial and governmental positions, follow a career in science education or pursue a higher level degree. It does this through fundamental courses in the respective disciplines and through specialized programs in geographic information sciences (GIS), energy, hydrogeology, groundwater modeling, certification in GIS sciences, certification in Geophysics, and certification in nuclear power plant (NPP) operations. For students in technical areas, the department endeavors to provide the background necessary for success in their chosen profession. For non-technical majors, the department strives to enlighten students concerning some of the basic realities of our universe and to instill in them an appreciation of the methods of scientific inquiry and the impact of science on our modern world.

Students majoring or minoring in the Department of Physics and Geosciences should plan the course work so that it will best support their career and educational goals. This should be done in consultation with their faculty adviser.

The Department offers minors in Geography, Geographic Information Systems (GIS), Geology, Geophysics, and Physics.

The minor in GIS consists of five 4-SCH courses, three required and two chosen from among alternatives. The required courses are GEOG 2472, GEOG 4429 and GEOG 4435. The remaining two courses shall be selected from GEOG 3450, GEOG 3460, GEOG 4436 and GEOG 4441. Courses counted in this minor may not also be counted toward a minor in Geography.

The Department offers an undergraduate level certification in Geographic Information Systems (GIS). Students will receive the certificate upon completing all courses (C or better) stated in the course requirements. In order to get the certificate, students need to take four courses, three required and one chosen from among electives. The required course are GEOG 2472, GEOG 4429, and GEOG 4435. The elective shall be selected from the following: GEOG 3450, GEOG 3460, GEOG 4441, or any advanced GIS course offered within individual colleges that is approved by the University GIS Curriculum Committee and has GEOG 2472 or GEOG 4435 listed as a prerequisite.

The Department of Physics and Geosciences offers an undergraduate Geophysics certificate program. The certificate in Geophysics consists of 15 credit hours in Geology and Geophysics. The required courses are GEOL 3370, GEOL 3431, 4375/4175 and GEOL 4441. Students will receive the certificate upon completing all required courses with a C or better.

GEOGRAPHY (GEOG)

1101. Physical Geography: Meteorology Laboratory.

1(0-2)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes greater understanding of concepts of meteorology presented in GEOG 1301. Prerequisite:

credit or registration in GEOG 1301.

1102. Physical Geography: Climate and Mankind Laboratory. 1(0-2)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes greater understanding of concepts of climatology and its effect on human civilization, as presented in GEOG 1302. Prerequisite or corequisite: GEOG 1302.

1301. Physical Geography: Meteorology. (GEOG 1301) 3(3-0)

Earth motions and their meanings; system of location and time; composition and structure of the earth's atmosphere. Meteorology and weather prediction, including storms. Air pollution meteorology. Field trips will be arranged.

1302. Physical Geography: Climate and Mankind. (GEOG 1302) 3(3-0)

Climatic classification, types and world regions. Climatic change, fluctuations and their effects on human ecology (e.g., droughts). Agricultural and urban climatology. Microclimates. The distribution of soils and natural vegetation as related to climate. Field trips will be arranged.

1303. World Geography. (GEOG 1303) 3(3-0)

Major geographic regions of the world. Landscapes and peoples of continents; major culture realms and nations, resources, land-use and industries. Contrasts between developed and emerging nations.

2472. Introduction to Geographic Information Systems. 4(3-3)

Principles and experience of Geographic Information Systems. Acquisition, management, processing and interpretation of geographic data. Spatial data structure and the display, manipulation and analysis of geographic data. Field Trip required. Field trip fee required. Prerequisite: 3 hours of natural science or permission of instructor.

3302. Introduction to Broadcast Meteorology. 3(3-0)

Principles and practice of broadcast meteorology, a joint effort of the Department of Physics and Geosciences and Department of Communication and Theatre Arts. Introduction to television weather broadcasting with emphasis on creating accurate forecasts and on the techniques of communicating weather information to the public. Prerequisites: GEOG 1301 with GEOG 1302 recommended.

3305. Environmental Geography. 3(3-0)

The nature, geographic distribution, use and misuse of global resources with emphasis on those of North America. Ecosystems, air, water, soil, mineral and energy resources will be considered. Prerequisites: 3 semester credit hours of Geography or a science course (see General Education Requirements *Life & Physical Science* component).

3310. The World in Change: Crucial Topics in Contemporary Geography. 3(3-0)

Intensive study of the geography of selected world "crisis" regions. Examples include the Middle East, Sub-Saharan Africa and the former U.S.S.R. and Eastern Europe. May be repeated for credit as the topic changes. Prerequisite: 6 semester hours of geography or 12 semester hours of social sciences.

3331. United States and Canada. 3(3-0)

The regional aspects of landforms, climate, resources and peoples of United States and Canada. Prerequisite: 6 hours of geography or 12 hours of social science.

3421. Geomorphology. 4(3-3)

Description, classification and quantitative analysis of landforms and surface processes in relation to human development. Regional physiography of the United States and topographic map interpretation. May be used as geology credit. Field trip required. Field trip fee required. Prerequisite: GEOL 1302/GEOL 1102 or GEOL 1303/GEOL 1103, MATH 1316.

3450. Field Mapping, Cartography and Global Positioning. 4(3-3)

The principles and practice of plane surveying and the global positioning system (GPS) and their interface with geographic information systems (GIS). Basic principles of cartography and use of cartographic tools and software. Management of cartographic data and GPS data. Local field trips required. Field trip fee required. Prerequisite: MATH 1314 and MATH 1316 or MATH 1324.

3460. GIS in Natural Resources and Environmental Management. 4(3-3)

GIS and other geospatial technologies (including GPS and remote sensing) as applied to natural resources and environmental management. Technologies and techniques used to acquire geographic information, spatial data and location analysis and applications of geospatial technology within the natural and environmental sciences. Case studies, labs and field exercises. Prerequisite: GEOG 2472 (preferred), or six hours of physical or life science or permission of instructor.

3470. Quantitative Methods in Geography. 4(3-3)

Quantitative methods commonly used to describe, characterize, model, and analyze geospatial data. Geographic data description and summary, used in inferential statistics as exploratory and descriptive tools, different spatial statistics to explore geographic patterns, geographical correlation analysis, and geo-spatial regression analysis. Prerequisite: junior standing.

4305. Geographic Research Methods. 3(3-0)

Review of scientific techniques used in geographic research, independent review of literature, and a research problem yielding a formal report on the research. Prerequisites: senior standing and 12 hours in geography and geology.

4420. Special Topics in Geoscience. V:1-4

Concepts, developments or discoveries in geography. May be repeated for a maximum of six semester hours credit. Prerequisite: 12 semester hours of geography and/or geology.

4429. Advanced Geographic Information Systems. 4(3-3)

Advanced techniques and applications of Geographic Information Systems. GIS data structure and conversions, advanced spatial analysis, data visualization, hydrological modeling. Basic and intermediate GIS programming for customizing and manipulating GIS applications. May be used as a geology credit. Prerequisite: GEOG 2472 or permission of instructor.

4435. Remote Sensing. 4(3-3)

The technology and interpretation of aerial photography and satellite imagery, including multi-spectral, thermal and radar images. Digital image processing using a raster geographic information system. Applications of remote sensing and guided projects in areas of student interest. May be used as a geology credit. Prerequisite: MATH 1314 and 6 hours of science, engineering or agriculture.

4436. Advanced Remote Sensing. 4(3-3)

Advanced topics in remote sensing. Recently emerged remote sensing systems, including high-resolution multi-spectral imaging systems, thermal remote sensing, and airborne LiDAR remote sensing systems. Cutting-edge remote sensing data processing and analysis techniques. May be used as Geology credit. Prerequisite: GEOG 4435 or equivalent.

4441. GIS for Business. 4(3-3)

GIS and spatial analysis applied to organizations. Geographic Information, locational decision-making, spatial data, investment in and value of GIS, ethical aspects and GIS strategies. Case studies and lab practice with spatial data. Prerequisite: GEOG 2472.

GEOLOGY (GEOL)

1101. Earth Science I Laboratory. (GEOL 1101) 1(0-2)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. Reinforces and promotes greater understanding of concepts of presented in GEOL 1301. Prerequisite: credit or registration in GEOL 1301.

1102. Introduction to Oceanography, Astronomy and the Atmosphere Laboratory. (GEOL 1102) 1(0-2)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. Reinforces and promotes greater understanding of concepts of the oceans, the hydrosphere and atmosphere and astronomy as presented in GEOL 1302. Prerequisite: credit or registration in GEOL 1302.

1103. Physical Geology Laboratory. (GEOL 1103) 1(0-2)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes greater understanding of earth materials and the physical processes at work on and in the earth. Prerequisite or corequisite: GEOL 1303.

1104. Historical Geology Laboratory. (GEOL 1104) 1(0-2)

A laboratory experience that focuses on laboratory techniques, data collection and analysis. The experience reinforces and promotes greater understanding of the events and processes that have shaped the earth and influenced the development of life through time. Prerequisite or corequisite: GEOL 1304.

1131. Introduction to Forensic Geology Laboratory. 1(0-2)

Analyses of soil, sand, minerals, gemstones, rocks, glass, and metal using analytical equipment. Hands-on experience identifying rocks and minerals. Field use of GPS units and mapmaking to solve forensic problems. Prerequisite: Credit for/or registration in GEOL 1331.

1301. Earth Science I. (GEOL 1301) 3(3-0)

Study of earth and the concepts and physical properties responsible for its problems including volcanoes, earthquakes, floods and droughts. Includes the study of plate tectonics, physical geology and geomorphology. Field trips may be arranged. Designed for students not majoring in science or engineering.

1302. Introduction to Oceanography, Astronomy and the Atmosphere. (GEOL 1302) 3(3-0)

Survey of earth's dynamic systems: the oceans, the hydrosphere and the atmosphere. Survey of astronomy emphasizing earth's place in the universe. Field trips may be arranged. Designed for students not majoring in science or engineering. Open to geosciences majors.

1303. Physical Geology. (GEOL 1303) 3(3-0)

General composition and form of the earth's surface and the volcanic, erosional, depositional and deformational processes which operate on it. The properties of the interior of the earth inferred from earthquakes and other external evidence. Occasional field trips may be arranged.

1304. Historical Geology. (GEOL 1304) 3(3-0)

The important change through which the earth has passed since its origin as a planet; especially, the history of the orderly evolution of life and physical features evidenced in the rocks of the earth. Field trip and field trip fee required. Prerequisite: GEOL 1303.

1331. Introduction to Forensic Geology. 3(3-0)

Principles and methods of forensic geosciences. Analysis of soil, sand, minerals, gemstones, rocks, glass, and metal. Application of forensic science to solve crimes. Introduces GPS and forensic interpretation of maps.

2376. Nature of the Earth and Universe. 3(3-2)

Survey of the basic concepts of geosciences. This course begins with an introduction to astronomy and the Earth's position in our solar system. The course includes the interrelationships between the solid portion, hydrosphere, atmosphere and biosphere of the Earth. Prerequisites: BIOL 2375 and CHEM 1376.

3107. Field Geology Laboratory. 1(0-3)

Methods of collection of geological field data and its presentation; proper use of geological field and lab equipment and instruments; interpretation of various types of map systems. Overnight camping field trip required, and local mini-field trip reports. Field trip fee required. Prerequisite: Credit or registration in GEOL 3307, or permission of instructor.

3170. Introduction to Geophysics Laboratory. 1(0-3)

Structure of the earth, plate tectonics, and sea-floor spreading. Principles of seismology, gravity, heat flow, geomagnetism, and rock magnetism. Prerequisite: registration or credit in GEOL 3370.

3305. Environmental Geology. 3(3-0)
The relationship between humans and their geologic environment. Reviews and builds on principles of physical geology to understand the geology of the present, as distinct from that of the distant past. Relevant examples from South Texas environmental geologic research are included. Prerequisite: GEOL 1303 or permission of instructor.

3307. Field Geology. 3(3-0)
Geologic mapping on topographic maps and aerial photographs. Interpretation of field relationships. Basic topographic surveying methods and measurements using the Global Positioning System (GPS). Prerequisite: GEOL 1304/GEOL 1104. Concurrent enrollment in GEOL 3107 recommended.

3370. Introduction to Geophysics. 3(3-0)
Application of classical physics to the study of the Earth and the solution of problems in Earth sciences. Geomagnetism, the Earth's gravitational field, seismic analysis, sequence stratigraphy, well log interpretation and applications to petroleum exploration. Prerequisites: GEOL 1301/GEOL 1103, PHYS 2325/PHYS 2125, PHYS 2326.

3409. Mineralogy. 4(3-3)
Morphological crystallography and symmetry concepts. Methods of identification of minerals by their physical and chemical properties. Origin of economic minerals and ore deposits. Geological significance of common rock-forming minerals. One weekend field trip required. Field trip fee required. Prerequisites: GEOL 1303/GEOL 1103 and 3 hours of chemistry.

3411. Petrology. 4(3-3)
Classification and origin of igneous, sedimentary and metamorphic rocks. Laboratory emphasis on identification and interpretation of hand specimens. One weekend field trip required. Field trip fee required. Prerequisite: GEOL 3409.

3431. Stratigraphy and Sedimentology. 4(3-3)
Study of the composition, environment, sequence and correlation of stratified rocks. Field trip and field trip fee required. Prerequisites: GEOL 1303/GEOL 1103 and GEOL 1304/GEOL 1104.

3445. Oceanography. 4(3-3)
Methods and principles of oceanography. The physical and chemical properties of the seas, life in the sea and a comprehensive treatment of marine geology. Field trip and field trip fee required. Prerequisite: GEOG 1301/GEOG 1101 or GEOL 1303/GEOL 1103 or GEOL 1301/GEOL 1101. May be used for geography credit.

3446. Computational Methods of Geosciences. 4(3-3)
Time series analysis, autocorrelation, cross-correlation, Fourier transform, Z transform, filtering, deconvolution, wave equation migration, forward and inverse problems, finite difference methods, and tomography. Prerequisites: GEOL 3370/3170; MATH 3320.

3481. Structural Geology. 4(3-3)
The inherent and imposed structures in rocks and their modes of formation. Mechanical principles of rock deformation, petrofabrics, regional structural interpretation, theories of mountain building and geotectonics. Field trip and field trip fee required. Prerequisites: GEOL 1303/GEOL 1103 and GEOL 1304/GEOL 1104.

4107. Applied Geology Laboratory. 1(0-3)
Laboratory course to accompany GEOL 4307. Field and laboratory applications of geological concepts in solving geological engineering problems. Study of engineering principles and properties of earth materials. Exploration of engineering design and methods of site investigations. Prerequisite: registration or credit in GEOL 4307.

4175. Seismology Laboratory. 1(0-3)
Interpretation of the spatial component of three-dimensional seismic data. Identification of faults and horizons within real-world volumes. Data loading, preparation, and examination, along with correlation of interpretation to geologic well control. Emphasis on the application of seismic interpretation to hydrocarbon exploration. Prerequisite: registration or credit GEOL 4375.

- 4213. Industry Geotechnical Training. [WI]** 2(0-8)
Industrial geologic field methods and techniques. Becoming familiar with local geologic employment situations through intern-type experiences. Typically scheduled in Winter Intersession with daily daylong activities; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3407, GEOL 3411 and GEOL 3481 recommended. Activity fee.
- 4307. Applied Geology.** 3(3-0)
Applications of geological concepts in solving geological engineering problems. Study of engineering principles and properties of earth materials. Exploration of engineering design and methods of site investigations. Prerequisites: GEOL 1303, MATH 1316 and CHEM 1111/CHEM 1311.
- 4311. Field Course I (WI)** 3(0-12)
Geologic field methods and techniques. Includes the use and maintenance of field equipment; measurement, description, and interpretation of stratigraphic sections; identification and interpretation of field relationships of sedimentary rock; preparation of geological field reports. Typically scheduled in Spring Intersession with daylong activities daily; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3407, GEOL 3411, and GEOL 3481 recommended.
- 4312. Field Course II (WI)** 3(0-12)
Geologic field methods and techniques. Includes the use and maintenance of field equipment; identification and interpretation of field relationships and igneous and metamorphic rocks; preparation of geological field reports. Typically scheduled in Summer Intersession with daylong activities daily; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3407, GEOL 3411, and GEOL 3481 recommended.
- 4325. Aqueous Geochemistry.** 3(3-1)
Introduces the processes controlling the chemical composition of surface and groundwater. Prerequisites: GEOL 1303/GEOL 1103, CHEM 1111, CHEM 1112, CHEM 1311 and CHEM 1312.
- 4375. Seismology.** 3(3-0)
Basics of seismology, starting with wave propagation, seismic reflection and refraction. The physics of determining the seismic velocity and anisotropy structure of the Earth, Earthquake generation, post-seismic deformation and creep events and their relation to faulting and plate tectonics. Prerequisites: GEOL 1303/GEOL 1103, GEOL 3370, PHYS 2325/PHYS 2125, PHYS 2326.
- 4395. Special Problems.** V:1-3
Supervised individual research of a geological problem that meets the needs and interest of the student. May be repeated for a maximum of 3 semester hours credit. Prerequisite: 18 semester hours of geology prior to registration.
- 4405. Senior Research Project.** 4(3-3)
Collaborative research project involving the student and a geology faculty member, focused on a topic that requires mastery of geologic knowledge appropriate to the student's plans for a professional career or advanced study in the field. Prerequisite: senior standing in geology. Activity fee, \$10.
- 4420. Special Topics in Geoscience.** 4(3-3)
One or more important concepts, developments or discoveries in geology. May be repeated once for credit. Field trip and field trip fee required. Prerequisite: 12 semester hours of geography and/or geology.
- 4425. Hydrogeology.** 4(3-2)
Principles of fluid, mass and energy transport in geologic formations are emphasized to handle human affair problems such as water supply, contamination and energy resources. Prerequisite: GEOL 1303/GEOL 1103 and GEOL 1304/GEOL 1104.
- 4441. Non-Seismic Geophysical Exploration.** 4(3-3)
Overview of gravity, magnetism, and other geophysical properties applied to exploration. Focus in on acquiring, processing, and interpreting non-seismic geophysical data and on integration of raw data with other geophysical and geologic data. Prerequisites: GEOL 3370/3170; GEOL 3446.

4615. Geology Field Camp. [WI] 6(1-15)

Geologic field methods and techniques. Includes the use and maintenance of field equipment; measurement, description and interpretation of stratigraphic sections; identification and interpretation of field relationships of various rocks; preparation of geological field reports. Typically scheduled in summer with daily day-long activities; special travel charges may apply. Prerequisites: GEOL 3431 and approval of instructor; GEOL 3307/GEOL 3107, GEOL 3411 and GEOL 3481 recommended. Activity fee of \$80.00.

PHYSICS (PHYS)

1101. College Physics I Laboratory. (PHYS 1101) 1(0-4)

A laboratory course to accompany PHYS 1301. Prerequisite: credit or registration in PHYS 1301.

1102. College Physics II Laboratory. (PHYS 1102) 1(0-4)

A laboratory course to accompany PHYS 1302. Prerequisite: credit or registration in PHYS 1302.

1103. Stars and Galaxies Laboratory. (PHYS 1103) 1(0-3)

A laboratory course to accompany PHYS 1303. Prerequisite: credit or registration in PHYS 1303.

1104. Solar System Laboratory. (PHYS 1104) 1(0-3)

A laboratory course to accompany PHYS 1304. Prerequisite: credit or registration in PHYS 1304.

1301. College Physics I. (PHYS 1301) 3(3-0)

A trigonometry-based introduction to physics. Topics include kinematics, vector analysis, force dynamics, equilibrium, work, energy, momentum, collisions, fluid dynamics and thermal physics. Prior knowledge of physics (one year of high school physics; otherwise PHYS 1373 is recommended) is assumed. Prerequisites: MATH 1314 and MATH 1316. Concurrent enrollment in PHYS 1101 is recommended.

1302. College Physics II. (PHYS 1302) 3(3-0)

A continuation of PHYS 1301. Topics include periodic motion, sound, electric force, electric current, resistance, electric circuits, magnetism, electromagnetic induction, AC circuits, light and optics. Prerequisite: PHYS 1301 and PHYS 1101. Concurrent enrollment in PHYS 1102 is recommended.

1303. Stars and Galaxies. (PHYS 1303) 3(3-0)

A survey of stellar astronomy and cosmology. Topics include the behavior of light; the sun as a star; positions, motions and brightness of the stars; stellar evolution; the Milky Way and other galaxies; and cosmology. Concurrent enrollment in PHYS 1103 is recommended.

1304. Solar System. (PHYS 1304) 3(3-0)

A survey of the astronomy of our solar system. Topics include the history of astronomy, naked-eye phenomena, telescopes, gravity and orbits and the nature and history of the Earth, moon, planets, asteroids and comets. Concurrent enrollment in PHYS 1104 is recommended.

1373. Preparatory Physics. 3(3-0)

Topics needed to succeed in College Physics or University Physics. Problem solving using basic techniques of algebra and trigonometry. Topics include vector mechanics, linear and two-dimensional kinematics and Newtonian dynamics.

1375. Physics. 3(3-2)

A survey of the most basic concepts of physics. Topics include scientific measurements, motion, momentum, energy, gravitation, matter, heat, electricity, magnetism, sound, light, atomic structure and nuclear energy. Prerequisite: MATH 1314.

1471. The Acoustical Foundations of Music. 4(3-2)

A general introduction and survey of the physical and acoustical foundations of music. Topics include the fundamental physics relevant to music, the reception of musical sound, intervals, scales, tuning, temperament, auditorium and room acoustics and the production of sounds by musical instruments including electronic.

- 2125. University Physics I Laboratory.** (PHYS 2125) 1(0-4)
A laboratory course to accompany PHYS 2325. Prerequisite: credit or registration in PHYS 2325.
- 2126. University Physics II Laboratory.** (PHYS 2126) 1(0-4)
A laboratory course to accompany PHYS 2326. Prerequisite: credit or registration in PHYS 2326.
- 2174. Physics Forensics Lab.** 1(0-4)
Physics laboratory in mechanics, including ballistics and other topics relating to forensics. Falling objects, momentum, thermodynamics as relating to burning materials, and electric phenomena such as bomb detonators. Prerequisites: PHYS 1375 or permission of instruction. For minors of forensics sciences, credit or registration in CRIJ 3250 required.
- 2325. University Physics I.** (PHYS 2325) 3(3-0)
A calculus-based introduction to physics. Topics include kinematics, vector analysis, force dynamics, equilibrium, work, energy, momentum, collisions, fluid dynamics and thermal physics. Prior knowledge of physics (one year of high school physics; otherwise PHYS 1373 is recommended) is assumed. Prerequisite: credit or registration in MATH 2413 or equivalent. Concurrent enrollment in PHYS 2125 is recommended.
- 2326. University Physics II.** (PHYS 2326) 3(3-0)
A continuation of PHYS 2325. Topics include periodic motion, sound, electric force, electric current, resistance, electric circuits, magnetism, electromagnetic induction, light, optics and modern physics. Prerequisites: PHYS 2325 and PHYS 2125 or PHYS 1302 and PHYS 1102; credit or registration in MATH 2414 or equivalent. Concurrent enrollment in PHYS 2126 is recommended.
- 3310. Advanced Physics Laboratory.** 3(1-4)
A laboratory course focusing on advanced techniques and experiments drawn from the full range of physics classes. The student will understand the role of experimental design, advanced data analysis and reduction, and the use of computers while investigating physical phenomena. Prerequisite: credit or registration in PHYS 3343.
- 3313. Mechanics I.** 3(3-0)
A mathematical treatment of the fundamentals of classical mechanics. Topics include particle dynamics in one, two and three dimensions; conservation laws; dynamics of a system of particles; motion of rigid bodies; central force problems; accelerating coordinate systems; gravitation; Lagrange's equations and Hamilton's equations. Prerequisites: PHYS 2326/PHYS 2126; credit or registration in either MATH 3320 or MATH 3415.
- 3323. Electromagnetic Field Theory.** 3(3-0)
Electrostatics; Laplace's Equation; the theory of dielectrics; magnetostatics; electromagnetic induction; magnetic fields of currents; Maxwell's equations. Prerequisites: PHYS 2326/PHYS 2126; credit or registration in MATH 3320 or MATH 3415 or equivalent.
- 3333. Thermodynamics.** 3(3-0)
Equations of state, ideal gases, first and second laws of thermodynamics, entropy, and statistical methods. Prerequisites: PHYS 2326 and PHYS 2126; credit or registration in MATH 3415 or equivalent.
- 3343. Modern Physics I.** 3(3-0)
Introduction to special relativity and elementary quantum mechanics. Topics include space-time, relativistic energy and momentum, the uncertainty principle, Schrödinger's equation, observables and operators, bound states, potential barriers and the hydrogen atom. Prerequisites: PHYS 2326 and PHYS 2126; credit or registration in either MATH 3320 or MATH 3415 or equivalent.
- 4160. Nuclear Physics Laboratory.** 1(0-4)
Laboratory study of natural and artificial radioactivity and particle physics. Particle physics detectors, such as Geiger-Müller, sodium-iodide, plastic scintillation and solid state detectors. Detector resolution, radioactive half-life, muon lifetime, energy of particles and gamma rays and coincidence measurements. Prerequisite: credit or registration in PHYS 4360.

- 4191. Physics Research Project.** 1(1-0)
Literature survey and preparation for, and initiation of, a research project agreed to between the student and a faculty advisor, to be completed and reported on in the Research Seminar course. Prerequisite: PHYS 3343.
- 4192. Physics Research Seminar.** 1(1-0)
An experimental or theoretical project, begun in the Research Project course, will be concluded by the student and the results reported in a seminar. Students who have not yet taken the ETC major field test in physics are required to do so while enrolled in Seminar. Prerequisite: PHYS 4191.
- 4303. Mathematical Methods of Physicists and Engineers.** 3(3-0)
Mathematical techniques from the following areas: infinite series, integral transforming, applications of complex variables, vectors, matrices and tensors, special functions, partial differential equations, Green's functions, perturbation theory, integral equations, calculus of variations and groups and group representations. Prerequisite: credit or registration in MATH 3320.
- 4323. Optics.** 3(3-0)
A mathematical treatment of the modern theory of optics. Topics include Huygen's principle as applied to geometric optics, interference, diffraction, polarization, crystal optics, electromagnetic theory of light, the interaction of light with matter and quantum optics. Prerequisite: MATH 3415 or MATH 3320, PHYS 3323;
- 4343. Modern Physics II.** 3(3-0)
Continuation of Modern Physics I. Topics include atomic, molecular, nuclear, statistical, solid state, laser and elementary particle physics. Prerequisites: MATH 3415 or MATH 3320, PHYS 3343.
- 4353. Quantum Physics.** 3(3-0)
The Schrödinger equation; one dimensional systems; the Heisenberg uncertainty principle; magnetic moments and angular momentum; two and three dimensional systems; approximation methods; scattering theory. Prerequisites: PHYS 3343; credit or registration in either MATH 3320 or MATH 3415 or equivalent.
- 4360. Nuclear Physics.** 3(3-0)
Study of nuclear phenomena and properties including mass, stability, magnetic moment, radioactive decay processes and nuclear reactions. The application of nuclear principles to other fields such as astronomy, engineering, manufacturing and medicine. Prerequisites: PHYS 3343; credit or registration in both PHYS 4353 and either MATH 3320 or MATH 3415.
- 4370. Geophysics.** 3(3-0)
Fundamentals of the mechanics of geophysics. Study of the instruments and methods used in geophysical exploration. Prerequisite: 6 semester hours of advanced physics and/or engineering.
- 4383. Computational Physics.** 3(3-0)
An introduction to the methods and algorithms used in solving physical problems with computers, and computer-related limitations on such solutions. Prerequisites: knowledge of the C programming language; credit or registration in MATH 3320 or MATH 3415.
- 4390. Selected Topics in Modern Physics.** 3(3-0)
A detailed study of one or more important physical discoveries, developments and/or theories. Course may be repeated for credit. Prerequisite: senior standing.

**Degree Requirements
Bachelor of Science
Geology**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	GEOG 3421	4	GEOL 3407/	4
GEOL 1303/1103	4	GEOL 1304/1104	4	GEOL 3409	4	GEOG 3450	
HIST 1301	3	HIST 1302	3	GEOL 3431	4	GEOL 3411	4
UNIV 1101	1	UNIV 1102	1	+Minor	<u>3</u>	GEOL 3481	4
[^] <i>Creative arts</i>	<u>3</u>	[^] <i>Communications</i>	<u>3</u>		15	GEOL 4311*	<u>3</u>
	14		14				15
Sophomore Year				Senior Year			
GEOG 2472	4	CHEM 1311/1111	4	GEOG 4435	4	GEOL 4213	2
MATH 2413	4	POLS 2302	3	GEOL 4312	3	GEOG or GEOL, adv.	4
POLS 2301	3	[^] <i>Social/Behavioral</i>	3	PHYS 2325/2125	4	GEOL, adv.	3
[^] <i>Lang/Phil/Culture</i>	<u>3</u>	Elective	3	Minor+	3	Minor, adv.+	3
	14	Minor+	<u>3</u>	Minor or Elective+	<u>3</u>	Minor, adv.+	<u>3</u>
			16		17		15
						Total Hours Required	120

*Usually offered in Intersession

+Or any other mathematics, natural science, engineering or computer science course, provided a recognized minor is completed. Courses in other supporting areas may also be substituted with departmental approval. Non-advanced courses may be substituted for those marked "adv." provided the student will otherwise complete 45 advanced hours including those required in a minor.

**Degree Requirements
Bachelor of Science
Geology
(Concentration in Geosciences)**

Freshman Year				Junior Year			
ENGL 1301	3	CHEM 1311/1111	4	GEOG 3421	4	GEOG 3305	3
GEOL 1303/1103	4	ENGL 1302	3	GEOL 3445	4	GEOL 3431	4
MATH 2413	4	GEOL 1302/1102	4	Minor+	3	GEOL 3445	4
UNIV 1101	1	GEOL 1304/1104	4	Minor+	<u>3</u>	Minor+	<u>3</u>
[^] <i>Creative arts</i>	<u>3</u>	UNIV 1102	<u>1</u>		14		14
	15		16				
Sophomore Year				Senior Year			
HIST 1301	3	GEOG 1301/1101	4	GEOG 4429	4	GEOG 4435	4
PHYS 1301/1101*	4	HIST 1302	3	GEOL/GEOG, adv.	4	GEOL 4405	4
POLS 2301	3	POLS 2302	3	Minor, adv.+	3	GEOL 4425	4
[^] <i>Lang/Phil/Culture</i>	3	[^] <i>Communications</i>	3	Minor, adv.+	<u>3</u>	Minor, adv.+	<u>3</u>
[^] <i>Social/Behavioral</i>	<u>3</u>	Elective	<u>3</u>		14		15
	16		16				
						Total Hours Required	120

*Or PHYS 2325/2125. Required for physics minor; recommended for those interested in geophysics.

+Or any other mathematics, natural science, engineering or computer science course, provided a recognized minor is completed. Courses in other supporting areas may also be substituted with departmental approval. Non-advanced courses may be substituted for those marked "adv." provided the student will otherwise complete 45 advanced hours including those required in a minor.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Geology with Teaching Certification (Science 8-12)**

Freshman Year			Junior Year				
ENGL 1301	3	BIOL 1306/1106	4	CHEM 1312/1112	4	EDED 3302	3
GEOL 1303/1103	4	ENGL 1302	3	EDED 3310	3	EDED 3333	3
HIST 1301	3	GEOL 1304/1104	4	GEOG 3421	4	GEOL 3407	4
MATH 1316*	3	MATH 1348*	3	GEOL 3409	4	GEOL 3431	4
UNIV 1101	1	UNIV 1102	1		15	PHYS 1302/1102**	4
<i>^Creative arts</i>	3		15				18
	17						
Sophomore Year			Senior Year				
BIOL 1307/1107	4	CHEM 1311/1111	4	EDED 3332	3	EDED 4623	6
GEOG 1303	3	COMS 1311	3	EDED 3362	3	EDRG 4314	3
HIST 1302	3	POLS 2302	3	GEOG 1301/1101	4	EDSE 4349	3
PHYS 1301/1101**	4	SOCI 2361	3	GEOL 3481	4		12
POLS 2301	3	<i>^Lang/Phil/Culture</i>	3		14		
	17		16				
						Total Hours Required	124

*Or any more advanced MATH course, provided the *^Mathematics* requirement is satisfied.

**Or PHYS 2325/2125 and PHYS 2326/2126, if MATH 2413 and MATH 2414 are included. Recommended for those interested in geophysics.

**Degree Requirements
Bachelor of Science
Geology
(Concentration in Geophysics)
(Minor in Mathematics)**

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	GEOL 3370/3170	4	GEOL 3411	4
GEOL 1303/1103	4	GEOL 1304/1104	4	GEOL 3409	4	GEOL 3446	4
HIST 1301	3	HIST 1302	3	GEOL 3431	4	GEOL 3481	4
UNIV 1101	1	MATH 2413	4	MATH Elective	4	GEOL 4311*	3
<i>^Creative arts</i>	3	UNIV 1102	1		16		15
	14		15				
Sophomore Year			Senior Year				
CHEM 1311/1111	4	CHEM 1312/1112	4	GEOL 4312*	3	GEOL 4307/4107	4
MATH 2414	4	GEOG 2472	4	GEOL 4375/4175	4	GEOL 4441	4
PHYS 2325/2125	4	MATH 3320	3	MATH, adv.	3	POLS 2302	3
POLS 2301	3	PHYS 2326/2126	4	<i>^Communications</i>	3	<i>^Social/Behavioral</i>	3
	15		15	<i>^Lang/Phil/Culture</i>	3		14
					16		
						Total Hours Required	120

*Offered in Intersession and Summer I.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Physics**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	PHYS 3313	3	PHYS 3310	3
HIST 1301	3	HIST 1302	3	PHYS 4303	3	PHYS 3323	3
MATH 2413	4	MATH 2414	4	Elective	3	Elective	3
PHYS 2325/2125	4	PHYS 2326/2126	4	Elective	3	Minor+	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	Minor+	<u>3</u>	Minor+	<u>3</u>
	15		15		15		15
Sophomore Year				Senior Year			
MATH 3415	4	CSEN 2304	3	PHYS 3333	3	PHYS 4192	1
PHYS 3343	3	MATH 3320	3	PHYS 4191	1	PHYS 4360	3
POLS 2301	3	POLS 2302	3	PHYS 4353	3	Minor, adv.+	3
[^] Communications	3	[^] Creative arts	3	Elective	3	Minor, adv.+	3
[^] Social/Behavioral	<u>3</u>	[^] Lang/Phil/Culture	<u>3</u>	Minor+	3	PHYS, adv.	<u>3</u>
	16		15	PHYS, adv.	<u>3</u>		13
					16		
Total Hours Required						120	

+Or any other mathematics, natural science, engineering or computer science course, provided a recognized minor is completed and the student will complete 45 advanced hours including those required in a minor. Courses in other supporting areas may also be substituted with departmental approval.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF PSYCHOLOGY AND SOCIOLOGY

Richard Miller, *Chair*

Manning Hall 120. MSC 177. Extension 2701.

Professors

Chen, Daughtry, Green, Miller

Associate Professor

Byrd, Guerrero, Hannon, Hodges, Reiser-Robbins, Wark

Assistant Professors

Blake, Han, Kwon, Ngo

Lecturers

Bernal-Marichalar, Collette, Diaz-Carrasco, Garcia, Garza, McClendon, Pardo, Smith, Stephens

Faculty Emeritus

Bittinger, Juárez

The Department of Psychology and Sociology is committed to the goals of a liberal education emphasizing human growth and intellectual development through an understanding of individual behavior, social interaction and cultural awareness. The various programs in the department are geared specifically toward the professional preparation of social scientists and practitioners in the areas of human development, gender and minority relations, families and children, Mexican American culture and folklore, U.S.-Mexico borderlands studies, abnormal and deviant behavior, counseling and criminology. Opportunities for undergraduate research and service learning are provided.

The department promotes critical analyses and creative approaches surrounding the well-being of South Texas. It provides a comprehensive level of quality instruction, research and community involvement. By doing so it supports the academic, research and service goals of the College of Arts and Sciences and the mission of the University.

The department offers majors and minors in Criminology, Psychology, Sociology; and minors in Anthropology, Mexican American Studies and Southwest Borderlands Studies.

For the Bachelor of Arts in Psychology, students are required to pass an exit exam before graduation. The exam is scored on a pass/fail basis. A score of 70% or higher is passing. Students will not be allowed to take the exam until the semester they expect to graduate. Students failing the exam will have the option of retaking the exam in the following semester or taking an essay style examination. The essay exam will be designed by the undergraduate psychology faculty to address those core areas needing remediation and must be completed prior to graduation. The essay exam is administered and evaluated by the undergraduate psychology faculty. The exam is graded on a pass/fail basis and students must receive a pass from a majority of the faculty in order to graduate.

ANTHROPOLOGY (ANTH)

2301. Introduction to Archeology. (ANTH 2302) 3(3-0)

General introduction to the field of archeology. Emphasis on methods of data collection, analysis and a world review of major events in the development of past human civilizations.

2302. Introduction to Anthropology. (ANTH 2346) 3(3-0)

Major aspects of culture (social organization, economics, religion, etc.); cultural patterns and sociocultural change; prehistory of humans and the development of their culture.

2303. Introduction to Physical Anthropology. (ANTH 2301) 3(3-0)

An introduction to the origins and evolution of humans as reconstructed from the fossil record and from patterns of anatomical, behavioral and genetic similarity among living primates.

3301. American Cultures Before 1492. 3(3-0)

Development of Native American cultures (Maya, Inca, Aztec and related cultural traditions) of U.S., Mexico, Central and South America before Spanish, English and French conquest. Optional field trip when possible. Prerequisite: 3 semester hours of anthropology/southwest borderlands studies or 6 semester hours of social science.

- 3302. Principles of Cultural Anthropology.** 3(3-0)
Major approaches in the field of cultural anthropology and the major influences on the discipline; introduction to research methodology used in both primitive and modern societies. Prerequisite: 3 semester hours of anthropology or 6 semester hours of social science.
- 3304. Fundamentals of Archaeology.** 3(3-0)
Methods of data collection, analysis and theory in anthropological archaeology. Case studies of cultural development in selected ancient and historic societies. Prerequisite: 6 semester hours of social science.
- 4301. Social Theory.** 3(3-0)
Development of social theory as represented by Comte, Spencer, Durkheim and Weber, to contemporary schools of thought, including functionalism, conflict, symbolic interactionism, structuralism and world systems theory. Prerequisite: ANTH 2302 or SOCI 1301 and 6 semester hours of advanced anthropology or sociology. (Credit may not be obtained in both ANTH 4301 and SOCI 4383.)
- 4303. Folk Medicine.** 3(3-0)
An examination of the folk medical system of Mexican Americans from an anthropological perspective. Includes an exploration of household remedies (including herbal remedies), folk illness syndromes, various folk healers (including *parteras*, or midwives, and *sobadores*, or massagers), *curanderismo* (folk healing) and *brujeria* (witchcraft) in present-day Mexican American culture in South Texas and the Southwest. Prerequisite: 3 semester hours of anthropology/southwest borderlands studies or 6 semester hours of social science.
- 4305. Language and Culture.** 3(3-0)
Introduction to the social and cultural aspects of language and provides framework and methodology for studying and analyzing the many elements which make up verbal and nonverbal communication in various speech communities in the United States. Prerequisite: 3 semester hours of anthropology/southwest borderlands studies or 6 semester hours of social science.
- 4308. Latin American Culture.** 3(3-0)
Origin and development of contemporary cultural forms in Latin America. Industrialization, socioeconomic and demographic change are examined from several theoretical perspectives. Prerequisite: 3 semester hours of anthropology/southwest borderlands studies or 6 semester hours of social science.
- 4309. Mexican Border Subcultures.** 3(3-0)
Analysis of social processes such as competition, accommodation and cooperation occurring in the American Southwest and in Northern Mexico, with attention to such variables as ethnicity and stratification. Prerequisite: 3 semester hours of anthropology/southwest borderlands studies or 6 semester hours of social science.
- 4348. Multicultural Groups in the United States.** 3(3-0)
Issues of multicultural groups with salient ethnic characteristics; analysis of concepts of ethnic identity and belonging, and examination of the dynamics of group cohesion within political, economic, social, and immigration contexts. Prerequisite: junior standing or approval of the instructor. (Credit may not be given for both ANTH 4348 and SOCI 4348.)
- 4350. Selected Topics in Anthropology.** 3(3-0)
Literature and research in anthropological areas not otherwise treated in depth in available courses. May be repeated once for credit when topics differ. Prerequisite: ANTH 2302 or SOCI 1301 and 6 semester hours of social science.
- 4362. Race Relations.** 3(3-0)
Critical analysis of the concept of race, analysis of subordinate peoples in the United State and around the world. Emphasis on dynamics of problems of subordinate groups. Prerequisite: 6 semester hours of anthropology or sociology. (Credit may not be given for both ANTH 4362 and SOCI 4362.)
- 4382. Methods of Social Research.** 3(3-0)
Introduction to the study of the scientific method as applied to social research, including the logic of science, covering the nature of data, hypotheses, concepts and objectivity. Prerequisites: ANTH 2302 or SOCI 1301 and 3

semester hours of advanced anthropology or sociology. (Credit may be obtained in only one of ANTH 4382, CRIM 4382 or SOCI 4382.)

4604. South Texas Field Archaeology. 6(3-V)

Data collection, analysis and theory in anthropological archaeology with direct field experience examining selected South Texas ancient and historic societies. Students required to camp on-site during the field school. Prerequisite: 6 semester hours of social science or consent of the instructor. Special field course fee required: \$300, subject to change.

CRIMINOLOGY (CRIM)

3302. Social Deviance. 3(3-0)

Survey of the sociological and psychological aspects of deviant behavior. Nature of deviance, types of deviant behavior, causal theories and social policy implications. Prerequisites: SOCI 1301 and 3 semester hours of criminology or sociology. (Credit may not be obtained in both CRIM 3302 and SOCI 3302.)

3320. Psychology of Criminal Behavior. 3(3-0)

Psychological processes related to behaviorism, social learning theory, aggression theory, bio-psychological factors, criminal homicide, sexual offenses, drugs and crime, correctional psychology, the criminal offender and the mentally disordered offender. Prerequisites: PSYC 2301 and SOCI 1301. (Credit may not be obtained in both CRIM 3320 and PSYC 3320.)

3321. Introduction to Criminology. 3(3-0)

Extent, types, causation, patterns and organization, apprehension, punishment treatment, agents and agencies related to crime and criminals, including experiences such as field trips and visits to jail may be included. Prerequisite: SOCI 1301. (Credit may not be obtained in both CRIM 3321 and SOCI 3321.)

3322. Juvenile Delinquency. 3(3-0)

Incidences, types, causation, patterns, processes, treatment agencies and research as related to juvenile delinquency. Selected practical experiences such as field trips to juvenile institutions. Prerequisite: SOCI 1301. (Credit may not be obtained in both CRIM 3322 and SOCI 3322.)

4320. Law and Society. 3(3-0)

An in-depth examination of law and society through the philosophy and evolution of legal systems and legal institutions. The major functions of law as agents of social control, dispute resolution and societal engineering are addressed. Prerequisites: SOCI 1301 and 3 semester hours of criminology or sociology. (Credit may not be obtained in both CRIM 4320 and SOCI 4320.)

4321. Criminological Theory. [WI] 3(3-0)

An overview of the principle theories of criminality and the application of these theories to contemporary crime issues. Prerequisite: CRIM 3321 or SOCI 3321.

4325. Sociology of Corrections. 3(3-0)

Overview of social psychological, cultural, sociological and political factors related to the correctional enterprise. Includes treatment of the context of corrections, correctional practices, correctional issues, correctional institutions and correctional perspectives. May include field trips to correctional institutions. Prerequisite: CRIM 3321 or SOCI 3321. (Credit may not be obtained in both CRIM 4325 and SOCI 4325.)

4326. Community Resources in Corrections. 3(3-0)

An analysis of correctional processes and facilities available at the community level. Topics include: probation, parole, diversion, halfway houses, community reintegration procedures, community treatment centers and volunteer programs. Emphasis is placed on social structure, functions and problems of community-based programs. May include practical experiences such as field trips. Prerequisites: CRIM 3321 and SOCI 1301.

4327. Organized Crime. 3(3-0)

Social structure and organizational factors leading to the development of organized criminal activity, as analyzed from a sociological perspective. The nature, extent, types, costs and structure of white-collar crimes will be treated.

Prerequisite: 6 semester hours of criminology.

4328. White Collar Crime. 3(3-0)
Types of white collar crime; the social structure and organizational factors leading to its development. Its nature, extent and costs, as well as society's response. Prerequisite: 6 semester hours of criminology.

4331. Constitutional Law. [WI] 3(3-0)
A survey of American constitutional law, using leading cases, both historic and contemporary, of the Supreme Court of the United States. Establishment of the federal political system for which the Constitution provided and the judicial allocations of political and economic power within that system. Prerequisite: 6 semester hours of political science. (Credit may not be obtained in both CRIM 4331 and POLS 4331.)

4332. Constitutional Law. [WI] 3(3-0)
A survey of American constitutional law, using leading cases, both historic and contemporary, of the Supreme Court of the United States. Matters of rights and liberties, their recognition and definition, policies of rights developed by the Supreme Court of the United States. Prerequisite: 6 semester hours of political science. (Credit may not be obtained in both CRIM 4332 and POLS 4332.)

4333. The American Judicial Process. 3(3-0)
The federal Judicial System in terms of structure, function and process with stress on court interaction at both intracourt and intersystem levels. Prerequisite: 6 semester hours of political science. (Credit may not be obtained in both CRIM 4333 and POLS 4333.)

4338. Police and Society. 3(3-0)
Types of policing agencies and police in contemporary American society, treated in terms of their nature, organization, functions, problems and components. Prerequisite: 6 semester hours of criminology.

4340. Topics in Criminology. 3(3-0)
Literature and research in the area of criminology not otherwise treated in depth in available courses. Topics will vary according to needs, interests and capability of the instructor. May be repeated once for credit when topic differs. Prerequisite: 6 semester hours of criminology.

4341. Organized and White-Collar Crime. 3(3-0)
An in-depth view of the social structural and organization factors leading to the development of organized and white collar criminal activity from a sociological perspective. The nature, extent, types, costs, structure and control of these crimes will be treated. Prerequisite: 6 semester hours of criminology.

4342. Substance Abuse. 3(3-0)
A general survey of current research on psychological, social, legal and situational factors involved in substance usage and its effect on human behavior and criminal activity. Includes a treatment of therapeutic procedures and facilities. Prerequisite: 6 semester hours of criminology or psychology. (Credit may not be obtained in both CRIM 4342 and PSYC 4342.)

4345. Victimology. 3(3-0)
An examination of the historical role of crime victims, nature of victimization in modern society, the victimization process, solutions to victimization and victim's rights. Emphasis given to the social, legal, psychological and societal aspects of victimization. Victim-offender interaction and societal response to victimization will also be treated. Prerequisite: 6 semester hours of social science.

4346. Gangs and Gang Behavior. 3(3-0)
Gangs and gang behavior from a cross-cultural perspective. The historical evolution of gangs in America and Europe. Emphasis on the causes, consequences and social control of gangs in relation to society. Prerequisite: 6 semester hours of criminology.

4348. Violence. 3(3-0)
Types of violence from a historical and cross-cultural perspective, identifying and delineating patterns of violent behavior. Social structure and culture are linked to violence and examined in the context of individuals, groups and societies. Emphasis is placed on the social control of violence. Prerequisite: 6 semester hours of criminology.

4382. Methods of Social Research. 3(3-0)
Introduction to the study of the scientific method as applied to social research including the logic of science, covering the nature of data, hypotheses, concepts and objectivity. Prerequisites: SOCI 1301 and 3 semester hours of sociology. (Credit may be obtained in only one of CRIM 4382, ANTH 4382 or SOCI 4382.)

4384. Directed Research in Criminology. V:1-3
Supervised research experience in criminology. Student will assist with a research project by working under the individual guidance of a faculty member. Requirements may include library research, data collection, data entry, statistical analysis and/or assistance in planning and conducting parts of a research project. A paper on the research experience is required. May be repeated for a maximum of 3 semester hours of credit. Prerequisites: SOCI 3381 or PSYC 3381, CRIM 4382 and 6 other semester hours of criminology; consent of instructor required. Credit/Non-credit.

MEXICAN AMERICAN STUDIES

A minor in Mexican American Studies requires eighteen (18) hours. This minor includes courses that focus on ancient and historic cultures, modern cultural studies, geography, history, music, political science, sociology, the Spanish language and Spanish literature, and regional studies of the Southwest Borderlands, which examine both sides of the U.S.-Mexico border.

SWBS 2301 is required of all persons taking this minor. Students may select from a list of additional courses to complete this minor. The list of applicable courses may be obtained from the program coordinator or department chair. No more than 9 semester hours in any discipline may apply toward the minor. Students may not count the same course toward both a major and a minor. Students should have all of the prerequisites or permission from the instructor. Course descriptions are available under each discipline prefix.

PSYCHOLOGY (PSYC)

2301. Introduction to Psychology. (PSYC 2301) 3(3-0)
Scientific method of psychology; psychological phenomena and basic processes necessary to understanding human behavior.

2305. Women's Issues in Health and Sexuality. 3(3-0)
Examines health and medical issues for women, legal and political realities that influence women's lives and important aspects of intimacy and sexuality with a focus on both physiological and psychological development. Credit can be received in only one of PSYC 2305, EDHL 2305 or WGST 2305.

2306. Human Sexuality. (PSYC 2306) 3(3-0)
Biophysical and psychological aspects of human sexuality. (Credit may not be obtained in both PSYC 2306 and SOCI 2306.)

2308. Child Psychology. (PSYC 2308) 3(3-0)
A scientific study of the child as a sentient organism. The best methods of child study; native and learned behavior patterns and their development; the nature, amount and significance of individual differences; typical and atypical child behavior; emotions; play; language; work in specific capacity and interest; growing personality. Prerequisite: PSYC 2301 and sophomore standing.

2314. Lifespan Development Psychology. 3(3-0)
Human growth and development through the prenatal, child, adolescent and adult stages of life. Physical, emotional, psychosocial and cognitive influences from conception to death will be addressed.

- 3301. Social Psychology.** 3(3-0)
Theory and phenomena of social psychology. The nature and type of social variables and the methods used to study them. The effect of social variables upon the behavior of individuals. Prerequisite: 6 semester hours of psychology or 12 hours of social science. (Credit may not be obtained in both PSYC 3301 and SOCI 3301.)
- 3303. Psychology of Personal Adjustment.** 3(3-0)
Adjustment problems of normal people. Principles of healthy psychological functioning in relation to family, peers, career, community and culture. Prerequisite: 6 semester hours of psychology.
- 3304. Introduction to Learning Psychology.** 3(3-0)
General principles of learning and memory and an introduction to learning theory. Emphasis on motivation, conditioning and problem-solving. Prerequisite: 6 semester hours of psychology.
- 3313. Psychology of Women. [WI]** 3(3-0)
An overview of the broad range of psychological issues and biological events which are of significant relevance to women. Explores the richness of the female experience in terms of changing values, attitudes and expectations. Prerequisite: 6 hours of psychology. (Credit may not be obtained in both PSYC 3313 and WGST 3313.)
- 3314. Psychology of Adolescence.** 3(3-0)
Treats the definition of adolescence, research and theory concerning the biological, moral, sex-role, personality and emotional development. Prerequisite: 6 semester hours of social science approved by the instructor.
- 3315. Health Psychology.** 3(3-0)
Examines and defines the nature of illness and healing through the integration of biophysiological, psychoneuroimmunological, psychological and environmental factors. Examines stress and stress management techniques. Prerequisites: 9 hours of social science and PSYC 2301.
- 3320. Psychology of Criminal Behavior.** 3(3-0)
Psychological processes related to behaviorism, social learning theory, aggression theory, bio-psychological factors, criminal homicide, sexual offenses, drugs and crime, correctional psychology, the criminal offender and the mentally disordered offender. Prerequisites: PSYC 2301 and SOCI 1301. (Credit may not be obtained in both PSYC 3320 and CRIM 3320.)
- 3325. Evolutionary Psychology.** 3(3-0)
Explores the extent to which the explanatory approaches of physical anthropology, based in modern evolutionary and genetic theory, can be usefully applied to the study of psychological traits. Grounding in biological theories, dissection of a wide range of psychological topics, including sensation and perception, consciousness, emotion and motivation, cognition, learning, individual differences, and social behaviors such as mating and parenting. Prerequisites: 9 semester hours of psychology.
- 3381. Statistics for the Behavioral Sciences.** 3(3-0)
Statistics for students in psychology, sociology and education. Emphasis upon descriptive and inferential techniques. Basic concepts in sampling data organization and statistic selection. Prerequisite: 6 semester hours of social science. (Credit may not be obtained in both PSYC 3381 and SOCI 3381.)
- 3387. Experimental Psychology. [WI]** 3(2-2)
Introduction to experimentation in psychology. Basic experiments will be performed on the discriminial process, motivation and learning. Prerequisites: 6 semester hours of psychology and PSYC 3381 or equivalent.
- 3482. Behavioral Statistics.** 4(4-0)
Statistics for students in Psychology, Sociology, and Criminology programs. Emphasis on descriptive and inferential techniques. Basic concepts in data sampling, data organization, statistic selection, and using statistical software. Prerequisite: 6 semester hours of social science. (Credit may not be obtained in more than one of the SOCI 3381, SOCI 3482, PSYC 3381, or PSYC 3482.)

- 3487. Experimental Psychology.** 4(3-2)
Introduction to experimentation in psychology. Basic experiments will be performed on the discriminative process, motivation, and learning. Prerequisites: 6 semester hours of psychology and one of the following: PSYC 3381, PSYC 3482, SOCI 3381, or equivalent.
- 4301. Cross-Cultural Psychology.** 3(3-0)
Psychological processes related to perception, cognition, human development, psychopathology, gender influences and social behavior from a cross-cultural perspective. Current theories, methods and research findings. Prerequisite: 12 semester hours of psychology. May be counted as any one of the following: ANTH 3301, ANTH 3302, or ANTH 4305, or PSYC 4301.
- 4302. Industrial Organizational Psychology.** 3(3-0)
Application of psychological principles to the world of work and to organizations. Topics include recruitment and selection of employees, evaluation of job performance, motivation, training, leadership, job satisfaction and work teams. Prerequisite: 12 semester hours of social science and senior standing.
- 4303. Environmental Psychology.** 3(3-0)
Relationships between people and the environments in which they live, work and play, from a broad interdisciplinary perspective encompassing psychology, sociology, urban planning, landscape architecture, public policy and public health. Prerequisite: 12 semester hours of psychology.
- 4304. Family Therapy.** 3(3-0)
An overview of family systems approaches to etiology and treatment. Family dysfunctions that result from drug and alcohol usage and other causes are emphasized. Prerequisite: 12 semester hours of psychology.
- 4305. Advanced Human Sexuality.** 3(3-0)
Psychosocial factors in human sexuality with emphasis on sexual adjustment, sexual dysfunctions, sexual variations and new approaches in sex therapy. Appropriate field trips may be included. Prerequisite: PSYC 2306 or SOCI 2306. (Credit may not be obtained in both PSYC 4305 and SOCI 4305.)
- 4308. Theory and Principles of Psychological Testing.** 3(3-0)
An introduction into the rationale of psychological measurement. Test construction, validity, reliability, standardization and statistical treatment of test results. Various accepted tests will be examined as they present measurement of significant individual characteristics. Prerequisite: 9 semester hours of Psychology, including PSYC 3381 or its equivalent.
- 4312. Physiological Psychology.** 3(3-0)
Introduction to the physiological substrata of behavior; including basic neuroanatomy, research techniques, basic physiology, sensory processes and central nervous system functions. Prerequisite: PSYC 2301.
- 4315. Selected Topics in Psychology.** 3(3-0)
Literature and research in areas of psychology not otherwise treated in depth in available courses. May be repeated once as topics change. Prerequisite: 12 semester hours of psychology.
- 4322. Psychology of Personality.** 3(3-0)
A comparison of personality theories and the implications for personality development and change. Prerequisite: 6 semester hours of psychology.
- 4323. History and Systems of Psychology.** 3(3-0)
Important historical antecedents and contemporary psychological systems. An exit course that integrates diverse material encountered in the discipline. Prerequisite: 6 semester hours of advanced psychology; senior standing.
- 4325. Abnormal Psychology.** 3(3-0)
Personality development and adjustment, causes of abnormal behavior, neuroses, psychoses, suicide, personality disorders and crime. Prerequisite: 6 semester hours of psychology.

4328. Psychology of Perception. 3(3-0)
Analysis of basic perceptual phenomena and theories of perception. Emphasis on sensation, attention, meaning and structural concepts. Prerequisite: 6 semester hours of psychology.

4329. Cognitive Psychology. 3(3-0)
Examination of current information-processing models of human cognition. Emphasis on the processes by which stimuli are identified, by which past information is retrieved and used, and by which one's knowledge is modified. Prerequisites: 12 semester hours of psychology.

4330. Biological Psychology. 3(3-0)
Explores brain-behavior relationships with special emphasis on clinical examples. How the brain and nervous system produce the human range of feelings and behaviors: sensation, emotion, sleep and dreams, reproductive behavior, language, and memory. Examples of dysfunction include depression, schizophrenia, eating disorders, sleep disorders, aggression, dyslexia and amnesias. Prerequisite: 12 semester hours of psychology.

4342. Substance Abuse. 3(3-0)
A general survey of current research on psychological, social, legal and situational factors involved in substance usage and its effect on human behavior and criminal activity. Includes a treatment of therapeutic procedures and facilities. Prerequisite: 6 semester hours of criminology or psychology. (Credit may not be obtained in both CRIM 4342 and PSYC 4342)

4350. Introduction to Learning and Memory. 3(3-0)
General principles of learning and memory and an introduction to learning theory. Emphasis motivation, conditioning, and problem-solving. Prerequisite: 6 semester hours of psychology.

4351. Directed Research in Psychology. V:1-3
Individual instruction course for advanced and qualified undergraduates to obtain supervised research experience in psychology. Student will assist with a research project by working under the individual guidance of a psychology faculty member. Requirements may entail library research, data collection, data entry, statistical analysis and or assistance in planning and conducting parts of a research project. A paper on the research experience is required. Consent of instructor required. May be repeated for a maximum of 3 semester credit hours. Prerequisites: PSYC 3381, PSYC 3387 or SOCI 4382 and 6 other semester hours of psychology. Credit/Non-credit.

SOCIOLOGY (SOCI)

1301. Principles of Sociology. (SOCI 1301) 3(3-0)
Study of the nature of human societies, social processes, social interaction, groups, culture, institutions and social change.

1306. Social Problems. (SOCI 1306) 3(3-0)
Survey of contemporary social problems and current trends in the direction of their solution. Prerequisite: SOCI 1301.

2306. Human Sexuality. (SOCI 2306) 3(3-0)
Biophysical and psychological aspects of human sexuality. (Credit may not be obtained in both SOCI 2306 and PSYC 2306.)

2361. Pluralistic Societies. 3(3-0)
Macro-cultural and micro-cultural variables such as ethnicity, religion, age, socioeconomic status, language, gender and exceptionality and their impact upon major institutions such as education, labor markets and government.

2363. Women, Change and Society. 3(3-0)
Interdisciplinary approach utilizing political, historical and sociological factors to analyze the status of American women. Aspects of sex role socialization, institutional interaction, social problems and social movements are analyzed. Prerequisite: SOCI 1301 or 6 hours of social science. (Credit may not be obtained in both SOCI 2363 and WGST 2363.)

- 3301. Social Psychology.** 3(3-0)
Theory and phenomena of social psychology. The nature and type of social variables and the methods used to study them. The effect of social variables upon the behavior of individuals. Prerequisite: 6 semester hours of psychology or 12 hours of social science. (Credit may not be obtained in both SOCI 3301 and PSYC 3301.)
- 3302. Social Deviance.** 3(3-0)
Survey of the sociological and psychological aspects of deviant behavior. Nature of deviance, types of deviant behavior, causal theories and social policy implications. Prerequisites: SOCI 1301 and 3 semester hours of Sociology or Criminology. (Credit may not be obtained in both CRIM 3302 and SOCI 3302)
- 3321. Introduction to Criminology.** 3(3-0)
Extent, types, causation, patterns and organization, apprehension, punishment treatment, agents and agencies related to crime and criminals, including experiences such as field trips and visits to jail may be included. Prerequisite: SOCI 1301. (Credit may not be obtained in both CRIM 3321 and SOCI 3321.)
- 3322. Juvenile Delinquency.** 3(3-0)
Incidence, types, causation, patterns, processes, treatment agencies and research as related to juvenile delinquency. Selected practical experiences such as trips to juvenile institutions. Prerequisite: SOCI 1301. (Credit may not be obtained in both CRIM 3322 and SOCI 3322.)
- 3332. An Introduction to Group Work.** 3(3-0)
A study of the dynamics of groups with emphasis on theories and findings concerning groups. Prerequisite: SOCI 1301 or 6 hours of social science.
- 3381. Statistics for the Behavioral Sciences.** 3(3-0)
Statistics for students in psychology, sociology and education. Emphasis upon descriptive and inferential techniques. Basic concepts in sampling data organization and statistic selection. Prerequisite: 6 semester hours of social science. (Credit may not be obtained in both PSYC 3381 and SOCI 3381.)
- 3482. Behavioral Statistics.** 4(4-0)
Statistics for students in Psychology, Sociology, and Criminology programs. Emphasis on descriptive and inferential techniques. Basic concepts in data sampling, data organization, statistic selection, and using statistical software. Prerequisite: 6 semester hours of social science. (Credit may not be obtained in more than one of SOCI 3381, SOCI 3482, or PSYC 3381.)
- 4305. Advanced Human Sexuality.** 3(3-0)
Psychosocial factors in human sexuality with emphasis on sexual adjustment, sexual dysfunctions, sexual variations and new approaches in sex therapy. Appropriate field trips may be included. Prerequisite: PSYC 2306 or SOCI 2306. (Credit may not be obtained in both PSYC 4305 and SOCI 4305.)
- 4307. The Family and Marriage.** 3(3-0)
History and development of the family as an educational and social institution, factors involved in family integrity, role of the individual in family relations, marital adjustments and family conservation in light of the present-day social and economic conditions. Prerequisite: SOCI 1301 or 6 semester hours of social science.
- 4308. Selected Topics in Sociology.** 3(3-0)
Literature and research in areas of sociology not otherwise treated in depth in available courses. May be repeated once for credit when topics differ. Prerequisite: 12 semester hours of sociology.
- 4310. Population Problems.** 3(3-0)
Introduction to demographic concepts, such as fertility, mortality and migration of human populations in a larger social and cultural context, and to population problems in modern society. Prerequisite: SOCI 1301 or 6 semester hours of social science.

- 4312. Social Stratification.** 3(3-0)
Examination of patterns and distribution of stratification and social inequalities in modern society. Prerequisite: SOCI 1301 or 6 semester hours of social science.
- 4320. Law and Society.** 3(3-0)
An in-depth examination of law and society through the philosophy and evolution of legal systems and legal institutions. The major functions of law as agents of social control, dispute resolution and societal engineering are addressed. Prerequisites: SOCI 1301 and 3 semester hours of sociology or criminology. (Credit may not be obtained in both CRIM 4320 and SOCI 4320.)
- 4324. Technology and Society.** 3(3-0)
A study of technology and society from the perspective of social values, ethics, sociology, social environment, politics and economics. Prerequisite: 12 semester hours of social science.
- 4325. Sociology of Corrections.** 3(3-0)
Overview of social, psychological, cultural, sociological and political factors related to the correctional enterprise. Includes treatment of the context of corrections, correctional practices, correctional issues, correctional institutions and correctional perspectives. May include field trips to correctional institutions. Prerequisite: CRIM 3321 or SOCI 3321. (Credit may not be obtained in both CRIM 4325 and SOCI 4325.)
- 4341. Sociology of Aging.** 3(3-0)
Study of the last stage in the life-cycle of man. The course emphasizes the interdisciplinary approach necessary in the field of gerontology, the biological, psychological and social aspects of the aging process, along with the social impact of growing proportions of aged persons within the social structure of society. Prerequisite: SOCI 1301.
- 4342. Sociology of Death.** 3(3-0)
Sociological perspectives of the dying process and death itself, including the cultural and institutional means of aiding survivors through the grief, mourning and bereavement process. Prerequisite: 12 semester hours of sociology.
- 4345. Sociology of Religion.** 3(3-0)
World religions in the context of social, cultural and ideological perspectives that impact social life in a global world. Prerequisite: junior standing or permission of the instructor.
- 4348. Multicultural Groups in the United States.** 3(3-0)
Issues of multicultural groups with salient ethnic characteristics; analysis of the concept of ethnic identity and belonging, and examination of the dynamics of group cohesion within political, economic, social, and immigration contexts. Prerequisite: junior standing or approval of the instructor. (Credit may not be given for both ANTH 4348 and SOCI 4348.)
- 4351 Urban Sociology.** 3(3-0)
The culture, history and growth patterns of cities; demographic, ecological patterns and trends. Problems of housing and community organization. Prerequisite: SOCI 1301.
- 4353. Social Movements.** 3(3-0)
Concepts of social movements; important types of social movements and their relation to the field of collective behavior and social change. Prerequisite: junior standing or permission of the instructor.
- 4362. Race Relations.** 3(3-0)
Critical analysis of the concept of race, analysis of subordinate peoples in the United States and around the world. Emphasis on dynamics of problems of subordinate groups. Prerequisite: 6 semester hours of anthropology or sociology. (Credit may not be given for both ANTH 4362 and SOCI 4362.)
- 4364. Minority Women in U.S. Society.** 3(3-0)
An integrated study of the impact that socioeconomic and ethnic/racial factors have on minority women within the United States. Prerequisite: SOCI 1301 or 6 semester hours of social science. (Credit may not be obtained in both SOCI 4364 and WGST 4300.)

4367. Gender, Politics and Citizenship. 3(3-0)
Investigation of how political institutions and processes shape norms of citizenship, focusing on social identifiers such as gender, race/ethnicity and sexuality. Prerequisite: 6 semester hours of political science and/or sociology. Credit may not be obtained in only one of SOCI 4367, POLS 4367 or WGST 4367.

4382. Methods of Social Research. 3(3-0)
Introduction to the study of the scientific method as applied to social research including the logic of science, covering the nature of data, hypotheses, concepts and objectivity. Prerequisites: ANTH 2302 or SOCI 1301 and 3 semester hours of advanced anthropology or sociology. (Credit may be obtained in only one of ANTH 4382, CRIM 4382, or SOCI 4382.)

4383. Social Theory. [WI] 3(3-0)
Development of social theory as represented by Comte, Spencer, Durkheim and Weber, to contemporary schools of thought, including functionalism, conflict, symbolic interactionism, structuralism and world systems theory. Prerequisite: ANTH 2302 or SOCI 1301 and 6 semester hours of advanced Anthropology or Sociology. (Credit may not be obtained in both ANTH 4301 and SOCI 4383.)

4386. Directed Research in Sociology. V:1-3
Individual instruction course for advanced and qualified undergraduates to obtain supervised research experience in sociology. Student will assist with a research project by working under the individual guidance of a sociology faculty member. Requirements may entail library research, data collection, data entry, statistical analysis and/or assistance in planning and conducting parts of a research project. A paper on the research experience is required. Consent of instructor required. May be repeated for a maximum of 3 semester credit hours. Prerequisite: SOCI 3381, SOCI 4382 or PSYC 3387 and 6 other semester hours of sociology. Credit/Non-credit.

SOUTHWEST BORDERLANDS STUDIES (SWBS)

A minor in Southwest Borderlands Studies requires eighteen (18) hours. This interdisciplinary minor focuses on sociocultural, economic, demographic and environmental aspects of the U.S.-Mexico borderlands.

SWBS 2302 is required. Students may select from a list of additional courses to complete this minor. The list of applicable courses may be obtained from the program coordinator or department chair. To maintain the interdisciplinary nature of these minors, no more than 9 semester hours in any one discipline may apply toward the minor. Students may not count the same course toward both a major and a minor.

2301. Foundations of Mexican American Studies. 3(3-0)
History, economics, sociology, demography, folklore, education, art and literature of Mexican Americans.

2302. Introduction to Southwest Borderlands Studies. 3(3-0)
A survey of the multidimensional and interdependent nature of United States-Mexico regional interaction and development. A focus on southwest borderlands dynamics which impact upon culture, social institutions, ecological and demographic characteristics.

3301. Pre-Columbian American Cultures. 3(3-0)
Development of American Indian cultures of Central and South America to time of Spanish Conquest. Maya, Inca, Aztec, and related cultural traditions. Optional field trip when possible. Prerequisite: 3 semester hours of Anthropology or Southwest Borderland Studies. (Credit may not be obtained in both SWBS 3301 and ANTH 3301.)

4301. Bicultural Groups in U.S. Society. 3(3-0)
A study of bicultural groups with salient ethnic characteristics, i.e., Blacks, Mexican Americans, Puerto Ricans, Japanese, Italians and Native Americans. Prerequisite: 3 semester hours of Southwest Borderlands Studies or 12 semester hours of social science.

4303. Folk Medicine. 3(3-0)
An examination of the folk medical system of Mexican Americans from an anthropological perspective. Includes an exploration of household remedies (including herbal remedies), folk illness syndromes, various folk healers (including parteras, or midwives, and sobadores, or massagers), curanderismo (folk healing) and brujeria

(witchcraft) in present-day Mexican American culture in South Texas and the Southwest. Prerequisite: 3 semester hours of southwest borderlands studies or anthropology. (Credit may not be obtained in both SWBS 4303 and ANTH 4303.)

4308. Latin American Culture. 3(3-0)
Origin and development of contemporary cultural forms in Latin America. Industrialization, socioeconomic and demographic change are examined from several theoretical perspectives. Prerequisite: 6 semester hours of anthropology or sociology. (Credit may not be obtained in both SWBS 4308 or ANTH 4308.)

4309. Mexican Border Subcultures. 3(3-0)
Analysis of social processes such as competition, accommodation and cooperation occurring in the American Southwest and in Northern Mexico, with attention to such variables as ethnicity and stratification. Prerequisite: 3 semester hours of southwest borderland studies or anthropology. (Credit may not be obtained in both ANTH 4309 and SWBS 4309.)

**Degree Requirements
Bachelor of Science
Criminology**

Freshman Year			Junior Year				
ENGL 1301	3	COMS 1311	3	CRIM 3320	3	CRIM 4382	3
HIST 1301	3	ENGL 1302	3	PSYC 3482/SOCI 3482	4	CRIM, adv.	3
MATH 1314 or MATH 1334	3	HIST 1302	3	CRIM, adv.	3	CRIM, adv.	3
SOCI 1301	3	POLS 2301	3	CRIM, adv.	3	Elective, adv.	3
UNIV 1101	<u>1</u>	UNIV 1102	1	Minor	<u>3</u>	Minor, adv.	<u>3</u>
	13	[^] <i>Creative arts</i>	<u>3</u>		16		15
			16				
Sophomore Year			Senior Year				
ENGL 2342	3	ANTH 2301 or	3	CRIM 4321	3	CRIM 4325	3
POLS 2302	3	ANTH 2302	3	CRIM, adv.	3	CRIM, adv.	3
PSYC 2301	3	CRIM 3321	3	CRIM, adv.	3	CRIM, adv.	3
[^] <i>Life/Physical sciences</i>	4	[^] <i>Life/Physical sciences</i>	4	Elective, adv.	3	Elective	3
Minor	<u>3</u>	Elective	2	Minor, adv.	<u>3</u>	Minor, adv.	<u>3</u>
	16	Minor	<u>3</u>		15		15
			15				
Total Hours Required						120	

**Degree Requirements
Bachelor of Arts
Psychology**

Freshman Year			Junior Year				
ENGL 1301	3	COMS 1311	3	POLS 2301	3	POLS 2302	3
HIST 1301	3	ENGL 1302	3	PSYC 4312 or	3	PSYC 3301, PSYC	3
MATH 1314 or MATH 1334	3	HIST 1302	3	PSYC 4328		4301, PSYC 4302 or	
PSYC 2301	3	PSYC 2308, PSYC	3	PSYC 4322 or	3	PSYC 4303	
UNIV 1101	1	2314, or PSYC 3314		PSYC 4325		PSYC 4351	1
Kinesiology	<u>1</u>	UNIV 1102	1	Elective	3	Minor, adv.	3
	14	Minor	<u>3</u>	Foreign language	<u>3</u>	Foreign language	<u>3</u>
			16		15		13
Sophomore Year			Senior Year				
ENGL 2342	3	ENGL 2362	3	PSYC 4329 or	3	PSYC 3325 or	3
PSYC 3482	4	PSYC 3487	4	PSYC 4350		PSYC 4330	
[^] <i>Creative arts</i>	3	SOCI 2361	3	Elective, adv.	3	PSYC 4323	3
[^] <i>Life/Physical sciences</i> + Minor	<u>3</u>	[^] <i>Life/Physical sciences</i> + Minor	3	Foreign language	3	Elective, adv.	3
	16		<u>3</u>	Minor, adv.	3	Foreign language	3
			16	PSYC, adv.	<u>3</u>	Minor, adv.	<u>3</u>
					15		15
Total Hours Required						120	

+BIOL or CHEM recommended

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Arts
Sociology**

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	ANTH 2301 or	3	SOCI 4382	3
HIST 1301	3	HIST 1302	3	ANTH 2302		Stratification &	3
SOCI 1301	3	UNIV 1102	1	SOCI 3482	4	Inequality§§	
UNIV 1101	1	[^] <i>Life/Physical sciences+</i>	4	Crime, Law, &	3	Elective	1
Elective	1	Foreign language	3	Deviance§		Elective, adv.	3
Foreign language	<u>3</u>	SOCI	<u>3</u>	Elective, adv.	3	Minor	<u>3</u>
	14		17	Minor	<u>3</u>		13
					16		
Sophomore Year				Senior Year			
ANTH 2303	3	COMS 1311	3	SOCI 4383	3	Culture & Social	3
ENGL 2342 or	3	ENGL 2342 or	3	Social Institutions§§§	3	Change§§§§	
ENGL 2362		ENGL 2362		Elective	3	SOCI, adv.	3
MATH 1314 or	3	POLS 2302	3	Minor, adv.	3	Elective, adv.	3
MATH 1334		[^] <i>Creative arts</i>	3	Minor, adv.	<u>3</u>	Minor, adv.	3
POLS 2301	3	Foreign language	<u>3</u>		15	Minor, adv.	<u>3</u>
Foreign language	<u>3</u>		15				15
	15						
Total Hours Required							120

+BIOL or CHEM recommended

§Crime, Law and Deviance: Choose one course from SOCI 3302, SOCI 3321, SOCI 3322, SOCI 4320, or SOCI 4325.

§§Stratification and Inequality: Choose one course from SOCI 2361, SOCI 4310, SOCI 4312, or SOCI 4364.

§§§Social Institutions: Choose one course from SOCI 4307, SOCI 4341, SOCI 4342, SOCI 4345, or SOCI 4351.

§§§§Culture and Social Change: Choose one course from SOCI 2363, SOCI 4348, SOCI 4353, or SOCI 4362.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

NATIONAL NATURAL TOXINS RESEARCH CENTER

Elda E. Sanchez, *Executive Co-Director and Associate Professor*

Peter Davies, *Co-Director for Translational Research*

Nora Diaz DeLeon, *Administrative Officer*

Montamas Suntravat, *Research Assistant Professor*

Mark Hockmuller, *Serpentarium Curator*

Juan J. Salinas, *Animal Room Technician*

John C. Perez, *Regents Professor Emeritus*

<http://www.tamuk.edu/nntrc>

The National Natural Toxins Research Center (NNTRC) at Texas A&M University-Kingsville was established in 2002. The mission of the NNTRC is to provide global research, training and resources that will lead to the discovery of medically important toxins found in snake venoms.

The NNTRC is a unique animal and biological material resource center organized to support basic and translational research on venomous snakes and their venoms. The NNTRC is dedicated to the advancement in the understanding of the therapeutic value of venom molecules and the training of research scientists in the field of toxinology. The NNTRC has grown to become the only federally funded (NIH/ORIP) viper resource center in the U.S. providing high-quality venom and snake-related research materials to national and international biomedical and biological research programs. The NNTRC also is recognized for its elaborate John C. Perez Serpentarium with 4,383 square feet of space housing over 450 venomous snakes. *The goal of the NNTRC is to provide snake venoms, purified venom components, cDNA clones, and recombinant venom proteins of the highest quality to support biomedical research.* To achieve this goal, the NNTRC 1) operates as a resource center that provides high quality venom and products that support biological and biomedical research for National and International research programs, 2) develops and expands the collection of snakes, specialized services, education and outreach programs to support growth of venom-related research in the U.S., and 3) supports a state-of-the-art applied research program using high-throughput genomic, proteomic, recombinant DNA and screening technologies that will support an information-based approach to the discovery of snake venom components with potential therapeutic and/or diagnostic applications.

RELIGION (RELG)

Director

Baptist Student Ministries. MSC 205. Telephone 592-9335.

Credit toward university degrees is given for courses offered by an off-campus Bible Chair, under regulations that maintain their equivalence with other courses given at the university. The instructor is under the control of some permanent religious organization of recognized standing, possesses at least the training of instructors in the university, and is approved by the Dean of Arts and Sciences, Provost and Vice President for Academic Affairs and the President. Religious studies courses are subject to the same regulations and supervision as regular courses given in the university.

1301. Old Testament Survey. 3(3-0)

Old Testament origin, literature, history and content from the beginning to the Maccabean period.

1303. New Testament Survey. 3(3-0)

New Testament, origin, literature, history and content from the Maccabean period to the close of the Apostolic age.

2303. Life and Teachings of Jesus. 3(3-0)

The life, teaching and significance of Jesus as revealed in the gospels.

2306. Life and Letters of Paul. 3(3-0)

The life of Paul, the work of Paul and an attempt to understand his contributions to the early Church as well as his continuing significance in ethics and doctrines of Christianity.

2311. Christian Ethics. 3(3-0)

An introduction to Christian ethics which sets forth the Biblical foundations for Christian ethical decision and applies these precepts to major ethical problems. These problems will include the self, marriage and the family, race relations, economic life and political life.

3339. Comparative Religions. 3(3-0)

Survey of the religions of the world. Included are studies in the origin, development, literature (scripture) and present status of Hinduism, Buddhism, Jainism, Confucianism, Taoism, Shinto, Judaism, Christianity and Islam.

WOMEN AND GENDER STUDIES (WGST)

Susan Roberson, *Interim Director*

Extension 2012.

Women and Gender Studies is based on the premise that an educated person, regardless of discipline, needs to understand the contemporary world at both personal and societal levels. The minor in Women and Gender Studies provides an integral understanding of forces at work in a multicultural, pluralistic society, especially as they relate to the variety of issues related to gender, including women's studies, masculinity studies, LGBT issues, feminist theory and queer theory. A minor in Women and Gender Studies enhances the academic analysis of other university disciplines and lends itself to various careers such as counseling, business, personnel management, social work, advertising, law, politics and education.

A minor in Women and Gender Studies requires 18 semester hours to be selected from the following courses:

Required: WGST 1301

15 hours from the following:

ARTS 3302/MUSI 3302/THEA 3302/WGST 3302

EDHL 3383

ENGL 3399/WGST 3399

ENGL 4340/WGST 4340

ENGL 4360/WGST 4361

ENGL 4380/WGST 4380

HIST 4360/WGST 4360

POLS 4367/SOCI 4367/WGST 4367

PSYC 3313/WGST 3313

PSYC 2305/WGST 2305

SOCI 2363/WGST 2363

SOCI 4364/WGST 4300

WGST 4390

Or with approval from the WGST Director other courses for which there is a significant component or project on gender or women's issues.

Transcripted Certificate in Women and Gender Studies

An undergraduate transcripted certificate in Women and Gender Studies required WGST 1301 and at least 9 semester hours of advanced courses across at least two disciplines to be selected from courses approved for the Women and Gender Studies Minor.

1301. Introduction to Women and Gender Studies.

3(3-0)

Introduces the role that gender plays in social institutions and the ideas, discourses and questions that define women and gender studies.

2305. Women's Issues in Health and Psychology.

3(3-0)

Examines health and psychological issues for women, legal and political realities that influence women's emotional and physical well-being and important aspects of intimacy and sexuality with a focus on both physiological and psychological development. (Credit may be obtained in only one of EDHL 2305, PSYC 2305 or WGST 2305.)

2363. Women, Change and Society.

3(3-0)

A comprehensive survey utilizing political, historical and sociological factors to analyze the status of American women. Aspects of sex role socialization, institutional interaction, social problems and social movements are analyzed. Prerequisite: SOCI 1301 or 6 hours of social science. (Credit may not be obtained in both SOCI 2363 and WGST 2363.)

3302. Women and the Arts. 3(3-0)

Issues surrounding the participation of women in the arts. Selected women who have contributed to the visual and performing arts throughout history are studied in relation to the culture of their time and the principles related to the arts. No previous experience in theatre, art or music required. Prerequisite: completion of visual/performing arts component requirement. (Credit may be obtained in only one of ARTS 3302, MUSI 3302, THEA 3302 or WGST 3302.)

3313. Psychology of Women. 3(3-0)

An overview of the broad range of psychological issues and biological events which are of significant relevance to women. Explores the richness of the female experience in terms of changing values, attitudes and expectations. Prerequisite: 6 hours of psychology. (Credit may not be obtained in both PSYC 3313 and WGST 3313.)

3399. Intermediate Topics in Literature or Language. 3(3-0)

Readings in special topics. Credit may not be obtained in both ENGL 3399, when taught from a woman and gender studies perspective, and WGST 3399. Can be repeated once when topics change. Prerequisite: 3 semester hours of sophomore English or permission of instructor.

4300. Minority Women in U.S. Society. 3(3-0)

An integrated study of the impact that socioeconomic and ethnic/racial factors have on minority women within the United States. Prerequisite: SOCI 1301 or 6 hours of social science. (Credit may not be obtained in both SOCI 4364 and WGST 4300.)

4340. Special Topics in British Literature. 3(3-0)

Selected topics in British Literature. A topic for intensive investigation will be selected for each offering of the course. Prerequisite: 6 semester hours of sophomore English. Credit may not be obtained in both ENGL 4340, when taught from a women and gender studies perspective, and WGST 4340. Can be repeated once when topics change.

4360. Women in History. 3(3-0)

Investigation of women's historical place in global themes such as patriarchy, sexual politics, work, religion, peace, colonization and the body. Prerequisite: 12 semester hours of history or political science. (Credit may not be obtained in both HIST 4360 and WGST 4360.)

4361. Special Topics in American Literature. 3(3-0)

Selected topics in literature from the United States. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topics, but no more than 6 semester credit hours may count toward major or minor requirements. Prerequisite: 6 semester hours of sophomore English. (Credit may not be obtained in both ENGL 4360, when topic is taught from a women's studies perspective, and WGST 4361.)

4367. Gender, Politics and Citizenship. 3(3-0)

Investigation of how political institutions and processes shape norms of citizenship, focusing on social identifiers such as gender, race/ethnicity, and sexuality. Prerequisite: 6 semester hours of political science and/or sociology. Credit may not also be obtained for POLS 4367 or SOCI 4367.

4370. Nature and Women in the American Novel. 3(3-0)

Nature and women have been problematic for American society and, thus, American literature. Nature has been seen both as an early Hell populated by Indian "devils" and as a second Garden of Eden. Similarly, as a group, women have been regarded both as latter-day Eves and as "angels in the house." This course will address these two topics and show the development of the themes concerning them. Students will understand something of the role of nature and of women (as a class) in shaping and reflecting American thought and values. (Credit may not be obtained in both ENGL 4370, when taught from a women's studies perspective and WGST 4370.)

4380. Special Topics in World Literature. 3(3-0)

Selected topics in world literature written in English or in English translation. A topic for intensive investigation will be selected for each offering of the course. May be repeated with different topics, but no more than 6 semester credit hours may count toward major or minor requirements. Prerequisite: 6 semester hours of sophomore English. (Credit may not be obtained in both ENGL 4380, when topic is taught from a women's studies perspective. and WGST

4380.)

4390. Internship.

V:1-3

Intensive work in the field or with an organization, related to gender or women's issues. Prerequisites: junior standing and approval of the WGST Director.

DUAL ENROLLMENT PROGRAM

Lewis Hall 133

Miranda Joiner, *Coordinator*

Anna L. Trevino, *Academic Advisor I*

Deanna Rubio, *Administrative Associate I*

The College of Arts & Sciences and its Dual Enrollment Program are committed to preparing students for academic success before they begin their collegiate journey. We will support an environment in which knowledge and skills are developed as the area high school students transition to higher education, engage in educational and co-curricular activities, and develop a skill which can be used both in and out of the classroom.

Dual Enrollment Admission Requirements

The Texas A&M University-Kingsville Dual Enrollment Program allows a high school student to earn college credit(s) while also fulfilling high school requirements. To be eligible, a student must meet the following criteria:

1. The student must be classified as a high school Freshman, Sophomore, Junior or Senior.
2. The student must meet the criteria required by the Texas Administrative Code, Title 19, Part 1, Chapter 4, Subchapter D, Rule §4.85 (b).
3. The student must achieve or succeed the minimum college readiness standards on a state approved assessment.
4. The high school principal or counselor must recommend the student by signing the student's dual enrollment registration form.

Eligible high school students should contact their high school principal or counselor regarding their interest in enrolling in dual enrollment courses through our program.

School officials may request more information from the Dual Enrollment Office at Texas A&M University-Kingsville.

COLLEGE OF BUSINESS ADMINISTRATION

COLLEGE OF BUSINESS ADMINISTRATION

Natalya Delcours, *Dean*

Business Administration Building 108. MSC 182. Extension 3801.

Jesus Carmona, *MBA Director and Associate Dean*

Texas A&M University-Kingsville, through its College of Business Administration, is nationally accredited by the Association of Collegiate Business Schools and Programs (ACBSP) to offer the Bachelor of Business Administration degree at the undergraduate level and the Master of Business Administration degree at the graduate level.

The College of Business Administration is composed of the following two departments:

The Department of Accounting and Finance

The Department of Management, Marketing and Information Systems

In addition, the college houses the Center for Negotiation.

College of Business Administration Mission Statement

The College of Business Administration is a school of opportunity providing an accessible, quality business education that empowers both working and full-time students of all ages and diverse backgrounds, transforming their lives. To accomplish this mission, we provide a comprehensive business education to emerging leaders of the region, the State of Texas, national and international communities.

College of Business Administration Vision Statement

Texas A&M University-Kingsville College of Business Administration will be recognized for:

- High quality teaching programs that produce graduates who are valued by employers and citizens who positively impact society.
- Engagement of stakeholders through professional and community service.
- Excellence in applied, theoretical, and pedagogical research advancing academics, extending business knowledge and contributing to practice.

College Core Values

- Excellence – College of Business Administration is driven by excellence in teaching, research and service.
- Experiential learning – College of Business Administration prepares students for life-long learning using innovative pedagogies and experiential learning through engagement with local businesses and community, professional development and cross-cultural experiences.
- Ethics – College of Business Administration faculty and staff set the highest standards of academic and professional behavior.
- Engagement – College of Business Administration embraces diversity, open communication, collegiality and collaboration.

Courses of Instruction

There are three components of the B.B.A. degree: (1) the university's general education component; (2) the common professional component (BUSCORE) consisting of business courses required of all business majors; and (3) the required and elective courses specific to a major. The B.B.A. degree program consists of 120 hours.

ACCT 2301, ACCT 2302, BCOM 3306, ECON 2301 and ECON 2302 (or their equivalent) are prerequisites for all 3000 and 4000 level business administration courses except as provided elsewhere in this catalog for students in other majors. MGMT 4390 is required and must be taken at Texas A&M University-Kingsville during the final long semester.

Accounting Students

Students planning to sit for the Certified Public Accountant (CPA) exam should consult with the College of Business Administration (CBA) academic adviser in CBA room 112 to arrange an appropriate degree plan.

Minor in Accounting (Available only to business majors)

A minor consists of 18 credit hours, including 12 credit hours selected from: ACCT 3308, ACCT 3311, ACCT 3312, ACCT 3314 and six additional hours to be chosen from the following courses: ACCT 3330, ACCT 3338, ACCT 4309, ACCT 4310, ACCT 4312, ACCT 4314, ACCT 4319, ACCT 4320, ACCT 4328, ACCT 4342, ACCT 4345, FINC 3351, FINC 4331, FINC 4341 and FINC 4342. Candidates for the minor in Accounting must earn at least 12 credit hours in residency at Texas A&M University-Kingsville College of Business with at least 6 credit hours of upper level credits.

Minor in Business Administration (Available only to nonbusiness majors)

A minor consists of 18 credit hours, including the following nine required credit hours: ACCT 2301, ECON 2301, ISYS 3330 and nine additional hours to be chosen from the following courses: ACCT 2302, BCOM 3306, BUAD 2374, **BUAD 2341**, BUAD 3355, ECON 2302, FINC 2331, MGMT 3312, MGMT 3322, MGMT 3325 and MKTG 3324. Candidates for the minor in Business Administration must earn at least 12 credit hours in residency at Texas A&M University-Kingsville College of Business with at least 6 credit hours of upper level credits.

Minor in Digital Marketing

A minor in Digital Marketing consists of 18 credit hours, including the following 12 required credit hours: ISYS 3320, ISYS 3351, MKTG 3364, and MKTG 3370; and six credit hours from the following: ISYS 3330, ISYS 3358, MKTG 3364, MKTG 3365, and MKTG 4350. Candidates for the minor in Digital Marketing must earn at least 12 credit hours at Texas A&M University-Kingsville College of Business with at least six credit hours of upper level credits.

Minor in Finance (Available only to business majors)

A minor consists of 18 credit hours, including 12 credit hours selected from FINC 3345, FINC 3351, FINC 4331, FINC 4341 and FINC 4342 and six credit hours selected from ACCT 3308, ACCT 3311, ACCT 3312, ACCT 3314, ACCT 4314 and ACCT 4328. Candidates for the minor in Finance must earn at least 12 credit hours in residency at Texas A&M University-Kingsville College of Business with at least 6 credit hours of upper level credits.

Minor in Professional Selling

A minor in Professional Selling consists of 18 credit hours, including the following 12 required credit hours: MKTG 3360, MKTG 4315, and MKTG 4321; and six credit hours from the following: ISYS 3320, MKTG 3365, MKTG 3370, MKTG 4325, and MKTG 4350. Candidates for the minor in Professional Selling must earn at least 12 credit hours in residency at Texas A&M University-Kingsville College of Business with at least six credit hours of upper level credits.

Requirements for the B.B.A. Degree

Admission Requirements

Students wishing to earn a Bachelor of Business Administration (BBA) degree must apply for admission to and be accepted by the College of Business Administration when they have earned between 54 and 60 credits. All students admitted to the College of Business Administration are expected to have a basic level of knowledge including the ability to read and write effectively, to think quantitatively and to have a basic understanding of our economic system. To gain admission to the College, students must meet the following requirements:

- Earn a minimum ACT score of 17 or SAT score of 850
- Earn a grade of *C* or better in each of the following seven courses:
 - ACCT 2301
 - ACCT 2302
 - ECON 2301
 - ECON 2302
 - ENGL 1301
 - ENGL 1302
 - MATH 1314

- Complete at least 54 credit hours
- Earn a grade point average of at least 2.00 in all undergraduate work completed prior to admission*
- Complete the Student Professional Development Program**

*Transfer students must have earned a grade point average of at least 2.00 on course work completed at Texas A&M University-Kingsville.

**The Student Professional Development Program must be completed no later than the end of the first semester after admission to the College.

Special situations that may arise with respect to completion of the lower-division course work and sequencing of courses such as students transferring from other majors within the university and students transferring from other institutions, may be handled on a case-by-case basis.

Communication Skills

The college requires that all of its majors demonstrate proficient communication skills. A minimum level of proficiency may be demonstrated by a minimum grade of *C* in BCOM 3306.

Grade Point Average for Graduation

A minimum grade point average of 2.0 is required on: (1) all course work attempted including course work attempted at other universities, (2) all course work attempted at Texas A&M University-Kingsville, (3) all courses in business administration and (4) all courses in the professional field for each major.

Residency Requirement

Candidates for the degree must earn at least 30 business credit hours required for the degree in residence at Texas A&M University-Kingsville. Candidates for any minor in Business Administration must earn at least 12 credit hours in residency at Texas A&M University-Kingsville College of Business with at least 6 credit hours of upper level credits.

Student Professional Development Program (SPDP)

All College of Business Administration majors must complete four online training courses and two face-to-face workshops to meet graduation requirements. All four online training courses and face-to-face workshops will be offered online during the fall and spring semesters. This program must be completed and attended in their entirety within the allotted time allowed. Non-attendance of face-to-face workshops will result in having to repeat the entire workshop (register, pay fee & attend).

The entire Student Professional Development Program must be completed no later than the end of the first semester after admission to the College.

The Student Professional Development Program consist of 4 online training courses and 2 face-to-face workshops:

- Course 1: Discovering Your Options
- Course 2: Sculpting Your Value Proposition
- Course 3: Selling Yourself
- Course 4: Activating Your Plan
- The Job Campaign (*Prerequisites: All four Online Training Courses*)
- Professional Etiquette

Immersion Experience

All College of Business students are required to complete at least one Immersion Experience in order to graduate. Students are encourage to fulfill this requirement prior to their senior year. The Immersion Experience and all required documentation must be approved in advance.

Immersion Experience options are as follows:

- Faculty/Student collaborative research
- Business Internship
- Study abroad

Exit Exam

Candidates for the B.B.A. degree must take the ETS® Major Field Test for the Bachelor's Degree in Business as part of the graded requirements for MGMT 4390.

Certificates*Certification in Forensic Accounting*

Any student seeking a business degree is eligible for an undergraduate Certificate in Forensic Accounting. This represents a multidisciplinary approach to demonstrate their focused study in this specific area of expertise and to increase employment opportunities. Completion of the required coursework will further prepare undergraduate business students for additional professional examinations, including those for Certified Fraud Examiners (CFE) and Certified Public Accountant (CPA). The following courses (and any applicable prerequisites) are required to obtain the transcribed certificate: ACCT 3338 – Financial Statement Analysis; ACCT 4311 – Introduction to Auditing; ACCT 4345 – Fraud Investigation and Prevention; ISYS 4350 – Information Security.

DEPARTMENT OF ACCOUNTING AND FINANCE

Thomas Krueger, *Chair*

Business Administration Building 201. MSC 184. Extension 3787.

Professors

Delcoure, Krueger, Verma

Associate Professor

Rivera

Assistant Professors

Huff, Kim, Lelkes, Scalan

Lecturers

Buck, Singh

ACCOUNTING (ACCT)

2301. Principles of Accounting I. (ACCT 2301) 3(3-2)

Introduction to accounting with emphasis on the accounting cycle and financial accounting accompanied by a mandatory lab that focuses on techniques, of data collection, recording and reporting in support of financial accounting principles and the accounting cycle.

2302. Principles of Accounting II. (ACCT 2302) 3(3-0)

Continuation of principles of financial accounting. Introduction to managerial accounting concepts with emphasis on planning and control. Prerequisite: ACCT 2301.

3305. Fundamentals of Federal Income Taxation. 3(3-0)

Survey of domestic and multinational provisions of federal income tax law. Practical experience including preparation of federal income tax forms. Students must participate in the VITA program. May not be counted toward an ACCT degree.

3308. Income Tax Accounting. 3(3-0)

Analysis of Federal income tax laws, emphasis being placed on the determination of net taxable income and preparation of income tax returns for individuals. Prerequisite: ACCT 2302.

3311. Intermediate Accounting I. 3(3-0)

Overview of basic accounting theory and the accounting process; structure of financial statements; accounting principles for cash, short-term investments, receivables, inventories, current liabilities, plant assets and natural resources. Prerequisite: ACCT 2302.

3312. Intermediate Accounting II. 3(3-0)

Accounting principles for long-term liabilities, stockholders' equity, income taxes, pensions, leases and statement of cash flows. Prerequisite: ACCT 3311.

3314. Cost/Managerial Accounting. 3(3-0)

Financial cost accounting -- job order and process cost procedures. Managerial cost accounting: planning, controlling and specific project decisions. Prerequisite: ACCT 2302.

3330. International Accounting. 3(3-0)

International dimensions of accounting, including patterns of accounting development found in other nations, worldwide accounting standards and accounting problems associated with multinational corporate operations. Prerequisite: ACCT 2302.

3338. Financial Statement Analysis. 3(3-0)

Analysis and interpretation of financial statements for the guidance of management, stockholders and other stakeholders. Prerequisite: ACCT 2302.

- 4305. Ethics for Accountants.** 3(3-0)
Application of ethical theory, philosophy and principles including the concepts of ethical reasoning, integrity, objectivity, independence and other core values. Prerequisite: senior standing.
- 4309. (Formerly ACCT 4207) Accounting for Governmental and Nonprofit Entities.** 3(3-0)
Principles and practice of fund accounting applicable to governmental and nonprofit organizations. Prerequisite: ACCT 2302. (Credit may not be obtained in both ACCT 4207 and ACCT 4309.)
- 4310. (Formerly ACCT 4217) Accounting Systems.** 3(3-0)
Principles and procedures of the design and installation of an accounting system with emphasis on producing the information necessary for decision making. Analysis of accounting data using spreadsheet and accounting software. Prerequisite: ACCT 3312. (Credit may not be obtained in both ACCT 4217 and ACCT 4310.)
- 4311. Introduction to Auditing.** 3(3-0)
Auditing standards, professional ethics, legal liability, evidence, internal control and audit reports. Prerequisites: ACCT 3312 and ACCT 3314.
- 4312. Advanced Auditing.** 3(3-0)
Audit program planning and special reports; auditing topics. Prerequisite: ACCT 4311.
- 4314. Advanced Financial Accounting.** 3(3-0)
Accounting principles for business combinations, mergers and consolidations, investments in subsidiaries, consolidated statement preparation; intercompany transactions, indirect and mutual holdings. Prerequisite: ACCT 3312.
- 4316. Accounting Theory.** 3(3-0)
Advanced accounting concepts and standards with emphasis on the development of generally accepted accounting principles. Prerequisite: ACCT 4314.
- 4319. Advanced Cost/Managerial Accounting.** 3(3-0)
Planning and control of cost elements, analysis of costs and profits and current topics in cost/managerial accounting. Prerequisite: ACCT 3314.
- 4320. Advanced Accounting Systems and EDP Auditing.** 3(3-0)
Integrated accounting and information systems experience, using information systems knowledge to address accounting issues of internal control and computer auditing. Prerequisite: ACCT 4310.
- 4328. (Formerly ACCT 4318) Advanced Tax Accounting.** 3(3-0)
Federal taxation of entities including C Corporations, S Corporations, partnerships, trusts, estates, gifts, as well as, how the entities affect individual tax returns. Prerequisite: ACCT 3308. (Credit may not be obtained in both ACCT 4218 and ACCT 4328.)
- 4340. Internship in Accounting.** 3(3-0)
An off-campus learning experience allowing the application of accounting skills in an actual work setting. Will count towards the hours required for the CPA exam only if the internship requirements set by the State Board of Public Accountancy are met. Prerequisite: approval of the department chair.
- 4342. (Formerly ACCT 4242). Business Law for Accountants.** 3(3-0)
Sales and commercial paper; the Uniform Commercial Code in Texas; the law of agency; business organization formulation and dissolution; accountants' legal responsibility; federal securities regulation; insurance; suretyship; property; wills, estates and trusts. Prerequisite: BUAD 2341.
- 4345. Fraud Investigation and Prevention.** 3(3-0)
Fraud methods, investigation, and prevention through internal controls. Emphasis on financial and asset misappropriation frauds. Prerequisite: ACCT 2302.

4380. Senior Research. 3(3-0)
Research study under supervision of instructor resulting in paper to be presented at a research symposium approved by the instructor. Prerequisites: senior standing and consent of instructor.

4395. Special Topics in Accounting. V:1-3
Study or research under supervision of instructor; small business audits. May be repeated for credit. Prerequisite: consent of instructor.

ECONOMICS (ECON)

2301. Principles of Macroeconomics. (ECON 2301) 3(3-0)
Economics of modern industrial society. Determinants of national income, economic stability and growth, money and banking; fiscal policy, business organization and international trade.

2302. Principles of Microeconomics. (ECON 2302) 3(3-0)
Supply and demand concepts, composition and pricing of the national output cost and price concepts, market structures, income distribution and selected economic problems.

3334. International Economics. 3(3-0)
International trade theory and policy and international monetary economics; balance of payments and exchange rate theory. Apply trade theories and models to explain why countries trade, gains from trade and trade patterns. Trade unions, tariffs, quotas and other non-tariff barriers to trade. Reasons and consequences of trade deficits. Prerequisites: ECON 2301, ECON 2302.

FINANCE (FINC)

2331. Personal Finance. 3(3-0)
Key personal finance issues, including goal setting, budgeting for major purchases, loan provisions and originators, taxation, insurance coverages, mutual funds and savings accounts and retirement planning.

3310. Personal Financial Planning. 3(3-0)
Applying financial principles to household decision making, stressing integration between areas. Income tax and estate planning, retirement, investments, portfolio management and risk management.

3321. Business Finance. 3(3-0)
Determining and analyzing the forms of business enterprise. Analysis of the techniques, methods and procedures used in the acquisition and proper employment of funds in the business entity. Prerequisite: junior standing in Business Administration.

3338. Financial Statement Analysis. 3(3-0)
Analysis and interpretation of financial statements for the guidance of management, stockholders and other stakeholders. Prerequisite: ACCT 2302. Credit may not be obtained in both ACCT 3338 and FINC 3338.

3345. Real Estate Finance. 3(3-0)
Real estate valuation and methods of financing real estate transactions, property management and taxation. Instruments and sources of real estate credit. Real estate appraisal theory and practice. Real estate investment trusts (REIT) and other real estate investment methods.

3351. Insurance and Risk Management. 3(3-0)
Principles and practices of risk management and insurance. Property and casualty insurance, fire insurance, consequential loss, transportation insurance, automobile insurance, crime insurance and disaster insurance. Individual life insurance, annuities and health insurance products with emphasis on policy coverage.

3355. Pricing for Profitability. 3(3-0)
Creating financial models to determine optimal product and service prices based upon financial metrics and goals, the competitive environment, value created to customers and product cost data. Prerequisite: MGMT 3312.

- 4331. Investments.** 3(3-0)
Principles governing the proper investment of personal and institutional funds; the characteristics of a sound investment and the analysis of the different securities offered to investor. Topics include valuation of stocks and bonds, portfolio valuation and mutual funds. Simulations allow the student to create and manage a portfolio of securities. Prerequisite: FINC 3321.
- 4332. Portfolio Management.** 3(3-0)
Analysis and evaluation of the decision-making process in investments. Asset valuation, portfolio management and performance evaluation. Theoretical and analytical developments in security selection and portfolio management. Risk measurement and risk reduction through portfolio construction. Analysis of derivative securities, including options and future contracts. Student-directed simulated portfolio management. Prerequisite: FINC 4331.
- 4334. Bank Management.** 3(3-0)
Organization and structure of banks, financial statements, measurement and evaluation of performance of banks, analysis of principles and policies affecting the management of funds in commercial banks. Risk Management for changing interest rates. Prerequisites: FINC 3321.
- 4336. Intermediate Financial Management.** 3(3-0)
Finance function and its integration into the administration of the firm. Selected case studies and problems illustrate techniques used in financial decision making and optimum capital utilization. Prerequisite: FINC 3321.
- 4340. Internship in Finance.** 3(3-0)
An off-campus learning experience allowing the acquisition and application of finance skills in an actual work setting. Prerequisite: approval of the department chair.
- 4341. Money and Capital Markets.** 3(3-0)
Financial markets and institutions in the U.S. economy. Determinants of savings and investments, interest rates and flow of funds. Role of regulatory agencies governing financial markets and institutions. Money and capital market instruments and institutions. Prerequisite: FINC 4331.
- 4342. International Finance.** 3(3-0)
Foreign exchange markets, balance of international payments, short-term borrowing and investment decisions. Changes in exchange rates, international aspects of capital decisions and currency derivatives. Prerequisite: FINC 3321.
- 4360. Options and Futures.** 3(3-0)
Structure of the options and futures markets and the trading system of derivatives. Options and futures pricing theory. Analysis of hedging strategies using options and futures. Role of options and futures trading strategies as part of portfolio management, performance evaluation and investment planning. Prerequisite: FINC 4331.
- 4362. Financial Planning and Capital Budgeting.** 3(3-0)
Corporate analysis of valuations and investments, capital budgeting and financing, credit and debt management, risk management and taxation. Short-term planning including cash and working capital management. Long-term planning including debt and equity management. Prerequisite: FINC 3321.
- 4364. Business Forecasting.** 3(3-0)
Techniques for statistically sound business forecasting. Graphical analysis and concepts such as seasonality, trends and cycles. Advanced forecasting using ARMA modeling as well as regression. Extensive use of appropriate computer software. Prerequisite: BUAD 3355.
- 4366. Entrepreneurial Finance.** 3(3-0)
Financial issues affecting entrepreneurial investments associated with small or rapidly growing ventures. How investors and entrepreneurs create value. Strategic and business planning, financial forecasting, valuation, organizational design and financial contracting, and harvesting strategies. Prerequisite: FINC 3321.

4380. Senior Research.

3(3-0)

Research study under supervision of instructor resulting in paper to be presented at an instructor-approved research symposium. Prerequisites: senior standing and consent of instructor.

4395. Special Topics in Finance.

V:1-3

Special studies in finance. May be repeated for credit. Prerequisite: consent of the instructor.

Degree Requirements
Bachelor of Business Administration
Accounting

Freshman Year				Junior Year			
COMS 1315*	3	ENGL 1302	3	ACCT 3308	3	ACCT 3312	3
ENGL 1301	3	HIST 1302	3	ACCT 3311	3	ACCT 3314	3
HIST 1301	3	MATH 1324	3	BUAD 3355	3	ISYS 3330	3
MATH 1314	3	UNIV 1102	1	FINC 3321	3	MKTG 3324	3
UNIV 1101	1	^Creative arts	3	MGMT 3322	3	ACCT Elective	3
^Life/Physical sciences	3	^Life/Physical sciences	3		15		15
	<u>16</u>		<u>16</u>				
Sophomore Year				Senior Year			
ACCT 2301	3	ACCT 2302	3	ACCT 4305	3	ACCT 4311	3
BUAD 1115	1	BCOM 3306	3	ACCT 4310	3	ACCT 4342	3
ECON 2301	3	BUAD 2341	3	ACCT 4314	3	MGMT 4390	3
ENGL 2342,	3	ECON 2302	3	BUAD 2374	3	ACCT Elective	3
ENGL 2362		POLS 2302	3	MGMT 3355	3	ACCT Elective	3
or ENGL 2314**			15		15		15
POLS 2301	3						
	<u>13</u>						
Total Hours Required						120	

*COMS 1311 may not be substituted for COMS 1315.

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/phil/culture* component by taking an appropriate course as an elective.

Degree Requirements
Bachelor of Business Administration
Finance

Freshman Year				Junior Year			
COMS 1315*	3	ENGL 1302	3	BUAD 3355	3	BUAD 2374	3
ENGL 1301	3	HIST 1302	3	FINC 3321	3	FINC 4331	3
HIST 1301	3	MATH 1324	3	FINC 3338	3	FINC 4341	3
MATH 1314	3	UNIV 1102	1	MGMT 3322	3	ISYS 3330	3
UNIV 1101	1	^Creative arts	3	MKTG 3324	3	FINC Elective	3
^Life/Physical sciences	3	^Life/Physical sciences	3		15		15
	<u>16</u>		<u>16</u>				
Sophomore Year				Senior Year			
ACCT 2301	3	ACCT 2302	3	FINC 4332	3	FINC 4342	3
BUAD 2341	3	BCOM 3306	3	FINC 4336	3	FINC 4362	3
ECON 2301	3	BUAD 1115	1	MGMT 3355	3	MKTG 4390	3
ENGL 2342,	3	ECON 2302	3	ACCT Elective	3	Business Elective	3
ENGL 2362 or		POLS 2302	3	FINC Elective	3	Nonbusiness Elective	3
ENGL 2314**			13		15		15
POLS 2301	3						
	<u>15</u>						
Total Hours Required						120	

*COMS 1311 may not be substituted for COMS 1315

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/phil/culture* component by taking an appropriate course as an elective.

***FINC 2331 (*Personal Finance*) may not be used as one of the required FINC electives towards the Finance degree.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF MANAGEMENT, MARKETING AND INFORMATION SYSTEMS

Jack Shorter, *Chair*

Business Administration Building 226. MSC 186. Extension 2130.

Professors

Oates, Shorter

Associate Professors

Carmona, Chatelain-Jardon, J. Cicala, Schumann

Assistant Professors

Colvin, Karst, Hong, Knight, Jung

Lecturers

K. Cicala, Hinojosa

BUSINESS ADMINISTRATION (BUAD)

1101. Introduction to Business Administration. 1(1-0)

An overview of the American business sector with emphasis on social responsibility and ethical behavior. A discussion of the skills and personal characteristics which contribute to the success of individuals pursuing a career in the professional administration of business enterprise.

1105. Introduction to the World of Business. 1(1-0)

Introduction to the business environment and the operation of businesses within that environment.

1115. Introduction to Business Software. 1(1-0)

Introductory course providing skills development, performance, and application of basic information processing software (i.e., Excel) used in business. Covered areas included graphs and charts, advanced functions and analytical tools, linking of worksheets and workbooks, importing and manipulating data, and macros.

2341. Business Law. 3(3-0)

Historical background and role of law in business and society; general principles of the law of contracts, personal property, secured transactions, sales and commercial paper; the Uniform Commercial Code as adopted in Texas and other applicable Texas statutes. Prerequisite: sophomore standing.

2374. International Business. 3(3-0)

Introduction to various facets of international business including theories of international trade, monetary systems, environmental forces and the organizational environment.

3355. Business Statistics. 3(3-0)

Statistical methods as applied to business and economic problem analysis: descriptive statistics, sampling, probability, statistical inference, regression analysis, correlation analysis, time series and index numbers. Prerequisite: MATH 1314. An electronic calculator (minimum four functions) is required.

4344. International Business Law. 3(3-0)

Major business law topics and issues involved in international business transactions. Exporting-importing, licensing and direct foreign investment. Risks of international business trade including language, culture, currency, legal and political barriers. Prerequisite: BUAD 2341.

BUSINESS COMMUNICATION (BCOM)

3306. Business Communication. [WI] 3(3-0)

Principles of business communication through letters, memos, email, text messages, group leadership and participation and presentations. Clear, accurate and focused communication; practical psychology with attention to communication ethics and diversity. Prerequisite: ENGL 1301 and ENGL 1302

INFORMATION SYSTEMS (ISYS)

- 1301. Personal Computer Applications.** (COSC 1301, BCIS 1301) 3(3-0)
Introduction to personal computer terminology, operations and applications including word processing, spreadsheets, presentation graphics, databases, the Internet and e-mail utilization. Open to all majors.
- 3302. Business Applications Using C++.NET.** 3(3-0)
Concepts and applications of the C++ programming language for business and industry using Visual Studio.NET. Prerequisite: ISYS 3330.
- 3320. Responsive Web Site Design.** 3(3-0)
Methods and techniques of developing a moderately complex web site; after the foundation language has been established, the aid of the web editor will be introduced. Prerequisite: junior standing.
- 3330. Information Systems and Business Analytics.** 3(3-0)
Management decision support systems, concepts of system analysis and design and information processing; data management and the development of business analytics. Prerequisites: BUAD 3355 and MATH 1324; or permission of the instructor.
- 3351. Database Design and SQL.** 3(3-0)
Basic database design and introduction to structured query language (SQL). Includes instruction on creating user interface forms for a database.
- 3356. Systems Analysis and Design.** 3(3-0)
Analysis and design techniques required for implementing medium to large-scale computer information systems. Development of requirements for personnel, software and equipment for typical applications. Prerequisites: ACCT 2302 and ISYS 3330. (Credit may not be obtained in both ACCT 3356 and ISYS 3356.)
- 3358. Business Information Systems.** 3(3-0)
A comprehensive study of the use of information technology as an organizational resource, including the implementation of disciplined processes and management development to effectively exploit the power of modern information technology.
- 3364. Programming in Visual BASIC.NET.** 3(3-0)
Fundamentals and techniques of programming for business applications using Visual Studio.NET. Prerequisite: ISYS 3330.
- 4303. Client/Server Application Development.** 3(3-0)
Client/Server application development practices and tools. Emphasis on developing distributed database applications that support the information processing needs of business. Topics include: object-oriented program design, programming with object-oriented development platforms and the use of embedded Structured Query Language for database transaction processing. Prerequisite: ISYS 3351.
- 4304. Database Administration.** 3(3-0)
Database administration, including creating databases, setting user logins and permissions and backup and recovery. Intermediate-level use of structured query language (SQL). Prerequisite: ISYS 3351.
- 4306. Data Communication and Networking I.** 3(3-0)
Applications requiring data communication, internal and external influences on data communication systems and service providers, data transmission, standards and architectures, management of network design and operation, local area networks and future issues. Prerequisite: ISYS 3330 or equivalent.
- 4308. Data Communication and Networking II.** 3(3-0)
Installation, administration, interoperability and security issues associated with the implementation of typical business networks. Prerequisite: ISYS 4306.

4340. Internship in Information Systems. 3(3-0)
An off-campus learning experience allowing the acquisition and application of information technology skills in an actual work setting. Prerequisite: approval of the department chair.

4350. Information Security. 3(3-0)
Examination of the discovery of and preparation for potentially disabling threats and various defensive techniques to ensure organizational network security. Prerequisite: junior standing.

4358. Information Systems Project Management. 3(3-0)
Planning, organizing and control activities required for effective information systems management. Prerequisite: ISYS 3356.

4380. Senior Research. 3(3-0)
Research study under supervision of instructor resulting in paper to be presented at a research symposium approved by the instructor. Prerequisites: senior standing and consent of instructor.

4395. Special Topics in Information Systems. V:1-3
Research in selected fields of computer information systems. May be repeated for credit. Prerequisite: consent of instructor.

MANAGEMENT (MGMT)

3310. Introduction to Entrepreneurship and Creativity. 3(3-0)
The entrepreneurial process; how business personnel build basics out of ideas. Types of entrepreneurs are studied as well as the organization. How strategy, marketing, accounting, organization behavior, finance and business communication are all needed for success. How organizations can foster instead of stifle creativity by redefining paradigms. Creating new and potentially stronger business.

3312. Organization Theory and Human Behavior. 3(3-0)
Various organizational structure models and supporting theory, organizations as complex systems, organizational behavior, individual and group dynamics in the business environment, organization development and change. Prerequisite: junior standing.

3322. Principles of Management. 3(3-0)
Introduction to the management of business organizations. The functions of management and role of the manager. Managerial decision-making, communication, social responsibility and business ethics. How organizational power and politics affect the manager.

3325. Human Resource Management 3(3-0)
Policies and practices relating to recruitment, selection, training and development, performance appraisal, reward system and employee relations. Strategic human resource planning, equal employment opportunity laws and international human resource management issues. Prerequisite: credit or registration in MGMT 3312.

3351. Principles of Operations Management. 3(3-0)
Detailed analysis of the planning, systems design, control and use of physical resources in the production of goods and services. Introduction to quantitative tools of operations management. Prerequisite: BUAD 3355; credit or registration in MGMT 3312.

3355. Operations, Logistics, and Supply Chain Management. 3(3-0)
The study of the processes directly related to the creation and distribution of goods and services, forecasting, inventory management, logistics and supply chain information systems. Prerequisites: MATH 1324, BUAD 3355, and ISYS 3330.

4321. Negotiation and Dispute Resolution. 3(3-0)
Emphasis on fundamental skills in the art of negotiation across a variety of settings, including business, law, marketing, and sales; basics of both collaborative and competitive approaches including planning tools and techniques. MGMT 4321 and MKTG 4321 may not both be taken for credit. Prerequisite: MKTG 3324.

- 4331. International Management.** 3(3-0)
Management of the internationally competitive firm; topics considered include leadership, organizational structure, cultural differences and similarities and competitive analysis. Prerequisite: senior standing in Business Administration.
- 4338. Strategic Human Resource Management.** 3(3-0)
Human resource topics in the nature of work, recruitment, selection, training and development, compensation, benefits, labor relations and health and safety. Prerequisite: MGMT 3325.
- 4340. Internship in Management.** 3(3-0)
An off-campus learning experience allowing the acquisition and application of management skills in an actual work setting. Prerequisite: approval of the department chair.
- 4348. Compensation Theory and Administration.** 3(3-0)
Study of theories, methods and practices of compensation in organizations. Prerequisite: MGMT 3325.
- 4351. Leadership in Organizations.** 3(3-0)
Theoretical foundations of leadership in organizational change and innovation initiatives as they relate to competitive advantage in an ever-changing global market. Prerequisites: MGMT 3312 and MGMT 3322.
- 4358. Lean Operations.** 3(3-0)
Concepts, tools and techniques applied in the design and operation of lean systems. Prerequisite: MGMT 3312.
- 4360. Small Business Consulting.** 3(3-0)
Analysis and review of actual small business clients submitted by the Small Business Administration under the Small Business Institute Program; providing recommendations to the client. Prerequisites: ACCT 3250, MGMT 3312, and MGMT 3325.
- 4365. Ethics and Sustainability.** 3(3-0)
Ethics and sustainability topics in organizational business practices; how they interplay based on differing environmental contexts. Prerequisites: MGMT 3312 and MGMT 3322.
- 4380. Senior Research.** 3(3-0)
Research study under supervision of instructor resulting in paper to be presented at a research symposium approved by the instructor. Prerequisites: senior standing and consent of instructor.
- 4390. Strategic Management in a Global Business Environment.** 3(3-0)
To provide a capstone course for the graduating senior majoring in business that will allow him or her to practically apply the concepts and theories learned in the undergraduate program. The student will do this through integrating those principles with the ones that serve as the theoretical framework for the field of strategic management. The end result of this process will be a student who is able to analyze complex business problems and to effectively make decisions that affect the entire organization. Prerequisite: must be taken in the final semester before graduation in business administration.
- 4395. Special Topics in Management.** V:1-3
Special studies in management. May be repeated for credit. Prerequisite: consent of the instructor.

MARKETING (MKTG)

- 3324. Principles of Marketing.** 3(3-0)
Examination of marketing of goods and services by organizations and individuals in a free-enterprise economy. Topics covered include product, channels, price, promotion, consumer behavior, the legal and other uncontrollable environments and research, international marketing, strategy and control.
- 3350. Advanced Marketing for Entrepreneurs.** 3(3-0)
Successful strategies in an entrepreneurial environment; pursuing opportunities in a global business environment. Prerequisite: MKTG 3324.

- 3360. Sales.** 3(3-0)
The personal selling process and the use of a professional, customer-oriented, problem-solving approach in selling situations. The sales job, selection of salespeople, sales training programs and coordination/control of the sales function. Development of fundamentals of professional selling skills. Prerequisite: MKTG 3324.
- 3364. Integrated Marketing Communications.** 3(3-0)
Demand-stimulation processes of all elements of the promotional mix at all levels of the channel of distribution. Analysis of theoretical models and pragmatic applications of promotion in an organization. Prerequisite: MKTG 3324.
- 3365. Marketing Research.** 3(3-0)
Marketing research methods as applied to management problems involving marketing strategy and policy formulation, and economic-industry-firm-sales forecasts. Prerequisites: BUAD 3265 and MKTG 3324.
- 3370. Online Marketing.** 3(3-0)
Combines traditional marketing (situation analysis, marketing planning and marketing implementation) with the enhanced capabilities of electronic resources. Emphasis on student group application through use of online exercises and critical analysis of existing Web sites. Computer literacy expected. Prerequisite: MKTG 3324.
- 4310. Retail Marketing Management.** 3(3-0)
Analysis and conceptualization of the relationship among channel of distribution members, emphasizing the merchandising function of retail store management. Introduce applications of electronic commerce to retailing practice. Prerequisite: MKTG 3324.
- 4315. Sales Management.** 3(3-0)
The strategic role of the sales function and sales organization; developing and directing a sales force; and evaluating sales force performance. Role playing to help students experience realistic management scenarios. Prerequisite: MKTG 3360.
- 4321. Negotiation and Dispute Resolution.** 3(3-0)
Emphasis on fundamental skills in the art of negotiation across a variety of settings, including business, law, marketing, sales; basics of both collaborative and competitive approaches including planning tools and techniques. Prerequisite: MKTG 3324.
- 4325. Advanced Sales Topics.** 3(3-0)
Application of research skills to develop an in-depth analysis of one company's sales structure and its position relative to its competitors. A semester-long project will incorporate field study and database research identifying different sales structures and advantages. Prerequisite: MKTG 4315.
- 4335. Supply Chain Management.** 3(3-0)
Purchasing; supplier relationship and supply chain management; inbound and outbound logistics. Role of technology in managing the supply chain. International logistics. Prerequisite: MKTG 3324.
- 4340. Internship in Marketing.** 3(3-0)
An off-campus learning experience allowing the acquisition and application of marketing skills in an actual work setting. Prerequisite: approval of the department chair.
- 4350. Consumer Behavior.** 3(3-0)
Analysis and evaluation of the consumer's position in the marketing structure including patterns of consumer behavior and the psychological, social and cultural forces that underlie such patterns. Prerequisites: MKTG 3324 and MKTG 3365.
- 4354. Sustainable Marketing.** 3(3-0)
Marketing as a role player in the creation of a more sustainable society. Tools to optimize marketing decisions with respect to the natural environment, human well-being and profits. Prerequisite: MKTG 3324.

- 4356. Brand Management.** 3(3-0)
Focus on the creation, management, and growth of a brand – both traditionally and digitally – as an integral part of an organization’s marketing strategy. Students will explore brand strategy, analyze progress, and learn to manage internal and external brand-related relationships. Prerequisite: MKTG 3324.
- 4363. International Marketing.** 3(3-0)
Examines marketing in other countries, the marketing implications of cultural and environmental differences, international marketing research and adaptation of product, price, promotion and distribution decisions to international environments. Topics include international trade theory and the multinational firm. Prerequisite: MKTG 3324.
- 4380. Senior Research.** 3(3-0)
Research study under supervision of instructor resulting in a paper to be presented at a research symposium approved by the instructor. Prerequisites: senior standing and consent of instructor.
- 4390. Marketing Management and Analytics.** 3(3-0)
Capstone Marketing course for majors. Marketing functions in the firm and marketplace from the viewpoint of the marketing manager. Concepts and analytical tools used by marketing managers. Prerequisites: MKTG 3324, MKTG 3364 and MKTG 4350; senior standing.
- 4395. Special Topics in Marketing.** V:1-3
Special studies in marketing. May be repeated for credit. Prerequisite: consent of instructor.

Degree Requirements
Bachelor of Business Administration
General Business Administration

Freshman Year			Junior Year		
COMS 1315*	3	ENGL 1302	3	BUAD 2374	3
ENGL 1301	3	HIST 1302	3	ISYS 3330	3
HIST 1301	3	MATH 1324	3	Elective	3
MATH 1314	3	UNIV 1102	1	ISYS, adv.	3
UNIV 1101	1	^Creative arts	3	MKTG, adv.	3
^Life/Physical sciences	3	^Life/Physical sciences	3		3
	<u>16</u>		<u>16</u>		<u>15</u>
Sophomore Year			Senior Year		
ACCT 2301	3	ACCT 2302	3	MGMT 4390	3
BUAD 2341	3	BCOM 3306	3	Business, adv.	9
ECON 2301	3	BUAD 1115	1	FINC, adv.	3
ENGL 2342, ENGL 2362 or ENGL 2314**	3	ECON 2302	3		15
POLS 2301	3	POLS 2302	3		
	<u>15</u>	Nonbusiness Elective	3		
			<u>16</u>		
				Total Hours Required	120

*COMS 1311 may not be substituted for COMS 1315

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/phil/culture* component by taking an appropriate course as an elective.

Degree Requirements
Bachelor of Business Administration
General Business Administration – Product Pricing and Business Analytics

Freshman Year			Junior Year		
COMS 1315*	3	ENGL 1302	3	BUAD 2374	3
ENGL 1301	3	HIST 1302	3	ISYS 3330	3
HIST 1301	3	MATH 1324	3	ISYS 3351	3
MATH 1314	3	UNIV 1102	1	MGMT 3322	3
UNIV 1101	1	^Creative arts	3	MKTG 3324	3
^Life/Physical sciences	3	^Life/Physical sciences	3		3
	<u>16</u>		<u>16</u>		<u>15</u>
Sophomore Year			Senior Year		
ACCT 2301	3	ACCT 2302	3	FINC 3355	3
BUAD 2341	3	BCOM 3306	3	MGMT 3355	3
ECON 2301	3	BUAD 1115	1	MKTG 3360	3
ENGL 2342, ENGL 2362 or ENGL 2314**	3	ECON 2302	3	MKTG 3365	3
POLS 2301	3	POLS 2302	3	Business, adv.	3
	<u>15</u>	FINC 4364	3		15
			<u>16</u>		
				Total Hours Required	120

*COMS 1311 may not be substituted for COMS 1315

**Students who choose to take ENGL 2314 must fulfill the core curriculum *language/philosophy/culture* component by taking an appropriate course as an elective.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Business Administration
Information Systems**

Freshman Year				Junior Year			
COMS 1315*	3	ENGL 1302	3	BUAD 3355	3	BUAD 2374	3
ENGL 1301	3	HIST 1302	3	FINC 3321	3	ISYS 3330	3
HIST 1301	3	MATH 1324	3	ISYS 3351	3	ISYS 3356	3
MATH 1314	3	UNIV 1102	1	MGMT 3322	3	ISYS 3358	3
UNIV 1101	1	^Creative arts	3	MKTG 3324	<u>3</u>	ISYS, adv.	<u>3</u>
^Life/Physical sciences	<u>3</u>	^Life/Physical sciences	<u>3</u>		15		15
	16		16				
Sophomore Year				Senior Year			
ACCT 2301	3	ACCT 2302	3	ISYS 3364	3	ISYS 4303	3
BUAD 2341	3	BCOM 3306	3	MGMT 3355	3	ISYS 4358	3
ECON 2301	3	BUAD 1115	1	ACCT, adv.	3	MGMT 4390	3
ENGL 2342, ENGL 2362 or ENGL 2314**	3	ECON 2302	3	ISYS, adv.	3	ISYS, adv.	3
POLS 2301	<u>3</u>	POLS 2302	<u>3</u>	Elective	<u>3</u>	Nonbusiness Elective	<u>3</u>
	15		13		15		15
						Total Hours Required	120

*COMS 1311 may not be substituted for COMS 1315

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/phil/culture* component by taking an appropriate course as an elective.

**Degree Requirements
Bachelor of Business Administration
Management**

Freshman Year				Junior Year			
COMS 1315*	3	MATH 1324	3	BUAD 3355	3	BUAD 2374	3
ENGL 1301	3	ENGL 1302	3	FINC 3321	3	ISYS 3330	3
HIST 1301	3	HIST 1302	3	MGMT 3322	3	MGMT 3312	3
MATH 1314	3	UNIV 1102	1	MGMT 3325	3	MGMT 4358	3
UNIV 1101	1	^Creative arts	3	MKTG 3324	<u>3</u>	MGMT 4331	<u>3</u>
^Life/Physical sciences	<u>3</u>	^Life/Physical sciences	<u>3</u>		15		15
	16		16				
Sophomore Year				Senior Year			
ACCT 2301	3	ACCT 2302	3	ISYS 3358	3	MGMT 4390	3
ECON 2301	3	BUAD 1115	1	MGMT 3355	3	MGMT Elective	6
ENGL 2342, ENGL 2362 or ENGL 2314*	3	ECON 2302	3	MGMT 4351	3	MGMT 4365	3
POLS 2301	3	BCOM 3306	3	MGMT Electives	<u>6</u>	Nonbusiness Elective	<u>3</u>
BUAD 2341	<u>3</u>	POLS 2302	<u>3</u>		15		15
	15		13				
						Total Hours Required	120

*COMS 1311 may not be substituted for COMS 1315.

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/phil/culture* component by taking an appropriate course as an elective.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Business Administration
Management-Human Resources

Freshman Year			Junior Year			
COMS 1315*	3	ENGL 1302	3	BUAD 2374	3	
ENGL 1301	3	HIST 1302	3	ISYS 3330	3	
HIST 1301	3	MATH 1324	3	MGMT 3312	3	
MATH 1314	3	UNIV 1102	1	MGMT 4331	3	
UNIV 1101	1	^Creative arts	3	MGMT 4358	3	
^Life/Physical sciences	3	^Life/Physical sciences	3		3	
	16		16		15	
Sophomore Year			Senior Year			
ACCT 2301	3	ACCT 2302	3	MGMT 4338	3	
BUAD 2341	3	BCOM 3306	3	MGMT 4365	3	
ECON 2301	3	BUAD 1115	1	MGMT 4390	3	
ENGL 2342, ENGL 2362 or ENGL 2314**	3	ECON 2302	3	MGMT Elective	3	
POLS 2301	3	POLS 2302	3	Nonbusiness Elective	3	
	15		13		15	
					Total Hours Required	120

*COMS 1311 may not be substituted for COMS 1315.

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/phil/culture* component by taking an appropriate course as an elective.

Degree Requirements
Bachelor of Business Administration
Marketing

Freshman Year			Junior Year			
COMS 1315*	3	ENGL 1302	3	BUAD 2374	3	
ENGL 1301	3	HIST 1302	3	ISYS 3330	3	
HIST 1301	3	MATH 1324	3	MKTG 3364	3	
MATH 1314	3	UNIV 1102	1	MKTG 3370	3	
UNIV 1101	1	^Creative arts	3	Elective	3	
^Life/Physical sciences	3	^Life/Physical sciences	3		3	
	16		16		15	
Sophomore Year			Senior Year			
ACCT 2301	3	ACCT 2302	3	MGMT 4390	3	
BUAD 2341	3	BCOM 3306	3	MKTG 4350	3	
ECON 2301	3	BUAD 1115	1	MKTG 4390	3	
ENGL 2342, ENGL 2362 or ENGL 2314**	3	ECON 2302	3	MKTG, adv.	3	
POLS 2301	3	POLS 2302	3	Nonbusiness Elective	3	
	15		13		15	
					Total Hours Required	120

*COMS 1311 may not be substituted for COMS 1315.

**Students who choose to take ENGL 2314 must fulfill the core curriculum *Lang/philosophy* component by taking an appropriate course as an elective.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**COLLEGE OF EDUCATION AND
HUMAN PERFORMANCE**

COLLEGE OF EDUCATION AND HUMAN PERFORMANCE

Alberto Ruiz, *Dean*
Rhode Hall 120. MSC 195. Extension 2802.

Steve Bain, *Interim Associate Dean*
Linda Garza-Ortega, *Senior Administrative Coordinator I*
Lydia Landin, *Coordinator, Student Services*
Daniella G. Varela, *Certification Coordinator III*
Araceli Garza, *Academic Adviser*
Ashley Ochoa, *Academic Adviser*
Breanna Flores-Contreras, *Academic Adviser*

When the Texas Legislature enacted the original law providing for the South Texas Teachers College, which ultimately became Texas A&M University-Kingsville, one of the primary purposes was to prepare an adequate number of students for teaching and administrative positions in South Texas. Since the beginning, the university has functioned in this capacity.

Mission

The College of Education and Human Performance prepares professionals for positions of responsibility and leadership in a global society. Faculty and staff are committed to enabling students to attain high academic, professional and ethical standards that promote student achievement and lifelong learning. The programs prepare students to be successful in their professional careers by integrating technology, valuing diversity and promoting authentic applications of knowledge. The College strives to offer the highest quality in teaching, research and service.

Conceptual Framework

We, the community of learners in the College of Education and Human Performance, demonstrate professional knowledge, skills and dispositions expected of leaders in our respective fields. We are sensitive to diversity and inclusive of *all* learners. We design and deliver engaging, research-based, technology-integrated curricula and promote lifelong learning. We strive to be ethical, reflective, compassionate and fair when interacting with *all* learners, colleagues and communities.

The College houses three departments: Department of Educational Leadership and Counseling, Department of Health and Kinesiology and Department of Teacher and Bilingual Education

The Department of Educational Leadership and Counseling offers the Doctor of Education in Educational Leadership. Master of Science degrees are offered in Guidance and Counseling, leading to certification as a School Counselor or a Licensed Professional Counselor; and in Educational Administration, leading to certification as a Principal or Superintendent. The Master of Science in Instructional Technology and the Master of Education in Adult Education prepare students for employment in both the public and private sector.

The Department of Health and Kinesiology offers the Master of Science in Kinesiology where students may pursue a kinesiology generalist degree or emphasize their graduate studies in sport management/kinesiology pedagogy or health/exercise science. The Bachelor of Science in Kinesiology can prepare students for kinesiology-related careers in either a school setting or the public sector. Student select from emphases in EC-12 physical education (teacher certification), exercise science, exercise science/performance psychology, exercise science/pre-physical therapy, sport and leisure studies or sport business.

The Department of Teacher and Bilingual Education offers a Doctor of Education in Bilingual Education, the oldest Bilingual doctorate in the United States, the Master of Science in Bilingual Education, Master of Science in Reading leading to certification as a Reading Specialist, a Master of Education in Special Education that may lead to

certification as an Educational Diagnostician and a Master of Education in Early Childhood Education. The Bachelor of Science degree in Interdisciplinary Studies prepares candidates for Texas Teacher Certification in Core Subjects EC-6, and Core Subjects EC-6 with a Bilingual Supplemental endorsement; also for Social Studies, Science, Mathematics, and English Language/Arts and Reading in Grades 4-8; for Science and English Language Arts and Reading in grades 7-12; for Business and Finance in grades 6-12; and for certification in Technology Applications and Special Education grades EC-12. Candidates earning bachelor's degrees in the Colleges of Arts and Sciences, Business and Agriculture, Natural Resources and Human Sciences who want to become secondary level content teachers study pedagogy and complete their student teaching through the College of Education and Human Performance. Also, persons who hold bachelor's degrees from accredited institutions may be able to pursue teaching credentials through the Alternative Certification Program housed in the Department of Teacher and Bilingual Education.

Academic Advising

Each undergraduate major is assigned a professional adviser upon entering the university. Students meet with their adviser on a scheduled basis to plan their program and at any time there is a need to discuss questions of concern.

Students who are interested in changing majors into any of our elementary, middle school or secondary certification programs are responsible for meeting with an adviser in the College of Education and Human Performance Advising Office prior to doing so. Advisers have available specific information regarding all program options.

Accreditation

Texas A&M University-Kingsville is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools. The educator preparation program is fully accredited by the Texas State Board for Educator Certification (SBEC), based on the combined performance of all our candidates on the Texas Examinations of Educator Standards (TExES). Texas A&M University-Kingsville has received **ACCREDITED** status from SBEC for each year that the Texas system has been in effect.

Title II Report Card

Title II of the Higher Education Amendments of 1998 requires an annual reporting from states and universities based upon the pass rates of their students on the tests required for completing programs leading to their initial teaching certificates. The pass rates for the Department of Education can be found on the Texas A&M University-Kingsville Education web site as soon as the information is released by the Texas State Board for Educator Certification (SBEC).

NOTE: The following sections provide general information about programs in the College of Education and Human Performance. Additional regulations for educator certification may take effect during the years of this catalog and may require changes that could not be foreseen at the time of printing. Changes that become effective in response to rulings by the State Board for Educator Certification and the Texas Higher Education Coordinating Board may apply to current and prospective students.

The Educator Preparation Program

Lydia Landin-Ortiz, *Coordinator, Student Services*
Rhode Hall 117. MSC 195. Extension 4313.

The Educator Preparation Program at Texas A&M University-Kingsville is administered through the College of Education and Human Performance Center for Educator Preparation Services (CEPS). The program is field-based and is conducted at least 50% of the time at public or private school sites. Students interested in elementary certification may seek certification in early childhood (EC) through grade six or certification in grades four through eight in the specialization areas of mathematics, science, social studies, or English Language Arts and Reading.

The elementary program is divided into four semesters of study starting in the first semester of the junior year (60 semester hours) and upon acceptance into the teacher education program. Application packets for the educator preparation program are available in the Center for Educator Preparation Services along with a listing of assigned advisers. Field experiences include assignments for two semesters in EC-8 public and private school classrooms, according to the certification levels selected (EC-6 or 4-8). Fields experience assignments are in pre-arranged

collaborating area schools. Student teaching is done the final semester and involves working full days for one semester. Student teaching begins the day school begins, spring or fall, rather than when university classes begin.

The secondary (6/7-12)/all-level (EC-12) certification program usually begins in the second semester of the junior year and is a three semester field-based program. The first semester students are placed in a middle school or high school and the second semester students are placed in a high school. During the first and second semesters, several courses are field-based approximately 60% of the time. The student teaching experience in the third semester is 100% field-based. All EDED and EDSE courses (other than student teaching) must be successfully completed before the student teaching experience.

Degree Plans

Students declaring EC-6, 4-8, 6/7-12 or EC-12 Interdisciplinary Studies as a major should schedule an appointment with a College of Education and Human Performance adviser to plan and develop a draft degree plan. After appropriate College of Education and Human Performance personnel (adviser, certification officer, and dean) sign the degree plan, it then becomes the official plan that students follow to graduation. Changes and course substitutions to the plan must be approved by the student's adviser, certification officer, dean of education and dean of other colleges (when changes involve courses from other colleges). Changes may also occur when the State Board for Educator Certification mandates changes in the teacher preparation program or certification areas.

Other secondary/all level degree plans may be obtained from the department of the student's major field, and students should also meet with the secondary/all level education coordinator by the sophomore year.

Educator Certification in Texas

Daniella G. Varela, *Certification Coordinator III*
Rhode Hall 112. MSC 195. Extension 2894.

The college maintains an Educator Certification Office to assist individuals with eligibility for educator credentialing. The present certification rules in Texas became effective September 1, 1999. The Standard Certificate, issued by the State Board of Educator Certification, replaces the lifetime Provisional and Professional certificates for all certificate programs completed after September 1, 1999. It is a renewable credential which must be renewed every five years to remain valid.

The Initial Standard Certificate

The initial certificate for beginning teachers may be obtained by completion of an appropriate undergraduate program culminating in a baccalaureate degree. A student seeking initial certification is required to have a minimum cumulative grade point average of 2.75 plus a minimum 2.75 average in courses constituting the teaching field(s) and delivery system(s) (Bilingual Education, Early Childhood Education, Special Education).

In order to be recommended for initial certification or for additional teaching fields or areas of specialization, or for supplemental certificates, all persons are required to achieve a satisfactory level of performance on the Texas Examinations of Educator Standards (TExES). All persons seeking certification in Bilingual Education must also pass the Bilingual Supplemental Test and Bilingual Target Language Proficiency Test (BTLPT).

Areas and Levels of Certification

The State Board for Educator Certification (SBEC) approves subject areas and grade levels for certification. Standards describing the knowledge and skills that a beginning teacher must demonstrate prior to certification have been developed for each certificate. For the years covered by this catalog, beginning teachers will be certified under the certification structure described below.

Standard Certificates for Early Childhood-Grade 6 and Grades 4-8

An undergraduate student seeking a certificate to teach in the elementary schools must complete the work for a Bachelor of Science degree in Interdisciplinary Studies. Requirements include approximately two years of course work in academic foundations courses; a minimum of 12 semester hours of science, 9 semester hours of mathematics and 6 semester hours of reading; 48 semester hours in an interdisciplinary academic major consisting of subjects taught in the elementary grades with 24 semester hours in one or more subject areas or 18 semester hours

in a delivery system (Bilingual Education-Spanish, Early Childhood Education, Special Education), 18 semester hours of field-based professional development courses; and 6 semester hours of student teaching.

Texas A&M University-Kingsville offers the Bachelor of Science degree in Interdisciplinary Studies for the following specializations and delivery systems:

Early Childhood-Grade 6

Core Subjects
Core Subjects with Bilingual Supplemental

Grades 4-8

English Language Arts/Reading
Social Studies
Mathematics
Science
Core Subjects

Grades 6-12

Business and Finance

Grades 7-12

English Language Arts and Reading
Science

Early Childhood-Grade 12

Technology Applications
Special Education

Standard Certificate for Grades 6/7-12

A student seeking a certificate to teach in the secondary schools of Texas must earn a bachelor's degree in a recognized major. Majors that lead to secondary certification can be found in the colleges of Agriculture and Human Sciences, Arts and Sciences, Business Administration and Education. The introduction to the College of Arts and Sciences has a list of majors offered in that college which lead to teaching certification. To be eligible for certification, the student must spend approximately two years in academic foundations courses; approximately 48 semester hours in selected teaching fields; 18 semester hours in professional development courses; 3 hours in reading and 6 semester hours in student teaching. For further information, students should contact the appropriate chairs of departments offering majors that lead to certification, as well as the coordinator for secondary instruction in the Department of Teacher and Bilingual Education.

Standard Certificate for Grades EC-12

A student seeking a certificate to teach a special subject at all grade levels in Texas schools must complete the work for a Bachelor of Arts or Bachelor of Science degree consisting of approximately two years of course work in academic foundations courses; the required course work in the subject area, including specific courses at both the elementary and secondary levels; and the required professional education courses at the elementary and secondary levels. Texas A&M University-Kingsville offers the all-level certificate in Art, Special Education, Physical Education, Music and Technology Applications. For further information students should contact the chair of the appropriate department, as well as the coordinator for secondary instruction in the Department of Teacher and Bilingual Education.

Standard Certificate for Grades 6-12

A student seeking a certificate to teach vocational education must earn a Bachelor of Science degree in Agriculture or Human Sciences. Texas A&M University-Kingsville offers the vocational certificates for Agricultural, Food, and Natural Resources and Family and Consumer Sciences. Students should contact the appropriate adviser in the College of Agriculture, Natural Resources and Human Sciences.

Post-Baccalaureate Initial Standard Certificate

Students possessing a bachelor's degree from a regionally accredited institution may be admitted to a special program for initial certification as a teacher. A post-baccalaureate student seeking initial certification is required to have a minimum cumulative grade point average of 2.75 plus a minimum 2.75 average in courses constituting the teaching field(s) and delivery system(s) (Bilingual Education-Spanish, Special Education). In addition, all

requirements for admission to professional education courses (listed below) apply. Students interested in post-baccalaureate certification should make an appointment with the program coordinator to have a certification plan developed based on evaluation of the undergraduate transcript.

Supplemental Certificates

Supplemental certificates are designed to attach to the grade level and subject area of a base certificate, and are available in the following areas:

English as a Second Language
Special Education
Bilingual Education

Non-certification Degrees: Kinesiology (Exercise Science), Kinesiology (Exercise Science/Performance Psychology), Kinesiology (Exercise Science/Pre-Physical Therapy), Kinesiology (Sport and Leisure Studies), Kinesiology (Sport Business)

The Department of Health and Kinesiology offers undergraduate degrees that do not prepare recipients to sit for teacher certification. The Bachelor of Science degrees in Kinesiology (Exercise Science), Kinesiology (Exercise Science/Performance Psychology), Kinesiology (Exercise Science/Pre-Physical Therapy), Kinesiology (Sport and Leisure Studies) and Kinesiology (Sport Business) are designed for students wishing to pursue health-, exercise-, therapy-, movement- or sport-related careers outside of the public school setting. Students should consult the Department of Health and Kinesiology section of the catalog for more information.

Admission to Education*

Lydia Landin-Ortiz, *Coordinator, Student Services*
Rhode Hall 117. MSC 195. Extension 4051.

(NOTE: State requirements sometimes cause changes in university requirements. Please see your academic adviser for the latest updates to the admission requirements.)

Students admitted to the university may declare their interest in becoming teachers and initiate a general academic program preparatory to this objective. In addition to applying and being accepted to the university, after successfully completing 60 or more semester hours of study with a minimum cumulative grade point average of 2.75/4.0 (transfer and Texas A&M University-Kingsville course work), the student should request an application to the Educator Preparation Program in the Center for Educator Preparation Services, Rhode Hall 117. Students may not register for 3000 or 4000 level education courses until the application is submitted and approved with a formal offer of admittance. To be admitted to the Educator Preparation Program a student must:

- a. have completed 60 semester hours including at least 30 semester hours of academic foundations.
- b. have completed ENGL 1301 and ENGL 1302 (with a C or better), HIST 1301, HIST 1302 and MATH 1314 or higher.
- c. have an official degree plan on file in the College of Education and Human Performance or submit a copy of the signed degree plan from another college.
- d. have a cumulative GPA of 2.75 or better (including all transfer work).
- e. Submit TSI documentation for TSI Complete or Exemption/Waiver.
- f. have passed the Nelson-Denny Reading Test.
- g. have signed disclosure and consent forms required for participation in field experiences and student teaching. Schools participating in the field-based program may require criminal record checks on persons interacting on a daily basis with students. Applications for a Texas teaching certificate must report any previous arrest, indictment, conviction and/or deferred adjudication to the Texas Board for Educator Certification. SBEC requires fingerprinting to verify a nationwide criminal history background check. An applicant with a criminal history may be denied certification.
- h. have completed critical thinking requirements (EDED 1301 or approved substitute).
- i. have completed an interview or other screening instrument to determine if the applicant's knowledge, experience, skills, and aptitude are appropriate for the certificate sought.
- j. have a minimum of 12 semester credit hours in the subject-specific content area for the certification sought, or if seeking Math or Science certification, have a minimum of 15 semester credit hours in Math or Science.

*Requirements for admission are subject to change pending ruling made by State Board for Educator Certification.

Student must maintain a 2.75/4.0 grade point average to remain in the teacher preparation program. No education course (prefixes EDBL, EDED, EDRG, EDSE) may be counted toward any degree leading to teacher certification unless the grade is at least a C.

Admission to Student Teaching

Students are expected to plan their programs, if possible, so they are registered for not more than a maximum of 12 semester hours (6 hours are student teaching) when taking student teaching. Any exception must be approved by a student's department chair or the dean of the College of Education and Human Performance. To be eligible to register for student teaching a student must:

- a. be in good standing with the educator preparation program;
- b. have successfully completed all course work required field experiences
- c. have a cumulative grade point average of at least 2.75/4.0 overall (transfer and TAMUK work) and at least a 2.75 average or above in the teaching field(s) and/or delivery systems (bilingual, special education).
- d. have completed all education courses (except EDED 4613 Elementary Student Teaching and EDED 4623 Secondary/All-level Student Teaching)*

*Exceptions:

1. Secondary/All-level students may take EDRG 4314 during student teaching.
 2. Students with financial aid may take enough courses to maintain aid funding.
 3. For other circumstances, call the Center for Educator Preparation Services and make an appointment for advising.
- e. passing score on TExES content area exam
 - f. passing score on TExES Pedagogy and Professional Responsibilities EC-12 exam
 - g. submit an application for student teaching (available in the CEPS, Rhode Hall 117.)
 - h. have submitted the results of a tuberculin test (within 180 days of student teaching).

Communication Skills

Effective September 1, 1992, all freshmen and transfer students entering Texas A&M University-Kingsville must demonstrate minimum communication skills. Students in the College of Education and Human Performance must pass ENGL 1302 with a grade of C or better to meet the requirement. Students in other colleges should contact their advisers for specific communication requirements.

Laboratory Fee

For each laboratory course a fee of \$2 to \$30 is charged depending upon cost of materials used in the course.

Support Units and Special Resources

The Education Materials Center

The Education Materials Center located on the second floor of the James C. Jernigan Library houses a Curriculum Collection and a Bilingual Collection of print and nonprint materials. The collections include elementary and secondary state-adopted textbooks, curriculum materials and juvenile literature with special emphasis on award winning books, multicultural books and thematic units.

Human Performance Laboratory

The Department of Health and Kinesiology operates the Human Performance Laboratory (HPL) which is located in the Health and Recreation Building. The HPL is designed for instruction and research in the evaluation of human performance and health-related fitness variables in both competitive athletes and the general public.

DEPARTMENT OF HEALTH AND KINESIOLOGY

Christopher M. Hearon, *Chair*

Steinke Physical Education Center 100. MSC 198. Extension 2301.

Regents Professor

Sherman

Professors

Hearon, Knight, Ruiz

Associate Professors

Cutton, Killion

Assistant Professors

Burt, Farney, Hughes, Kowlasky, Menaker, Shipherd

Lecturers

Bloomquist, Elia, Gines, Kreitzer

Faculty Emeritus

Daniel, Diaz

The mission of Health and Kinesiology is to provide well-rounded leaders and critical thinkers in the areas of health and movement studies. To accomplish this mission, the faculty are committed to teaching, service and research in the fields of health and kinesiology, in an academically challenging, learner-centered and caring environment where all employees contribute to student success.

The Department offers the following undergraduate degrees that can prepare students for health- and/or kinesiology-related careers in either a school setting or the public sector: B.S. in Kinesiology (EC-12 Physical Education), B.S. in Kinesiology (Exercise Science), B.S. in Kinesiology (Exercise Science/Performance Psychology), B.S. in Kinesiology (Exercise Science/Pre-Physical Therapy), B.S. in Kinesiology (Sport and Leisure Studies) and B.S. in Kinesiology (Sport Business).

Special Requirements for B.S. in Kinesiology

In addition to the graduation requirements set forth by the university and the College of Education and Human Performance, the Department of Health and Kinesiology requires a grade of *C* or better in all major or teaching-field courses for all degree concentrations offered under the B.S. in Kinesiology.

Additionally, all students pursuing the B.S. in Kinesiology (EC-12 Physical Education) must have completed the major/teaching-field courses, with the exception of EDKN 4315 and EDKN 4342, prior to beginning the CEHP Educator Preparation Program in the second semester of their junior year. Finally, students pursuing the B.S. in Kinesiology (EC-12 Physical Education) must pass TExES examinations #158 (physical education: EC-12) and #150 (pedagogy and professional responsibilities) prior to enrolling in student teaching (EDED 4623) in their final semester.

Health Minor

The minimum requirement shall be 18 semester hours selected from EDHL 2325, EDHL 2327, EDHL 3331, EDHL 3333, EDHL 3335, EDHL 3381, EDHL 3383, EDHL 4331, EDHL 4342, EDHL 4344 or EDHL 4337.

Kinesiology Minors

Non-kinesiology majors may choose to minor in kinesiology. Students may select from one of the following minors based on their specific interests:

Kinesiology-Coaching (18-19 credit hours)

EDKN 1301; EDKN 1308; EDKN 2324; EDKN 3320; EDKN 3352; and EDKN 3436 or EDKN 4325. Note: Biology prerequisites for EDKN 3436 or EDKN 4325 must also be met.

Kinesiology-Exercise Science (19-20 credit hours)

EDKN 1305; EDKN 3345; EDKN 3353; EDKN 3436; EDKN 4320; EDKN 4329 or EDKN 4401; and EDKN 4325. Note: Biology prerequisites for EDKN 3436 and EDKN 4325 must also be met.

Kinesiology-Performance Psychology (18 credit hours)
EDKN 1305; EDKN 3320 or EDKN 3345; EDKN 3352; EDKN 3353; EDKN 4352; and EDKN 4353.

Kinesiology-Physical Education (18 credit hours)
EDED 3341; EDKN 1301; EDKN 2110; EDKN 2112; EDKN 2114; EDKN 3320; EDKN 4315; and EDKN 4342.
Declaration of the minor is restricted to students pursuing a teacher certification degree in another discipline.

Kinesiology-Sport Business (18 credit hours)
EDKN 2330; EDKN 2333; EDKN 3355; EDKN 3390 or EDKN 4328; EDKN 4345; and EDKN 4350.

ACTIVITY COURSES (EDKN)

Note that courses EDKN 1107, EDKN 1108, EDKN 1109 and EDKN 1110 are reserved for varsity athletes only. A towel fee of \$4 will be charged each student enrolled in a Kinesiology activity class. In certain specified courses additional fees may be charged. Students are expected to furnish their own lock for a locker and their own equipment for some classes. The instructor will provide details.

1105. Flexibility/Strength Training. 1(0-3)
Introduction to training techniques used for muscular endurance and flexibility training. Recommended for those desiring an individualized approach to light resistance and flexibility training.

1107. Varsity Football. 1(0-3)
Participation in varsity football through regularly scheduled practice sessions and games.

1108. Varsity Basketball. 1(0-3)
Participation in varsity basketball through regularly scheduled practice sessions and games.

1109. Varsity Track and Field, Volleyball, Tennis, Baseball or Softball. 1(0-3)
Varsity participation in either track and field, volleyball, tennis, baseball or softball through regularly scheduled practice sessions, meets and games.

1110. Second Semester Varsity Sports. 1(0-3)
Credit for a second semester's participation in varsity sports.

1111. Social Dance. 1(0-3)
Instruction and practice in social, ballroom, country western and recreational dance.

1112. International Social Dance. 1(0-3)
International social dance instruction and practice in social and ballroom dance, highlighting the salsa, rumba, merengue, samba, cumbia and other regional dance styles.

1114. Tennis. 1(0-3)
Fundamental skills for beginners in tennis.

1116. Intermediate Modern Dance. 1(0-3)
Continuation of the fundamental techniques in modern dance and study of choreography. Prerequisite: EDKN 1246 or equivalent.

1117. Ballet Folklorico. (DANC 1149) 1(0-3)
Fundamental techniques in Ballet Folklorico Dance.

1119. Beginning Rhythmic Activities. 1(0-3)
The development of skills and techniques appropriate for all ages (K-adult) in rhythmic and physical fitness activities suitable for inclusion in an educational setting.

1120. Archery and Badminton. 1(0-3)
Instruction and participation in the basic skills of archery and badminton.

- 1121. Elementary Swimming.** 1(0-3)
Instruction for the beginning swimmer.
- 1123. Intermediate Swimming.** 1(0-3)
Instruction in intermediate swimming skills. Must have basic swimming and personal aquatic safety skills or instructor permission.
- 1124. Advanced Swimming and Water Safety.** 1(0-3)
Instruction in advanced swimming and water safety. Lifeguarding Certification for those who qualify. Prerequisite: EDKN 1123 or equivalent.
- 1125. Water Aerobics.** 1(0-3)
A variety of water activities designed to strengthen the heart, lungs and vascular system without undue stress of weight-bearing exercise. Must have basic swimming and personal aquatic safety skills or instructor permission.
- 1126. Fencing.** 1(0-3)
Fundamental learning and practice of elementary skills in fencing.
- 1127. Skin and SCUBA Diving.** 1(0-3)
Instruction and participation in most basic to advanced skills in skin and SCUBA diving. Safety and proper use of equipment will be stressed. Prerequisite: EDKN 1124 or equivalent. Activity fee, \$25.
- 1128. Water Safety Instructor Certification.** 1(0-3)
Methods and techniques for teaching all levels of swimming, beginner through advanced lifesaving and water safety. Prerequisite: current Advanced Lifesaving Certificate.
- 1129. Aerobic Activities.** 1(0-3)
A variety of activities including aerobic dancing to strengthen the heart, lungs and vascular system.
- 1130. Golf.** 1(0-3)
Instruction and practice in the basic skills for beginners in golf. Activity fee, \$45, subject to change.
- 1135. Racquetball.** 1(0-3)
Instruction and practice in the fundamentals of racquetball.
- 1137. Weight Training/Conditioning.** 1(0-3)
Individualized conditioning program based upon knowledge of the basic training principles underlying flexibility, muscle strength, muscle endurance and cardiorespiratory endurance exercises.
- 1138. Canoeing.** 1(0-3)
Instruction and experience in canoeing. Must have basic swimming and personal aquatic safety skills or instructor permission. Activity fee, \$10.
- 1142. Bowling.** 1(0-3)
Instruction and practice in the basic skills for beginners in bowling.
- 1143. Camping and Backpacking.** 1(0-3)
Instruction and participation in basic camping and backpacking. Safety and proper equipment selection and use will be stressed. Activity fee, \$75.
- 1146. Beginning Modern Dance.** (DANC 1146) 1(0-3)
Fundamental techniques in modern dance.
- 1147. Jazz Dance.** (DANC 1147) 1(0-3)
Beginning modern jazz dancing with emphasis on body alignment and technique.

1148. Sailing. 1(0-3)
Instruction and experience in sailing. Students will spend some time away from the main campus. Must have basic swimming and personal aquatic safety skills or instructor permission. Activity fee, \$10.

1149. Jogging and Circuit Training. 1(0-3)
Instruction and participation in distance running and circuit training.

1150. Mat Pilates. 1(0-3)
Exercises serving to improve fluidity of mobility, mental focus and control, flexibility and posture. Lifelong participation in Mat Pilates can lead to improved muscular strength, balance, coordination and a reduction of stress.

HEALTH (EDHL)

1254. Contemporary Wellness. 2(2-1)
Introductory health education for establishing wellness concepts for men and women of all ages. Nutrition, diseases of the circulatory system, sexually transmitted diseases, behavior modification and related concepts for establishing life time commitments to health promotion are taught. May be substituted as one required activity course.

1304. Foundations of Health. (PHED 1304) 3(3-0)
Study of the profession and practice of health education, health sciences and behavior modification.

1353. Health Communication Through the Lifespan. 3(3-0)
An overview of health issues and methods of health communication to promote the health of individuals and communities.

1361. Nutrition, Health and Safety. 3(3-0)
A study of nutrition, health and safety issues related to children ages birth through eight. Required for students majoring in Early Childhood Education.

2124. CPR and First Aid. 1(0-3)
Current standards and techniques for first aid and cardiopulmonary resuscitation, including bloodborne and airborne pathogen training.

2305. Women's Issues in Health and Sexuality. 3(3-0)
Examines health and medical issues for women, legal and political realities that influence women's lives and important aspects of intimacy and sexuality with a focus on both physiological and psychological development. (Credit may be obtained in only one of EDHL 2305, PSYC 2305 or WGST 2305.)

2325. Health Promotion. 3(3-0)
Overview of theories, processes, activities and settings for health education/health promotion practice.

2327. Environmental Health and Safety. 3(3-0)
Intensive coverage of the aspects of a human being's health and safety in a changing environment. Considers applicable factors of ecology, including problems related to water, waste, pesticides, foods, radiation, population and other aspects of the total ecosystem, as well as personal and occupational safety within these parameters.

3308. Elementary and Secondary School Health. 3(3-0)
Health content for individuals who plan to present health information to children, preadolescent and adolescent individuals. Texas Education Agency standards are emphasized.

3331. Consumer Health. 3(3-0)
An informed health consumer is one who purchases health products and services that are useful and beneficial. This consumer is also aware of consumer protection, product safety and services available if dissatisfied with a product or service.

3333. Human Growth, Development and Sexuality. 3(3-0)
Human sexuality content for different developmental stages. Designed for individuals who plan to present human sexuality content to various age groups.

3335. Drug Education. 3(3-0)
Study of prescription and non-prescription drugs, their action in the body, their benefits and abuse potentials.

3381. Community Health. 3(3-0)
Acquaints the student with all aspects of community and public health. Designed to prepare students for planning, implementation and evaluation of health education/health promotion programs in community, health care and worksite settings. Prerequisites: junior standing.

3383. Women's Health. 3(3-0)
Medical, historical, legal, environmental, sociological and psychological issues that affect women's health, both past and present. Prerequisite: junior standing.

4331. Health: Field Studies. 3(3-0)
Studies and investigations relating to health problems in community health, school health and industry. All students will initiate individual study in an area of their interest. Prerequisite: 15 hours of health.

4337. Disease Entities and Epidemiology. 3(3-0)
Cause, epidemiology, prevention and treatment of communicable, chronic and degenerative disease. Prerequisites: BIOL 2401 and credit or registration in BIOL 2402.

4342. Program Planning for Health Promotion. 3(3-0)
Explore the demographics of the Kingsville area, identify a disease that is prevalent to a local population, assess the resources available, develop a health promotion program and implement the program at a local facility.

4344. Health and Aging. [WI] 3(3-0)
In-depth information regarding the health issues of aging individuals including: physical health, psychological health, legal and ethical issues of health and Medicare/Medicaid. Prerequisite: junior standing.

KINESIOLOGY (EDKN)

1300. Health and Kinesiology as a Profession. 3(3-0)
Overview of the health and kinesiology professions and their relationships with the natural and social sciences along with the arts. In-depth study of the mission and philosophical bases of the health and kinesiology professions with emphasis on professional opportunities and university success. Required of all Health and Kinesiology majors.

1301. Foundations of Kinesiology. (PHED 1301) 3(3-0)
Biological, sociological, psychological, philosophical and historical foundations of kinesiology. Consideration of objectives and programs in the field.

1305. Introduction to Exercise Science. 3(3-0)
Anatomical, physiological, nutritional, biomechanical and psychological foundations of the exercise sciences; courses of study, professional responsibilities and careers within the exercise sciences.

1308. Intramurals and Officiating. (PHED 1308) 3(3-0)
Develop competency in designing, organizing and promoting intramural programs. Emphasis on officiating techniques and procedures in various activities.

2110. Lifelong Activities. 1(0-3)
Participation and introduction to teaching in a variety of lifelong activities and sports. Active participation required. Prerequisite: kinesiology majors or minors only.

- 2112. Individual/Dual Sports.** 1(0-3)
Participation and introduction to teaching in a variety of individual/dual sports, recreational and physical fitness activities. Active participation is expected. Prerequisite: kinesiology majors or minors only.
- 2114. Team Sports.** 1(0-3)
Participation and introduction to teaching in a variety of team sports. Active participation required. Prerequisite: kinesiology majors or minors only.
- 2128. Skills in Outdoor Living.** 1(1-0)
An introductory course concerned with developing skills in a wide variety of outing activities: camping skills, conservation, safety, facilities and programs. Activity fee, \$15.
- 2130. Sport Business Apprenticeship.** 1(1-0)
An introductory field experience in sport business. Forty contact hours in the field in addition to in-class meetings, allowing the student to explore career options in a practical work setting, normally on campus. May be repeated for credit. Prerequisite: kinesiology adviser consent.
- 2201. Certified Personal Trainer Preparation.** 2(2-1)
Course is designed to help prepare students to sit for any of a number of accredited personal trainer certifications with primary focus on the knowledge and skills specific to the American College of Sport Medicine Certified Personal Trainer certification. Includes required laboratory experiences.
- 2321. High Adventure Activities.** 3(3-0)
High adventure activities including conservation of natural resources. Students will spend some time in a camp setting away from the main campus. Activity fee, \$125.
- 2322. Prevention and Care of Athletic Injuries.** 3(2-2)
The prevention, care and rehabilitation of athletic injuries and illnesses.
- 2324. Administration of Sports Programs.** 3(3-0)
Overview of the fundamental principles of management and administration of sports programs. Combines theory and practice related to legal and ethical issues, marketing and organizational structure of recreational and sport related services and facilities.
- 2326. Physical Activity, Health and Safety.** 3(2-2)
The factors that enhance children's physical development; the interrelatedness of physical activity, health, wellness and safety. Includes training in CPR/AED and basic first aid, and requires physical activity.
- 2330. Introduction to Sport Business.** 3(3-0)
Introduction to the sports industry, career opportunities involving sport and the economic impact of sports in America, including theoretical and applied foundations of sport business.
- 2333. Sport Marketing and Promotions.** 3(3-0)
Investigation of the complex responsibilities of the sport promotion specialist that unfold through promotions and sales. Advertising, publicity, sponsorship, atmospherics, incentives, personal contact, community relations, licensing and technology in the sport industry.
- 2335. Sport in Global Society.** 3(3-0)
The impact of sport on global society and its institutions. Current practices, problems and issues in sport and physical activity across the globe.
- 2340. Medical Terminology.** 3(3-0)
Vocabulary related to anatomical structures, physiological processes, illnesses and diseases of the human body.

- 3320. Motor Development/Motor Learning.** 3(2-3)
Physical factors that influence growth, maturation and aging; process underlying perceptual-motor performance and the interpretation and applications of motor research to human movement. Includes required laboratory experiences. Prerequisite: junior standing.
- 3322. Modalities and Therapeutic Exercise.** 3(3-0)
A basic foundation in concepts and techniques of modalities and therapeutic exercise programs for the patient recovering from athletically related injuries. Individual joint rehabilitation. Prerequisites: First Aid and CPR Certification, EDKN 4327, athletic training students or permission of instructor.
- 3332. Program Development/Management in Fitness Industries.** 3(3-0)
Organizational development and management in corporate, commercial and institutional fitness industries. Prerequisite: junior standing.
- 3345. Measurement and Evaluation in Kinesiology.** 3(2-3)
Use and function of the various tests in kinesiology, together with the purpose, scope and techniques of test construction will be analyzed. Sufficient statistical techniques necessary for adequate manipulation and interpretation will be reviewed. Required laboratory experiences. Prerequisites: MATH 1314 or MATH 1324, and one of the following: EDKN 1301, EDKN 1305, EDKN 2330 or EDHL 2325.
- 3350. Kinesiology and Sport in Society.** 3(3-0)
Impact of kinesiology and sport on society and its institutions. Individual characteristics, motivation, psychological interventions and social processes that influence exercise and human performance behaviors. Prerequisite: junior standing.
- 3352. Sport Psychology.** 3(3-0)
Social and psychological factors related to sport participation. Topics include socialization into and through sport; feedback, reinforcement and expectation effects; moral development; competition and competitive stress; self-perceptions; motivation and mental skills training. Prerequisites: PSYC 2301 and junior standing.
- 3353. Applied Performance Psychology.** 3(3-0)
Social and psychological factors related to exercise participation, peak performance, and injury rehabilitation. Prerequisite: PSYC 2301 and junior standing.
- 3355. Sport and the Law. [WI]** 3(3-0)
Legal and ethical dilemmas facing those in sport. Legal principles and judicial opinions in cases involving organized sport. Prerequisite: junior standing.
- 3390. Topics in Sport Business.** 3(3-0)
Current issues in sport business are identified and researched. Course may be repeated for credit as topics vary. Prerequisite junior standing.
- 3395. Topics in Kinesiology and Sport.** 3(3-0)
Current issues and special topics in kinesiology and sport are identified and researched. Course may be repeated for credit as topics vary.
- 3436. Basic Physiology of Exercise.** 4(3-2)
Physiology as applied to exercise and human performance. How the systems of the body respond to both acute and chronic exercise training. Includes required laboratory experiences. Prerequisite: BIOL 2401; credit or registration in BIOL 2402; junior standing.
- 4315. Complex Psychomotor Skills for Children. [WI]** 3(3-0)
Motor development activities for children. Grouping principals and techniques for selecting activities appropriate to various age groups and developmental levels. Prerequisites: EDKN 2110, EDKN 2112, EDKN 2114 and junior standing.

- 4320. Introductory Research Methods.** 3(3-0)
An introduction to research methodologies commonly employed in the health, fitness and exercise science disciplines. Prerequisites: MATH 1314 and junior standing.
- 4324. Exercise in Chronic Disease and Disabilities.** 3(3-0)
Special exercise testing and exercise program design/implementation considerations for individuals with commonly seen chronic diseases and disabilities. Basic pathophysiology. Prerequisites: EDKN 3436 and senior standing.
- 4325. Biomechanics.** 3(3-0)
The study of the human body in its performance of movement and interrelationships of biomechanics, musculoskeletal anatomy and neuromuscular physiology. Prerequisites: BIOL 2401; junior standing.
- 4327. Advanced Athletic Training.** 3(3-0)
Practical experience in the prevention, care and rehabilitation of athletic injuries and illnesses. Prerequisite: EDKN 2322 and EDKN 4325.
- 4328. Internship.** 3(3-0)
The student and the university supervisors will develop a contractual agreement which provides for a minimum of 120 clock hours of specific learning experiences on or off campus. Approved ACSM certification examination required for interns in the exercise science concentrations. Courses may be repeated for credit. Prerequisites: EDKN 2333 or EDKN 4401, and instructor consent.
- 4329. Senior Seminar in Exercise Science. [WI]** 3(3-0)
The capstone course for Kinesiology-Exercise Science, to be taken in the senior year. The course will explore the current status of and current issues in careers in exercise science. Issues will include but not be limited to professional ethics, social impact and career options. Prerequisites: senior standing and instructor consent.
- 4330. Research Projects in Kinesiology.** V:1-3
An independent review of literature and a laboratory or field problem yielding a formal report on the research. Variable credit dependent upon the project. May be repeated for a maximum of 6 semester hours. Prerequisite: advanced standing and prior approval of the problem by the supervising instructor.
- 4332. Advanced Orthopaedic Evaluation.** 4(3-1)
Orthopaedic evaluation techniques and rehabilitation exercises for the upper and lower body. Accepted techniques and rationale from the literature and development of a solid base of skills. Theory and principles of therapeutic exercises. Prerequisites: First Aid and CPR Certification, BIOL 2401, EDKN 4327 and EDKN 3322; athletic training students or permission of instructor.
- 4334. Research Project in Exercise Science.** 3(3-0)
An independent review of literature and a laboratory or field problem yielding a formal report on the research. Prerequisites: Kinesiology majors only, senior standing and prior approval of the problem by the supervising instructor.
- 4336. Research in Sport Business.** 3(3-0)
Research design, data collection, data analysis and data interpretation in sport business. Students are required to complete a practical sport business research project of publication quality. Prerequisite: EDKN 3345.
- 4342. Motor Skills for Special Populations.** 3(3-0)
Practical considerations for conducting kinesiology programs for individuals of all ages with disabilities. Legal entitlements, integrating persons with disabilities, conducting individualized instruction, physical fitness programs and use of motor skills for transitional living. Prerequisites: EDKN 3320 and junior standing.
- 4345. Sport Economics and Finance.** 3(3-0)
Cases from facility construction, marketing, sport law and sponsorship illustrating the integral role of economics and finances in the daily administration of the sport organization. How the disbursement, receipt and use of money can catalyze growth in the sport industry. Prerequisite: junior standing.

- 4350. Sport Event and Facility Management.** 3(3-0)
Designing, planning, implementing and evaluating sport events. Planning and management of major sport facilities. Emphasis on the experience of the sport event or facility's customer and/or participant. Prerequisite: junior standing.
- 4352. Psychology of Injury.** 3(3-0)
Psychosocial factors involved in injury prevention, pain, and the rehabilitation process. Relevant theory, research, and practical applications will be discussed. Prerequisites: PSYC 2301 and junior standing.
- 4353. Psychology for Sports Coaches.** 3(3-0)
Understanding and applying psychological principles as they relate to sports coaching and athletic performance. Prerequisites: EDKN 3352, PSYC 2301, and junior standing.
- 4401. Exercise Testing and Prescription.** 4(3-1)
Design and implementation of exercise programs for healthy and special populations based upon appropriate screening and evaluation procedures. Laboratory required. Prerequisites: EDKN 3436 and senior standing.
- 4432. Advanced Orthopaedic Evaluation.** 4(3-1)
Orthopaedic evaluation techniques and rehabilitation exercises for the upper and lower body. Accepted techniques and rationale from the literature and development of a solid base of skills. Theory and principles of therapeutic exercises. Prerequisites: First Aid and CPR Certification, BIOL 2401, EDKN 4327 and EDKN 3322; athletic training students or permission of instructor.

**Degree Requirements
Bachelor of Science
Kinesiology-Exercise Science**

Freshman Year				Junior Year			
COMS 1311 or	3	EDKN 2335 or	3	EDKN 3345	3	EDKN 3320	3
COMS 1315		EDKN 2340		EDKN 3353	3	EDKN 3332	3
EDHL 1254 or	2	ENGL 1302	3	EDKN 3436	4	EDHL/EDKN	3
EDKN 2201		HIST 1302	3	Supporting Field	3	Elective, adv.	
EDKN 1305	3	MATH 1314	3	Supporting Field	<u>3</u>	Supporting Field	3
ENGL 1301	3	UNIV 1102	1		16	Supporting Field	<u>3</u>
HIST 1301	3	EDKN Aquatics or	1				15
UNIV 1101	<u>1</u>	EDKN Fitness*					
	15	^Component option B**	<u>1</u>				
			15				
Sophomore Year				Senior Year			
BIOL 2401	4	BIOL 2402	4	EDKN 4320	3	EDHL/EDKN	3
EDHL 2325	3	EDHL 2124	1	EDKN 4325	3	Elective, adv.	
POLS 2301	3	HSCI 2350	3	EDKN 4401	4	EDKN 4324	3
^Creative arts	3	POLS 2302	3	Supporting Field, adv.	3	EDKN 4328	3
^Lang/Phil/Culture	<u>3</u>	PSYC 2301	3	Supporting Field, adv.	<u>3</u>	EDKN 4329	<u>3</u>
	16	EDKN Aquatics or	<u>1</u>		16		12
		EDKN Fitness*	15				
						Total Hours Required	120

*Select from EDKN 1105, EDKN 1121, EDKN 1123, EDKN 1124, EDKN 1125, EDKN 1128, EDKN 1129, EDKN 1137, EDKN 1149 or EDKN 1150.

**Can be replaced with an elective if EDHL 1254 and/or EDKN 2355 is taken within the major courses.

EDHL/EDKN advanced electives select from EDHL 4344, EDKN 4342, EDKN 4352.

**Degree Requirements
Bachelor of Science
Kinesiology-Exercise Science (Performance Psychology Option)**

Freshman Year				Junior Year			
COMS 1311 or	3	EDKN 2335	3	EDHL 3333 or	3	EDHL 4344 or	3
COMS 1315		ENGL 1302	3	EDKN 3345		EDKN 4342	
EDHL 1254 or	2	HIST 1302	3	EDKN 3352	3	EDKN 3332	3
EDKN 2201		MATH 1314	3	EDKN 3436	4	EDKN 3353	3
EDKN 1305	3	PSYC 2301	3	PSYC 3304 or	3	PSYC 4325	3
ENGL 1301	3	UNIV 1102	<u>1</u>	PSYC 4328		Statistics*	<u>3</u>
HIST 1301	3		16	PSYC 4312	<u>3</u>		15
UNIV 1101	<u>1</u>				16		
	15						
Sophomore Year				Senior Year			
BIOL 2401	4	BIOL 2402	4	EDKN 4320	3	EDKN 4324	3
POLS 2301	3	EDHL 2124	1	EDKN 4325	3	EDKN 4328	3
PSYC 2314	3	EDKN 3320	3	EDKN 4353	3	EDKN 4329	3
^Creative arts	3	POLS 2302	3	EDKN 4401	4	EDKN 4352	<u>3</u>
^Lang/Phil/Culture	<u>3</u>	PSYC 3301	<u>3</u>	PSYC 4322	<u>3</u>		12
	16		14		16		
						Total Hours Required	120

*Select from PSYC 3381, SOCI 3381 or STAT 4301.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Kinesiology-Exercise Science (Pre-Physical Therapy Option)**

Freshman Year				Junior Year				
BIOL 1306/1106	4	BIOL 1307/1107	4	CHEM 1311/1111	4	CHEM 1312/1112	4	
EDHL 1254 or EDKN 2201	2	ENGL 1302	3	EDKN 3345	3	EDKN 3320	3	
EDKN 1305	3	HIST 1302	3	EDKN 3436	4	EDKN 3332	3	
ENGL 1301	3	MATH 1314	3	BIOL, adv.	3	PSYC 2314	3	
HIST 1301	3	SOCI 1301	3		14	Statistics*	3	
UNIV 1101	1	UNIV 1102	1				16	
	16		17					
Sophomore Year				Senior Year				
BIOL 2401	4	BIOL 2402	4	EDKN 3353	3	EDHL/EDKN Elective, adv.	3	
COMS 1311 or COMS 1315	3	EDHL 2340	3	EDKN 4320	3	EDKN 4324	3	
POLS 2301	3	HSCI 2350	3	EDKN 4325	3	EDKN 4328	3	
^Creative arts	3	POLS 2302	3	EDKN 4401	4	EDKN 4329	3	
^Lang/Phil/Culture	3	PSYC 2301	3		13		12	
	16		16					
							Total Hours Required	120

*Select from PSYC 3381, SOCI 3381 or STAT 4301.

EDHL/EDKN advanced electives select from EDHL 4344, EDKN 4342, EDKN 4352.

**Degree Requirements
Bachelor of Science
Kinesiology (Sport and Leisure Studies)**

Freshman Year				Junior Year				
EDHL 1254 or EDKN 2201	2	COMS 1311 or COMS 1315	3	EDKN 3345	3	EDKN 3352	3	
EDKN 1119	1	ENGL 1302	3	EDKN 3426	4	EDHL Elective, adv.	3	
EDKN 1301	3	HIST 1302	3	EDHL Elective, adv.	3	EDKN Elective, adv.	3	
EDKN 1308 or EDKN 2330	3	MATH 1314	3	EDKN Elective, adv.	3	Supporting Field	3	
ENGL 1301	3	UNIV 1102	1	Supporting Field	3	Supporting Field	3	
HIST 1301	3	EDKN Aquatics*	1		16		15	
UNIV 1101	1	EDKN Recreation**	1					
	16		15					
Sophomore Year				Senior Year				
BIOL 2401	4	BIOL 2402	4	EDHL 4344	3	EDHL Elective, adv.	3	
EDHL 2124	1	EDKN 2324 or EDKN 2333	3	EDKN Elective, adv.	3	EDKN Elective, adv.	3	
POLS 2301	3	EDKN 2335	3	Elective	3	Elective	3	
^Creative arts	3	POLS 2302	3	Supporting Field	3	Supporting Field, adv.	3	
^Lang/Phil/Culture	3	PSYC 2301	3	Supporting Field, adv.	3		12	
EDKN Fitness***	1		3		15			
	15		16					
							Total Hours Required	120

*Select from EDKN 1121, EDKN 1123, EDKN 1124 or EDKN 1128.

**Select from EDKN 1114, EDKN 1120, EDKN 1126, EDKN 1130, EDKN 1135, EDKN 1142 or EDKN 2128.

***Select from EDKN 1105, EDKN 1125, EDKN 1129, EDKN 1137, EDKN 1149 or EDKN 1150.

EDKN advanced electives select from EDKN 3320, EDKN 3332, EDKN 3350, EDKN 3355, EDKN 3395, EDKN 4324, EDKN 4325, EDKN 4328, EDKN 4342, EDKN 4345, EDKN 4352.

EDHL advanced electives select from any advanced EDHL course except EDHL 4344.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

**Degree Requirements
Bachelor of Science
Kinesiology (Sport Business)**

Freshman Year				Junior Year			
EDKN 1308	3	COMS 1311 or	3	ECON 2302	3	EDKN 3390	3
EDKN 2330	3	COMS 1315		EDKN 2335	3	EDKN 4328	3
ENGL 1301	3	EDKN 2130	1	EDKN 3320	3	EDKN 4336	3
HIST 1301	3	ENGL 1302	3	EDKN 3345	3	MGMT 3322	3
UNIV 1101	1	HIST 1302	3	POLS 2302	<u>3</u>	<i>^Lang/Phil/Culture</i>	<u>3</u>
<i>^Creative arts</i>	<u>3</u>	MATH 1314 or	3		15		15
	16	MATH 1324					
		UNIV 1102	1				
		EDKN Activity	<u>1</u>				
			15				
Sophomore Year				Senior Year			
BIOL 2401	4	ACCT 2301	3	EDKN 3352	3	EDKN 3390	3
COMM 2311	3	BIOL 2402	4	EDKN 3355	3	EDKN 4328	3
EDHL 2124	1	COMM 2310	3	EDKN 3436	3	EDKN 4345	3
EDKN 2130	1	ECON 2301	3	EDKN 4350	4	ISYS 3330	<u>3</u>
POLS 2301	3	EDKN 2333	<u>3</u>	MKTG 3324	<u>3</u>		<u>12</u>
PSYC 2301	<u>3</u>		16		16		
	15						
						Total Hours Required	120

**Degree Requirements
Bachelor of Science
Kinesiology (EC-12 Physical Education with Teacher Certification)**

Freshman Year				Junior Year			
COMS 1311 or	3	EDKN 1308	3	EDKN 3320	3	EDED 3302	3
COMS 1315		ENGL 1302	3	EDKN 3345	3	EDED 3310	3
EDHL 1254 or	2	HIST 1302	3	EDKN 3352	3	EDED 3333	3
EDKN 2201		MATH 1314	3	EDKN 3436	4	EDKN 4315	3
EDKN 1119	1	PSYC 2301	3	EDKN 4325	<u>3</u>	EDKN 4342	3
EDKN 1301	3	UNIV 1102	1		16	Supporting Field	<u>3</u>
ENGL 1301	3	EDKN Aquatics*	<u>1</u>				18
HIST 1301	3		17				
UNIV 1101	<u>1</u>						
	16						
Sophomore Year				Senior Year			
BIOL 2401	4	BIOL 2402	4	EDED 3341	3	EDED 4623	6
EDKN 2112	1	EDHL 2124	1	EDED 3362	3	EDRG 4314	<u>3</u>
EDHL 2114	1	EDKN 2110	1	Supporting Field	3		9
EDKN 2335	3	EDKN 2324	3	Supporting Field, adv.	3		
POLS 2301	3	POLS 2302	3	Supporting Field, adv.	<u>3</u>		
<i>^Creative arts</i>	3	Supporting Field	3		15		
<i>^Lang/Phil/Culture</i>	<u>3</u>	Supporting Field	<u>3</u>			Total Hours Required	127
	18		18				

*Select from EDKN 1121, EDKN 1123, EDKN 1124 or EDKN 1128.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF TEACHER AND BILINGUAL EDUCATION

Gerri M. Maxwell, *Chair*

Rhode Hall 251. MSC 196. Extension 2203.

Regents Professor

K. Bradley

Professors

J. Bradley, Desiderio, Goswami, Lassmann

Associate Professors

Guzman, Sherris, Torres, Wong-Ratcliff

Assistant Professors

Garza, Garza-Reyna, Huskin, McNair, Modesto, Sowell

Lecturer

Garcia-Obregon

Faculty Emeriti

Bogener, Gonzalez, Harvey, Hopkins, Morales

The faculty in the Department of Teacher and Bilingual Education is united in our **vision** that we will become the program of choice for individuals wishing to pursue a career in education in south Texas. To this end, our **mission** is to serve the needs of south Texas, the state and nation by preparing qualified professionals to assume positions of responsibility and leadership in the classrooms and schools of the 21st century.

Through this mission, our **goal** is to establish and facilitate life-long professional development for both pre-service and professional educators through quality undergraduate and graduate programs. The Department of Teacher and Bilingual Education prepares education professionals for classroom and leadership roles in schools with diverse populations in the changing cultural and educational environments of south Texas. Our goal will be accomplished through a process of collaboration and commitment. Our strategies will utilize technology, research-based teaching methods, developmentally appropriate field-based experiences and outcome-based performance assessments. This process is aimed at maximizing learning for children, pre-service teachers, professional educators and university partners.

Admission requires successful completion of 60 hours of college/university course work with at least a 2.75 cumulative grade point average on a 4.0 scale. No course in the Department of Teacher and Bilingual Education (prefixes EDBL, EDEC, EDED, EDRG, EDSE, EDSL) may be counted toward any degree leading to teacher certification unless the grade is at least a C.

BILINGUAL EDUCATION (EDBL)

3308. Survey of Bilingual Education.

3(3-0)

Educational, psychological, historical and linguistic foundations of bilingual education; principles of learning relevant to bilingual-bicultural groups. Prerequisites: admission to Educator Preparation Program; SPAN 1313, SPAN 1314 or two approved Spanish courses.

3320. Tests and Measurements in the Bilingual and ESL Classrooms.

3(3-0)

Assessment instruments and strategies used in local, state and national systems for culturally and linguistically diverse students. Development and assessment of literacy and biliteracy; formal and informal assessment of language proficiency for Bilingual and ESL classrooms. Prerequisite: admission to Educator Preparation Program.

3325. Teaching English Language Learners in the Inclusive Classroom.

3(3-0)

How to adjust the curriculum for English Language Learners by applying language, literacy and learning theories to instruction in the first and second languages. Strategies for developing literacy in English by using the students' primary language. Prerequisite: admission to Educator Preparation Program.

3348. Teaching the Curriculum in Spanish.

3(3-0)

Methods and techniques of content-area instruction in Spanish for the bilingual child, using the first and second languages to build curriculum in language arts, social studies, science, mathematics, music and art. Preparation for

the Bilingual Target Language Proficiency Test (BTLPT) – Spanish. Prerequisites: admission to Educator Preparation Program; SPAN 1313, SPAN 1314 or two approved Spanish courses.

4307. Advanced Problems in Teaching English as a Second Language. 3(3-0)

Major approaches of second language acquisition. Special materials and methods of instruction for the linguistically different child. Emphasis on organization, curriculum development and usage of learning techniques for teachers of English as a Second Language and of Bilingual Education.

4316. Literacy Development for English Language Learners. 3(3-0)

Social, cultural and linguistic factors that affect student literacy. Designing literacy plans to meet diverse needs of students. Adjusting curriculum to support English Language Learners. Includes English Language Proficiency Standards (ELPS). Prerequisite: admission to Educator Preparation Program.

4354. Applied Linguistics. 3(3-0)

Linguistic structures and the relationships found in first and second language learning; educational implications in public school classrooms; dialects and cognitive development of language. First and second language acquisition theories for English Language Learners. Prerequisite: admission to the Educator Preparation Program.

EARLY CHILDHOOD EDUCATION (EDEC)

1310. Family and the Community. 3(3-0)

A study of the relationship between the child, the family, the community and early childhood educators, including a study of parent education, family and community lifestyles, child abuse and current issues.

3328. Foundations of Early Childhood Education. 3(3-0)

Historical, philosophical, sociological, psychological and research bases for programs for young children. Legislation for licensing, certification, handicapped children. Classroom management with emphasis on state public school curriculum for prekindergarten and kindergarten.

4317. Cognitive Development in Early Childhood. 3(3-0)

Development of logical thought and reasoning in young children. Theories and research on cognitive and aesthetic development. Methods and materials to facilitate quantitative and qualitative concepts in preschool children. Strategies for developing critical thinking skills in early childhood.

4320. Assessment in Early Childhood Education. 3(3-0)

An introductory course in evaluation and assessment strategies; inclusion of formal and informal assessment; advantages and disadvantages of different evaluative instruments; issues regarding bias; assessment of special populations; and appropriate usage of evaluative results. Prerequisite: EDEC 3328, EDEC 4317 or EDEC 4349.

4337. Physical Development in Early Childhood. 3(3-0)

Strategies and materials for enhancing the physical development of young children. Units of health, nutrition, safety and other related topics. Field experiences.

4349. Social/Emotional Development in Early Childhood. 3(3-0)

Study of factors that influence children's social and emotional development; socialization patterns; classroom strategies for promoting cooperation, acceptance, gender and ethnic identity; environments that are conducive to the development of autonomy in children.

EDUCATION (EDED)

1301. Teaching as a Profession: Schools and Society. 3(3-0)

Study of the foundations of education in the United States, with particular attention to Texas. Introduction to the history, purposes, structure and philosophies of education and to career options in teaching and other education fields. Students will apply critical thinking and communication skills as they structure their own educational philosophies about learning processes and professional responsibility. Students will develop personal and leadership qualities to succeed in the university and the teaching profession.

2310. Teaching in a Global Community. 3(3-0)
Examination of global cultural diversity and the relationship between local and global issues in educational environments.

Requirements for admission to teacher education and for admission to student teaching are set forth in the introduction to the College of Education and Human Performance.

3302. Development and Behavior of the Child and Adolescent. 3(3-4)
The child and adolescent in contemporary society: ethnic background, interests, attitudes, values and needs, self-concept, adjustment mechanisms; the learning process; social, emotional and sexual development. Identification and teaching mainstreamed and special populations of students. Methods for working effectively with the elementary and secondary student. Practical application in the classroom emphasized. 50% field-based. Prerequisite: admission to teacher education.

3304. Introduction to the Teaching Profession. 3
Study of the organization, function, history and purpose of schools in the United States and Texas and the importance of instructional media. Requires 8 hours weekly of participation as a teacher assistant in an accredited school. Student must furnish own transportation. Prerequisite: admission to teacher education.

3310. Introduction to Instructional Design for Secondary Schools. 3(3-0)
Lesson plan design for various teaching approaches will be emphasized. In correlation with lesson design, assessment methods and learning styles will be covered in detail with emphasis on how these three aspects of education are interdependent. Prerequisite: admission to teacher education.

3313. Child Development. 3(3-0)
Growth and development, teaching and learning processes. Emphasis on early childhood and elementary school children. Prerequisite: admission to teacher education.

3316. Teaching of Social Studies in the Elementary School. 3(3-4)
Methods and techniques of presenting social studies materials and content, including audio-visual aids, testing and evaluation, historical background, public school curriculum and philosophical implications. Prerequisites: junior standing and admission to teacher education.

3318. Principles of Learning. 3(3-0)
Motivation, attention, interest, transfer, relevance and other principles of learning. Theories and models with emphasis on early childhood and elementary school students. Prerequisite: admission to teacher education.

3322. Teaching Internship I. 3(1-4)
Internship designed for in-service teachers seeking certification under the post baccalaureate program. Prerequisite: bachelor's degree from a regionally accredited institution, employment by a school district and criteria for admission to student teaching as set out in this catalog.

3323. Teaching Internship II. 3(1-4)
Internship designed for in-service teachers seeking certification under the post baccalaureate program. Prerequisite: EDED 3322.

3332. Curriculum and Materials Development and Planning. 3(3-0)
A foundation course in curriculum philosophy and practice. Curriculum organization, planning and evaluation are analyzed. Materials for classroom use are developed and studied. Legal issues are reviewed. Prerequisite: EDED 3302 and EDED 3333.

3333. Classroom Management and Organization in the Middle School. 3(3-4)
Includes a general overview of the middle school, comparison and contrast to high school and uniqueness of the middle school scenario. Middle school students and their problems will be emphasized as well as teaching strategies and techniques with the middle school student in mind. Also included is a study of individual and group behavior change and behavior management with middle school students. Practical application in the classroom is emphasized.

50% field-based. Prerequisite: admission to teacher education.

3341. Group Management in Physical Activities. 3(3-0)

Theory and application of group management skills that are appropriate for physical activities. Effects of litigation, facilities, design, program, equipment, class scheduling and lesson planning on group management. Prerequisite: completion of 90 semester hours. For kinesiology majors only.

3344. Assessment and Teaching of Mathematics. 3(3-4)

Effective assessment and teaching of mathematics in elementary grades focusing on inquiry and other constructivist approaches. Field experience required. Prerequisite: admission to teacher education.

3346. Assessment and Teaching of Science. 3(3-4)

Effective assessment and teaching of science in elementary grades focusing on inquiry and other constructivist approaches. Field experience required. Prerequisite: admission to teacher education.

3362. Instructional Methods and Strategies, Secondary Schools. 3(3-4)

Emphasis will be given to practical activities in the classroom stressing various methods, strategies and learning styles appropriate for a secondary situation. 50% field-based. Prerequisites: EDED 3302 and EDED 3333.

4310. Technology and Media in Education. 3(3-0)

Emphasizes learning and mastery of technology and media tools that may be used to enhance learning in the public schools. Prerequisite: admission to teacher education.

4318. Academics, Creativity and Play. 3(3-0)

Emphasis on creative academic activity, fine arts and physical activity in the elementary grades. Emphasis on developing the whole child through constructivist approaches. Prerequisite: admission to teacher education.

4320. Integrating Curriculum Across Disciplines. 3(3-0)

Methods and materials for teaching children, early childhood through sixth grade. Scope and sequence of language, math, social and natural sciences, fine arts, health, and safety and physical education. Prerequisite: admission to teacher education.

4328. Topics and Issues in Elementary and Secondary Education. 3(3-0)

In-depth study of current problems and issues facing teaching and public education. Course may be repeated for credit when topics differ.

4613. Elementary School Student Teaching. V:3-6

Students will demonstrate, in a laboratory setting, knowledge of and an ability to effectively apply those skills necessary for successful teaching in the elementary school. Student teaching is a full-time assignment (8 a.m. to 5 p.m.) for 15 weeks in an accredited elementary school. Student is to furnish transportation. Prerequisite: admission to student teaching.

4623. Secondary School Student Teaching. V:3-6

Students will demonstrate in a laboratory setting knowledge of and an ability to effectively apply those skills necessary for successful teaching in the secondary school. Student teaching is a full-time assignment (8 a.m. to 5 p.m.) for 15 weeks in an accredited secondary school. Student is to furnish transportation. Prerequisite: admission to student teaching.

READING (EDRG)

3314. Foundations of Literacy Instruction. [WI] 3(3-4)

Introduction to the reading process. The study of essential reading abilities and foundations of reading with emphasis on the state public school curriculum in reading. Field experience required. Prerequisite: admission to teacher education.

3321. Literature for Public Schools. 3(3-0)
Criteria for selection and evaluation of children's literature in public schools; techniques for using literature in the classroom; integrating children's literature into the content area and reading curriculum. Using literature to meet the needs of children and to complement the reading and content area curriculum in elementary schools. Prerequisite: 9 semester hours of English.

3344. English Language Arts. 3(3-4)
Interrelationships between oral and written language; psycholinguistic and sociolinguistic theory and its application to English language learning; theories of writing development; criteria for evaluating oral and written language development. Field experience required.

4305. Effective Remediation of Reading Problems. 3(3-0)
Methods for remediating the reading of low achieving students, with a focus on using multi-sensory techniques. Prerequisites: EDRG 3314, EDRG 3344 and EDRG 4330.

4307. Literacy Instruction for Grades 4-8. 3(3-0)
Emphasis on materials, methods and beliefs for teaching literacy in grades 4-8. Includes the reading process, comprehension strategies for both narrative and expository text, vocabulary development, word study, study skills and reading-writing connections.

4314. Developmental Corrective Reading for Secondary School. 3(3-0)
The nature of the reading process, reading styles, comprehension instruction, vocabulary development, readability and lesson planning in the content areas. Prerequisite: 9 advanced hours of education or the equivalent.

4330. Classroom Reading Assessment and Remediation. 3(3-4)
Includes methods of assessment, both formal and informal, with attention given to special needs of the learning disabled and gifted readers. Development of diagnostic/prescriptive case study required. Lab experience is required. Prerequisites: EDRG 3314 and EDRG 3344.

SPECIAL EDUCATION (EDSE)

The special education teaching profession offers many options. One may choose a career path that specializes in specific types of disabilities, focus on a specific age group, from infants through adults, and also have the option of working in many different settings in school and in the community. Special education teachers may have their own classrooms or may work as resource teachers and consultants with students who receive their primary instruction from other teachers. Special educators are in great demand in Texas and nationwide and have unlimited opportunities for career advancement through graduate studies in specific areas of special education, administration, counseling and educational diagnostics.

Contact the Coordinator of Special Education for admission requirements to the specialization (delivery system) in Special Education.

4349. Foundations of Special Education. [WI] 3(3-4)
History, legislation, practices and opportunities inherent in teaching students with exceptionalities. Field experience required. This is the first course in the special education sequence.

4350. Assessment of Exceptional Individuals. 3(3-0)
Formal and informal assessment procedures applicable to identification of and instructional planning for exceptional individuals. The theory and content of instruments used to identify, analyze and evaluate the strengths and learning needs of exceptional individuals are emphasized. A minimum of 15 hours of field experience is included. Prerequisite: EDSE 4349.

4353. Transitioning Strategies in Special Education. 3(3-0)
Methods and strategies applicable to the educational needs of secondary students with disabilities including post-secondary education, life skills, vocational preparation and transition planning. Prerequisite: EDSE 4349.

4357. Federal and State Regulations. 3(3-0)
Historical background leading to current laws and regulations pertaining to the legal aspects of special education. Impact of the Texas Education Code in general. Prerequisite: EDSE 4349.

4358. Principles of Behavior Management. 3(3-4)
Comparison of theoretical models for individual and group behavior change and implications for behavior management. Field experience is required. Prerequisite: EDSE 4349.

4359. Teaching Exceptional Students. 3(3-0)
Models and strategies applicable to the assessment and educational needs of exceptional students in various settings. This is the last course in the Special Education sequence. Prerequisite: EDSE 4349, EDSE 4357, and EDSE 4358.

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Core Subjects EC-6 w/ Bilingual Supplemental

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	EDBL 3308	3	EDBL 3320	3
MATH 1314	3	HIST 1301	3	EDBL 4316	3	EDBL 3325	3
SPAN 1313/SPAN 1373*	3	PHYS 1375	3	EDED 3313	3	EDED 3344	3
UNIV 1101	1	SPAN 1314/SPAN 2302*	3	EDED 4310	3	EDED 3346	3
^Creative arts	<u>3</u>	UNIV 1102	1	EDRG 3321	3	EDRG 3314	3
	13	^Communications	<u>3</u>	GEOL 2376	<u>3</u>	EDSE 4349	<u>3</u>
			16		18		18
Sophomore Year			Senior Year				
CHEM 1376	3	BIOL 2375	3	EDBL 3348	3	EDED 4613	<u>6</u>
EDKN 2326	3	HIST 2321/	3	EDBL 4354	3		<u>6</u>
GEOG 1303	3	HIST 2322		EDED 3316	3		
HIST 1302	3	MATH 1351	3	EDRG 3344	3		
MATH 1350	3	POLS 2302	3	EDSE 4358	3	Total Hours Required	122
POLS 2301	<u>3</u>	SOCI 2361	<u>3</u>	HIST 4346	<u>3</u>		
	18		15		18		

*Other hours may be substituted if Department of Language and Literature placement procedures determine that the student is qualified for a course requiring the indicated course.

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Business and Finance 6-12

Freshman Year			Junior Year				
COMS 1311	3	ENGL 1302	3	EDED 3310	3	EDED 3302	3
ENGL 1301	3	HIST 1302	3	ISYS 3330	3	EDED 3333	3
HIST 1301	3	FINC 2331	3	MGMT 3322	3	EDED 4310	3
MATH 1314 or	3	MATH 1325	3	MKTG 3324	3	Support field*	<u>6</u>
MATH 1324		UNIV 1102	1	Support field adv.*	<u>3</u>		15
UNIV 1101	1	Support field*	<u>3</u>		15		
^Creative arts	<u>3</u>		16				
	16						
Sophomore Year			Senior Year				
ACCT 2301	3	ACCT 2302	3	BCOM 3306	3	EDED 4623	<u>6</u>
BUAD 2374	3	ECON 2302	3	EDED 3332	3	EDRG 4314	3
ECON 2301	3	ENGL 2342 or	3	EDED 3362	3	EDSE 4349	<u>3</u>
POLS 2301	3	ENGL 2362		Supporting field*	<u>6</u>		12
^Life/Physical sciences	3	POLS 2302	3		15		
Elective	<u>1</u>	^Life/Physical sciences	<u>3</u>				
	16		15				
						Total Hours Required	120

*All courses must be from the same academic field.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
English Language Arts and Reading 4-8

Freshman Year			Junior Year				
COMS 1311 or	3	ENGL 1302	3	EDED 4310	3	EDED 3302	3
COMS 1315		HIST 1302	3	EDRG 3314	3	EDED 3333	3
ENGL 1301	3	MATH 1350	3	EDRG 3321	3	EDRG 4307	3
HIST 1301	3	PHYS 1375	3	EDSE 4349	3	EDRG 4314	3
MATH 1314	3	UNIV 1102	1	ENGL 3300	<u>3</u>	ENGL 4311	3
UNIV 1101	1	Elective	<u>1</u>		15	American Lit. adv.*	<u>3</u>
[^] <i>Creative arts</i>	<u>3</u>		14				18
	16						
Sophomore Year			Senior Year				
CHEM 1376	3	BIOL 2375	3	COMS 3304	3	EDED 4613 or	6
COMM 2311	3	ENGL 2314 or	3	EDED 3332	3	EDED 4623	
ENGL 2342 or	3	ENGL 2331		EDRG 3344	3	ENGL, adv.	<u>3</u>
ENGL 2362		GEOL 2376	3	EDRG 4330	3		9
MATH 1351	3	POLS 2302	3	EDSE 4358	3		
POLS 2301	<u>3</u>	SOCI 2361	<u>3</u>	British Lit., adv.**	<u>3</u>		
	15		15		18		
						Total Hours Required	120

*American literature: ENGL 4360, ENGL 4361, ENGL 4365, ENGL 4366, ENGL 4370, ENGL 4372 or ENGL 4374.

**Later British 19th century or later: ENGL 4340, ENGL 4341, ENGL 4343 or ENGL 4346.

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
English Language Arts and Reading 7-12

Freshman Year			Junior Year				
ENGL 1301	3	COMS 1311	3	EDED 3310	3	EDED 3302	3
HIST 1301	3	ENGL 1302	3	EDED 4310	3	EDED 3333	3
MATH 1314	3	HIST 1302	3	ENGL 4311	3	EDRG 3344	3
UNIV 1101	1	UNIV 1102	1	Amer. lit., adv.	3	ENGL 4331	3
[^] <i>Life/Physical sciences</i>	<u>3</u>	[^] <i>Life/Physical sciences</i>	3	ENGL, adv.	<u>3</u>	Amer. lit., adv.*	3
	13	COMJ, COMM or	<u>3</u>		15	COMJ, COMM or	<u>3</u>
		COMS##	16			COMS, adv.##	18
Sophomore Year			Senior Year				
ENGL 2342	3	EDRG 3321	3	EDED 3332	3	EDED 4623	6
POLS 2301	3	ENGL 3362	3	EDED 3362	3	EDSE 4349	<u>3</u>
SOCI 2361	3	POLS 2302	3	EDRG 4307	3		9
[^] <i>Creative arts</i>	3	[^] <i>Component option B</i>	3	EDRG 4330	3		
COMJ, COMM or	<u>3</u>	COMJ, COMM	3	Brit. Lit., adv.**	3		
COMS##	15	COMS##		ENGL, adv.	<u>3</u>	Total Hours Required	120
		Elective	<u>1</u>		18		
			16				

*Select from any approved American Literature course.

**Select from any approved British Literature course.

#Select from COMM 1307, COMM 2311, COMM 2309, COMS 1144, COMJ 2129. COMM 2311 is prerequisite to COMM 2309 and COMJ 2129. COMS 1144 and/or COMJ 2129 may be repeated to reach a total of 3 hours.

##Select two courses from COMM 3308, COMJ 3304, COMJ 4302, COMS 3302, COMS 3331, or any approved upper division COMM, COMJ or COMS course. COMS 3331 is prerequisite to COMS 3304.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Core Subjects 4-8

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	BIOL 1306/	3	EDED 3302	3
GEOL 1301/ GEOL 1101	4	GEOG 1303	3	BIOL 1106	1	EDED 3333	3
HIST 1301	3	HIST 1302	3	EDRG 4307	3	EDSE 4349	3
MATH 1314 or	3	MATH 1350	3	SOCI 2361	3	STAT 1342	3
MATH 1316	3	PHYS 1375	3	Special Emphasis**	3	Special Emphasis**	<u>3/4</u>
UNIV 1101	1	UNIV 1102	<u>1</u>	Special Emphasis**	<u>3</u>		15-16
<i>^Comp Area B</i>	<u>1</u>		16		16		
	15						
Sophomore Year				Senior Year			
BIOL 2375	3	COMS 1311 or	3	EDED 3332	3	EDED 4613 or	6
CHEM 1376	3	COMS 1315		***EDED 3344 or	3	EDED 4623	
ENGL 2342	3	ENGL 2362	3	EDED 3346 or		EDRG 4314	<u>3</u>
MATH 1351	3	GEOL 1303/	4	EDED 3316 or			9
POLS 2301	<u>3</u>	GEOL 1103		EDED 4330			
	15	POLS 2302	3	EDED 4310	3		
		<i>^Creative arts</i>	<u>3</u>	EDSE 4358	3	Total Hours Required	120-122
			16	HIST 4346	3		
				Special Emphasis	<u>3/4</u>		
					18-19		

*MATH 1334 may be taken only with permission from adviser.

**Special Emphasis courses to be chosen from one of the following disciplines: Mathematics: MATH 1348, MATH 2413, MATH 3325, MATH 3352 Social Studies: HIST 2321, HIST 2322. Choose 2 from any approved U.S. History, adv. and POLS 4331.

Science: CHEM 1311/CHEM 1111, BIOL 2421, GEOG 3305, Science, adv. English/LA/Reading: COMS 3304 or ENGL 3300; EDRG 3321. Choose 2 from British Lit., American Lit., ENGL 4311.

***Select course that matches the discipline chosen for Special Emphasis: EDED 3344 for Mathematics; EDED 3316 for Social Studies; EDED 3346 for Science; EDRG 4330 for English/LA/Reading

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Core Subjects EC - 6

Freshman Year				Junior Year			
ENGL 1301	3	ENGL 1302	3	EDBL 4316	3	EDED 3344	3
HIST 1301	3	HIST 1302	3	EDED 3313	3	EDED 3346	3
MATH 1314	3	PHYS 1375	3	EDED 3318	3	EDRG 3314	3
UNIV 1101	1	POLS 2301	3	EDED 4318	3	EDRG 4307	3
<i>^Creative arts</i>	<u>3</u>	UNIV 1102	1	EDRG 3321	3	EDSE 4349	3
	13	<i>^Communications</i>	<u>3</u>	GEOL 2376	<u>3</u>	HIST 4346	<u>3</u>
			16		18		18
Sophomore Year				Senior Year			
CHEM 1376	3	BIOL 2375	3	EDED 3316	3	EDED 4613	<u>6</u>
EDED 2310	3	EDKN 2326	3	EDED 4310	3		<u>6</u>
ENGL 2342/ENGL 2362	3	GEOG 1303	3	EDED 4320	3		
MATH 1350	3	HIST 2321/	3	EDRG 3344	3		
POLS 2302	3	HIST 2322		EDRG 4330	3	Total Hours Required	122
SOCI 2361	<u>3</u>	MATH 1351	<u>3</u>	EDSE 4358	<u>3</u>		
	18		15		18		

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Mathematics 4-8

Freshman Year			Junior Year				
COMS 1311 or	3	ENGL 1302	3	EDED 4310	3	EDED 3302	3
COMS 1315		HIST 1302	3	EDRG 4307	3	EDED 3333	3
ENGL 1301	3	MATH 1316	3	GEOL 2376	3	EDRG 4314	3
HIST 1301	3	PHYS 1375	3	MATH 3325	3	EDSE 4349	3
MATH 1314	3	UNIV 1102	1	SOCI 2361	<u>3</u>	MATH, adv.	<u>3</u>
UNIV 1101	1	<i>^Component option B</i>	<u>3</u>		15		15
<i>^Creative arts</i>	<u>3</u>		16				
	16						
Sophomore Year			Senior Year				
CHEM 1376	3	BIOL 2375	3	EDED 3332	3	EDED 4613 or	<u>6</u>
ENGL 2342 or	3	MATH 1351	3	EDED 3344	3	EDED 4623	<u>6</u>
ENGL 2362		MATH 2413	4	EDSE 4358	3		
MATH 1348	3	POLS 2302	3	MATH 3352	3		
MATH 1350	3	STAT 1342	3	Support area, adv.**	<u>3</u>	Total Hours Required	120
POLS 2301	3	Support area**	<u>3</u>		15		
Support area**	<u>3</u>		19				
	18						

**Support area courses must be from the same discipline.

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Science 4-8

Freshman Year			Junior Year				
ENGL 1301	3	BIOL 1306/1106	4	CHEM 1311/1111	4	CHEM 1312/1112	4
HIST 1301	3	ENGL 1302	3	GEOL 1303/1103	4	EDED 3302	3
MATH 1314	3	HIST 1302	3	Science, adv.*	4	EDED 3333	3
UNIV 1101	1	MATH 1316	3	Science, adv.*	<u>4</u>	EDRG 4314	3
<i>^Creative arts</i>	<u>3</u>	UNIV 1102	<u>1</u>		16	EDSE 4349	<u>3</u>
	13		14				16
Sophomore Year			Senior Year				
BIOL 1307/1107	4	COMS 1311 or	3	EDED 3332	3	EDED 4613 or	<u>6</u>
ENGL 2342 or	3	COMS 1315		EDED 3346	3	EDED 4623	
ENGL 2362		GEOL 1311/1101	4	EDRG 4307	3	Science, adv.	<u>4</u>
MATH 1350	3	PHYS 1302/1102	4	EDSE 4358	3		10
PHYS 1301/1101	4	POLS 2302	3	GEOL 2376	3		
POLS 2301	<u>3</u>	SOCI 2361	<u>3</u>	Science, adv.*	<u>3</u>		
	17		17		18		
						Total Hours Required	121

*Select a minimum of 15 hours of advanced sciences from the following: BIOL 3402, BIOL 3407, GEOG 3305, CHEM 3451, GEOL 3445, GEOL 3409 and BIOL, any other 3- or 4- hour advanced course. Selecting more than one 3-hour course will require taking additional courses (e.g., one 3-hour + three 4-hour courses=15 hours; two 3-hour + three 4-hour courses=18 hours; three 3-hour + two 4-hour courses=17 hours).

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Science 7-12

Freshman Year				Junior Year			
BIOL 1306/1106	4	BIOL 1307/1107	4	EDED 3310	3	BIOL 3407 or	4
ENG 1301	3	ENGL 1302	3	GEOL or GEOL, adv.	4	CHEM 3451	
HIST 1301	3	GEOL 1301/1101	4	PHYS 1301/1101	4	CHEM 3323/3123	4
MATH 1314	3	HIST 1302	3	PHYS 1303/1103 OR	4	EDED 3302	3
UNIV 1101	<u>1</u>	MATH 1316	3	PHYS 1304/1104*	15	EDED 3333	3
	14	UNIV 1102	<u>1</u>			PHYS 1302/1102	<u>4</u>
			18				18
Sophomore Year				Senior Year			
CHEM 1311/1111	4	CHEM 1312/1112	4	EDED 3332	3	EDED 4623	6
ENGL 2342/	3	COMS 1311	3	EDED 3362	3	EDRG 4314	3
ENGL 2362		POLS 2302	3	Biology, adv.	4	EDSE 4349	<u>3</u>
GEOL 1302/1102	4	SOCI 2361	<u>3</u>	Science, adv.	<u>4</u>		12
POLS 2301	3		13		14		
[^] Creative arts	<u>3</u>						
	17						
						Total Hours Required	121

*PHYS 1303/1103 is recommended.

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Social Studies 4-8

Freshman Year				Junior Year			
ENGL 1301	3	COMS 1311 or	3	ECON 2302	3	EDED 3302	3
HIST 1301	3	COMS 1315		GEOG 1302/1102	4	EDED 3333	3
MATH 1314	3	ENGL 1302	3	HIST 4346	3	EDRG 4314	3
UNIV 1101	1	HIST 1302	3	HIST, adv.	<u>3</u>	EDSE 4349	3
[^] Creative arts	3	MATH 1350	3		13	U.S. HIST, adv.	<u>3</u>
Elective	<u>2</u>	PHYS 1375	3				15
	15	UNIV 1102	<u>1</u>				
			16				
Sophomore Year				Senior Year			
CHEM 1376	3	GEOG 1301/1101	4	EDED 3316	3	EDED 4613 or	6
ECON 2301	3	GEOG 1303	3	EDED 3332	3	EDED 4626	
ENGL 2342 or	3	HIST 2322	3	EDRG 4307	3	POLS 4331 or	<u>3</u>
ENGL 2362		POLS 2302	3	EDSE 4358	3	POLS 4332	9
HIST 2321	3	SOCI 2361	<u>3</u>	U.S. HIST, adv.	<u>3</u>		
MATH 1351	3		16		18		
POLS 2301	<u>3</u>						
	18					Total Hours Required	120

[^] * For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Special Education EC-12

Freshman Year			Junior Year				
COMS 1311/	3	EDKN 2326	3	EDEB 4316	3	EDED 3302	3
COMS 1315	3	ENGL 1302	3	EDED 3310	3	EDED 3333	3
ENGL 1301	3	HIST 1302	3	EDED 4310	3	EDRG 3314	3
HIST 1301	3	POLS 2301	3	EDRG 4307	3	EDSE 4349	3
MATH 1314	3	SOCI 2361	3	Support area*	<u>3</u>	EDSE 4353	3
UNIV 1101	1	UNIV 1102	<u>1</u>		15	EDSE 4357	<u>3</u>
<i>^Creative arts</i>	<u>3</u>		16				<u>18</u>
	16						
Sophomore Year			Senior Year				
ENGL 2342/	3	EDRG 3321	3	EDED 3316 or	3	EDED 4623	<u>6</u>
ENGL 2362		ENGL 1171	1	EDED 3346			<u>6</u>
MATH 1350	3	MATH 1351	3	EDED 3344	3		
POLS 2302	3	<i>^Component option B</i>	2	EDRG 4330	3		
<i>^Life/Physical sciences</i>	3	<i>^Life/Physical sciences</i>	3	EDSE 4350	3	Total Hours Required	122
Support area*	<u>6</u>	Support area*	<u>3</u>	EDSE 4358	3		
	18		15	EDSE 4359	<u>3</u>		
					18		

*Support area courses must be approved and from the same academic field.

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Technology Applications 7-12

Freshman Year			Junior Year				
ENGL 1301	3	COMJ, COMM, or	3	ARTS 4355	3	ARTS 4357 or	3
HIST 1301	3	COMS**		COMJ, COMM or	3	EDED 4310	
MATH 1314	3	ENGL 1302	3	COMS*		EDED 3302	3
UNIV 1101	1	HIST 1302	3	EDED 3310	3	EDED 3333	3
<i>^Life/physical sciences</i>	3	ISYS 1301	3	ISYS 3358	3	ISYS 3364	3
COMS 1311	<u>3</u>	UNIV 1102	1	SOCI 2361	<u>3</u>	Support area, adv.**	<u>3</u>
	16	<i>^Life/Physical sciences</i>	<u>3</u>		15		<u>15</u>
			16				
Sophomore Year			Senior Year				
ARTS 2313	3	COMJ, COMM or	3	EDED 3332	3	EDED 4623	6
COMJ, COMM or	3	COMS*		EDED 3362	3	EDRG 4314	3
COMS*		POLS 2302	3	ISYS 3351	3	EDSE 4349	3
ENGL 2342 or	3	Support area**	6	Support area, adv.**	<u>6</u>		<u>12</u>
ENGL 2362		<i>^Creative area**</i>	3		15		
ISYS 2302	3	<i>^Social/Behavioral</i>	<u>3</u>				
POLS 2301	<u>3</u>		18				
	15						
						Total Hours Required	122

*May be selected from COMS 1336 or COMS 2301 or COMS 3337, COMJ 2427, COMM 1307 or any approved COMJ, COMM or COMS course. COMS 1336 is a prerequisite for COMS 3337.

**Must be from the same academic field.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Interdisciplinary Studies
Technology Applications EC-12

Freshman Year				Junior Year			
ENGL 1301	3	COMS 1311	3	ARTS 4355	3	ARTS 4357 or	3
HIST 1301	3	ENGL 1302	3	EDED 3310	3	EDED 4310	
MATH 1314 or	3	HIST 1302	3	ISYS 3358	3	EDED 3302	3
MATH 1324		ISYS 1301	3	Support area**	<u>6</u>	EDED 3333	3
UNIV 1101	1	UNIV 1102	1		15	ISYS 3364	3
[^] Life/Physical science	3	[^] Life/Physical sciences	<u>3</u>			Support area, adv.**	<u>3</u>
Elective	<u>1</u>		16				15
	14						
Sophomore Year				Senior Year			
ARTS 2313	3	COMJ, COMM or	3	EDED 3332	3	EDED 4623	6
ENGL 2342 or	3	COMS*		EDED 3362	3	EDRG 4314	3
ENGL 2362		POLS 2302	3	ISYS 3351	3	EDSE 4349	<u>3</u>
ISYS 2302	3	Support area**	6	COMJ, COMM,	3		12
POLS 2301		[^] Creative area**	<u>3</u>	COMS, adv.*			
SOCI 2361	3		15	Support area, adv.**	<u>3</u>		
COMJ, COMM, or	3				15		
COMS*	<u>1</u>						
	16						
						Total Hours Required	120

*May be selected from COMM 1307, COMJ 2427, COMS 1336 or COMS 2301 or COMS 3337 or other approved COMJ/COMM/COMS course. COMS 1336 is a prerequisite for COMS 3337.

**Must be from the same discipline.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

MILITARY SCIENCE (ROTC)

U.S. ARMY ROTC

Thomas J. Troyn, *Professor of Military Science*
Karr Memorial Hall. MSC 204. Extension 3201.

Assistant Professor

McCormick

Instructors

Llacuna

The department's objective is the development of selected men and women with potential to serve as commissioned officers in the active Army, National Guard or Army Reserve. A student who completes the program will have developed leadership and managerial potential; have a basic understanding of military fundamentals and the requirements of national security; have acquired an understanding of the fundamental concepts of military art and science; have developed a strong sense of personal honor, integrity and individual responsibility; and have developed a better understanding of human relationships. The leadership and management experience gained through Army ROTC and service as a commissioned officer will benefit the student in civilian as well as in military science and national defense pursuits.

Minor

A student may pursue an interdisciplinary minor in Military Science. Courses for a total of 18 semester hours should be selected in consultation with the Professor of Military Science.

Army Scholarship Program: Any student who meets prerequisites may compete for nationally awarded US Army scholarships which pay for tuition, books, fees and other purely educational costs and a tax-free monthly subsistence allowance for 10 months of each year the scholarship is in effect.

Army Training-Airborne and Air Assault or Other Training: Selected cadets may be eligible to compete for attendance at Airborne, Air Assault or other training as available. Selection is based upon motivation, physical condition and academic Military Science performance.

Veteran's Assistance: Veterans who enroll in upper level Military Science receive a tax-free monthly subsistence allowance for 10 months each of two years in addition to benefits provided by the Veterans' Administration, Veteran's Education Assistance Program or the GI Bill/Army College Fund.

Leadership Laboratory: Required for Military Science courses. Designed to give the student an opportunity to practice hands-on lessons learned in class. Students are placed in leadership roles executing scenarios that challenge their organizational skills through the use of small-unit tactics. Scenarios may involve survival, water safety, rappelling, map reading and land navigation and patrolling using paint ball equipment.

LOWER DIVISION MILITARY SCIENCE CURRICULUM

Lower division courses provide an opportunity for students to satisfy their curiosity about the U.S. Army by exploring their own interests and aptitudes in courses which carry no obligation for further study and no obligation for military service. All Military Science courses may be used to satisfy kinesiology of general education requirements.

1211. Ranger Challenge Laboratory.

2(1-2)

Practical leadership and teamwork training in rappelling, rope bridges, weapons firing, map reading and land navigation, water safety, patrolling and other ranger skills. Includes a weekend field trip where the techniques learned will be applied to competitive events. May be repeated for credit. Prerequisite: approval of the Professor of Military Science.

1305. Leadership and Personal Development.

3(2-2)

Personal challenges and competencies that are critical for effective leadership. How the personal development of life skills such as time management, physical fitness and stress management relates to leadership, officership and Army

operations.

1306. Introduction to Tactical Leadership. 3(2-2)
Leadership fundamentals such as setting direction, problem solving, listening, presenting briefs, providing feedback and using effective writing skills. Leadership values, attributes, skills and actions in the context of practical, hands-on and interactive exercises.

2305. Innovative Team Leadership. 3(2-2)
Creative and innovative tactical leadership strategies and styles, studying historical case studies and engaging in interactive student exercises. Personal motivation and team building in the context of planning, executing and assessing team exercises. Prerequisites: ROTC 1305, ROTC 1306 or approval of the Professor of Military Science.

2306. Foundations of Tactical Leadership. 3(2-2)
Challenges of leading teams in a complex contemporary operating environment. Cross-cultural challenges of leadership in a constantly changing world, applied to practical Army leadership tasks and situations. Prerequisite: ROTC 2305 or approval of the Professor of Military Science.

UPPER DIVISION MILITARY SCIENCE CURRICULUM

The Advanced Military Science Program at Texas A&M University-Kingsville allows qualified students to earn a commission as a Second Lieutenant in the active Army, the Army Reserve or the National Guard. These courses also allow the first opportunity for most college students to make a formal and personal commitment to the preservation of the values embodied in the Constitution of the United States. For enrollment in upper level military science courses the student must meet these prerequisites:

- a. be enrolled as a full-time student (12 semester hours minimum for an undergraduate).
- b. be of good moral character as evidenced in the community and the university.
- c. have approximately two academic years remaining toward a baccalaureate degree or advanced degree (the requirement may be waived) and a minimum GPA of 2.0.
- d. meet medical fitness requirements as prescribed by U.S. Army regulations.
- e. either (1) satisfactorily complete ROTC 1305, ROTC 1306, ROTC 2305 and ROTC 2306; (2) possess qualification through any JROTC program (full or partial qualification depending upon participation); (3) satisfactorily complete the six-week summer basic camp at Fort Knox, Kentucky; (4) qualify through enlistment in the National Guard or Army Reserve (after successful completion of basic training); or (5) honorably complete enlisted service with a favorable reenlistment code, or have at least 60 semester hours and agree to attend the six-week summer basic camp at Fort Knox, Kentucky, the summer following enrollment in upper-level military science courses.

Qualified enrollment in upper division military science courses entitles each cadet to a tax-free monthly subsistence allowance for 10 months per year for two years.

3305. Adaptive Tactical Leadership. 3(3-2)
Adaptive tactical leadership skills applied to squad tactical operations. Developing leadership and critical thinking abilities aimed toward success at the ROTC summer Leadership Development and Assessment Course (LDAC).

3306. Leadership in Changing Environments. 3(3-2)
Situational leadership challenges building cadet awareness and skills in leading tactical operations up to platoon level. Aspects of combat, stability and support operations. Conducting military briefings and developing proficiency in garrison operations orders.

3335. American Military History. 3(3-0)
Military History course covers Military History from early colonial warfare in the eighteenth century to the global war on terrorism in the twenty-first century. The purpose of this course is to lead Reserved Officer Training Corps (ROTC) Cadets to understanding the role of military officers have played in the development of our country.

3405. Internship in Military Science. 4(15-25)
Six weeks of total environment training consisting of practical application of leadership and management skills. Formal instruction in tactics, techniques and skills required for all future officers. Prerequisites: ROTC 3305 and/or

ROTC 3306 and full contract status with the U.S. Army.

4105. Advanced Military Science.

V:1-3

Special problems course. Individual study. May be repeated for credit. Approval of Professor of Military Science required.

4305. Developing Adaptive Leaders.

3(3-2)

Planning, executing and assessing complex operations, functioning as a member of a staff and providing performance feedback to subordinates. Assessing risk, making ethical decisions and leading fellow ROTC students. Military justice and personal processes, preparing cadets to become army officers. Prerequisites: ROTC 3305, ROTC 3306 or approval of the Professor of Military Science.

4306. Leadership in a Complex World.

3(3-2)

Leading in the complex situation of current military operations in the contemporary operating environment. Differences in customs and courtesies, military law, principles of war and rules of engagement in the face of international terrorism. Aspects of interacting with non-governmental organizations, civilians on the battlefield and host nation support. Prerequisite: ROTC 4305 or approval of the Professor of Military Science

**FRANK H. DOTTERWEICH
COLLEGE OF ENGINEERING**

FRANK H. DOTTERWEICH COLLEGE OF ENGINEERING

Mohammad Alam, *Dean*

Engineering Complex 301. MSC 188. Extension 2001.

Web Site <http://www.tamuk.edu/engineering/>

Lee Clapp, *Interim Associate Dean for Research and Graduate Studies*

Afzel Noore, *Associate Dean for Undergraduate Affairs*

Maria Oralia De los Reyes, *Assistant Dean for RGV Engineering Initiative*

Patrick Mills, *Dotterweich Chair*

Trisha Gottschalk, *Director of Administration, Outreach, and Communication*

Mission Statement

The Frank H. Dotterweich College of Engineering:

- graduates engineers who become productive participants in industry, the profession, and society;
- conducts research and significantly contributes to the well-being and sustainable development of communities and industries in South Texas, the state of Texas, and the nation; and
- provides meaningful service to the profession and the communities that surround us.

The Frank H. Dotterweich College of Engineering comprises the following academic units:

Department of Civil and Architectural Engineering
Department of Electrical Engineering and Computer Science
Department of Environmental Engineering
Department of Industrial Management and Technology
Department of Mechanical Engineering and Industrial Engineering
Wayne H. King Department of Chemical and Natural Gas Engineering
Eagle Ford Center for Research, Education, and Outreach
Institute for Architectural Engineering Heritage
Institute for Sustainable Energy and the Environment

The College offers programs leading to Bachelor of Science degrees in architectural engineering, chemical engineering, civil engineering, computer science, electrical engineering, environmental engineering, industrial management and technology, mechanical engineering, and natural gas engineering. The architectural, chemical, civil, electrical, environmental, and mechanical engineering programs are accredited by the Engineering Accreditation Commission of ABET (415 North Charles Street, Baltimore, MD 21201; Telephone number 410-347-7700). The computer science program is accredited by the Computer Accreditation Commission of ABET, and the program in industrial management and technology is accredited by the Association of Technology, Management and Applied Engineering (ATMAE).

The undergraduate engineering programs are designed to give the student an understanding of the fundamental principles underlying engineering science and practice. Each curriculum contains basic courses to develop a solid foundation in mathematics, chemistry and physics and includes a general background in humanities and social sciences. Building on this background, the engineering science courses provide application of basic principles and the analysis of engineering systems. The engineering design component of the curriculum provides the student with methods and techniques for solution of the technological problems of society.

The curricula in computer science and in industrial management and technology are similarly structured to provide students a solid base in their fields.

Laboratory facilities are equipped to facilitate learning. Students will become familiar with the instruments, procedures, and processes employed in industry. A computation center is available for students' use throughout their course of study.

The College offers programs of study leading to both the Master of Science and the Master of Engineering degrees along with a Ph.D. in Environmental Engineering and a Ph.D. in Sustainable Energy Systems Engineering. Individuals interested in graduate programs should review the requirements listed in the graduate catalog.

Entering Freshmen

Entering freshmen are required to have a minimum composite score of 21 on the ACT (with a minimum mathematics score of 22), 970 on the old SAT (with a minimum mathematics score of 530), or a 1050 on the new SAT (with a minimum math score of 560).

Students whose test scores fall below the minimum scores for full admission but have 18 or above on the ACT (with a mathematics score of 19 or above), 810 or above on the old SAT (with a mathematics score of 500 or above), or an 890 on the new SAT (with a minimum math score of 530) will be admitted to the Pre-Engineering (PPEN) program in order to complete preparatory coursework. PPEN students completing 24 or more credit hours with a minimum cumulative GPA of 2.0 and a minimum cumulative GPA of 2.0 in all coursework including mathematics and science will be transferred to an engineering program. (Coursework must include MATH 1348 or higher and CHEM 1111/CHEM 1311 except for students that transfer to the industrial management and technology program.)

Students who fall below the minimum pre-engineering test scores will not be allowed entry into the College of Engineering before completing 36 or more credit hours with a minimum cumulative GPA of 2.5 and a minimum cumulative GPA of 2.5 in all included mathematics and science coursework. Once these criteria have been met, the student may reapply for admission to the College of Engineering. (Coursework must include MATH 1348 or higher and CHEM 1111/CHEM 1311 except for students that transfer to the industrial management and technology program.)

Transfer Students

Transfer students will be accepted in the college unconditionally if their overall grade point average from the previous institution(s) is 2.5 or greater. Texas A&M University-Kingsville students desiring to change their major to engineering must also meet this requirement.

Non-engineering majors may take one lower-level (1000-2000) engineering course a semester. Upper-level engineering courses (3000-4000) may not be taken by non-engineering or pre-engineering majors. Exceptions to the above policy must be approved in writing by the dean of the student's college and the dean of engineering. Students who enroll in engineering courses without approval will be dropped from the course.

Students who transfer into the Frank H. Dotterweich College of Engineering having attempted 60 credit hours or less and that have a cumulative GPA of 2.0-2.49 on a 4.0 grading system will be placed into the Pre-Engineering (PPEN) major. After one semester, the student will be re-evaluated by his/her adviser. If the student has maintained satisfactory progress, the student will be transferred out of PPEN and placed into a permanent engineering major. A change of major form will be completed and signed by the chair of the department and the dean of the college. Students who do not achieve satisfactory progress will remain in PPEN and will be re-evaluated after the completion of one (1) academic year.

Candidates for a bachelor's degree in engineering or computer science must have a minimum of 45 semester hours required for the degree completed in residence at the university. Of the 45 hours earned at the university, 36 hours must be earned within the College of Engineering. Exceptions to the above policy require permission of the department chair and dean.

Students planning to transfer to the Frank H. Dotterweich College of Engineering from another four-year university should apply for admission as early as possible. Once accepted, the student is encouraged to contact the appropriate department chair during the semester prior to enrolling at Texas A&M University-Kingsville. Course transferability and course prerequisite requirements can be determined to allow a smooth transition into the program at Texas A&M University-Kingsville.

Community college transfer students should complete English, mathematics and science courses as early as possible. The basic engineering courses required for a specific degree should also be completed. If some of these courses are not available at the college the student is attending, early transfer or a summer session at Texas A&M University-Kingsville may be advisable to enable the student to stay on schedule.

Specific articulation and joint admission agreements are available for several community colleges. These agreements can be viewed at [College of Engineering Homepage](#).

Transfer of Credit

The university has established course equivalencies from the majority of Texas community colleges and universities. The Texas Higher Education Coordinating Board has established guidelines on course transferability from two-year colleges to four-year universities in engineering. In addition to the university policies controlling the granting of credit for course work taken at other institutions where equivalency has not been established, the following policies apply to students entering the Frank H. Dotterweich College of Engineering from such institutions:

- a. All courses taken at another institution are subject to approval by the dean of the Frank H. Dotterweich College of Engineering and the chair of the degree granting department. Courses are approved on a course-by-course basis to ensure their acceptability in fulfilling requirements for a degree. In making this evaluation, the student may be required by the dean and/or department chair to produce catalogs and other supporting material from the institution from which the student is transferring.
- b. Degree credit will not be granted for any mathematics, science, engineering, or other technical course taken at another institution in which the student's grade in that course was not the equivalent of at least a *C* and an overall 2.0 on a 4.0 grading system.

A maximum of 72 semester hours may be transferred from institutions that do not have engineering programs accredited by the Engineering Accreditation Commission of ABET. Advanced (3000- or 4000-level) engineering courses from four-year institutions that do not have ABET accredited programs may be applied toward degree requirements only if approved by the department chair and the dean.

The student is responsible for timely processing of all course substitutions. This action should be completed during the first semester of work at Texas A&M University-Kingsville.

Academic Counseling

Students are assigned to an academic adviser in their major department upon entering the Frank H. Dotterweich College of Engineering. Academic counseling and preregistration sessions are scheduled each semester to allow students to review their academic progress and plan their schedule for the next semester. All pre-engineering and engineering students are assigned an adviser. Students are required to see their adviser before they will be permitted to register. Students should also consult their adviser for approval of academic matters such as choice of electives, course substitutions, course overloads and adding or dropping courses. The dropping of key courses in a curriculum may delay the student's progress toward the desired degree.

Policy on Electronic Devices During Examinations

It is the policy of the TAMUK College of Engineering that no electronic devices are permitted in course examinations without the permission of the instructor.

Requirements for the Bachelor of Science Degree in the Frank H. Dotterweich College of Engineering

The basic requirements for the Bachelor of Science degree is 120-132 semester hours of academic work, depending upon the career field chosen. Students coming from high school with adequate preparation will be able to satisfy this requirement in eight semesters. Students requiring preparatory work or choosing to take lighter loads will take longer to complete degree requirements.

Engineering is a rapidly changing profession and the departmental curricula are updated continuously to keep pace with these changes. Students entering under this catalog will be required to comply with such curriculum changes in order to earn their degree. However, the total number of semester hours required for the degree may not be increased and all work completed in accordance with this catalog prior to the curriculum change will be applied toward the

student's degree requirements. Courses that are modified or added to a curriculum and incorporated into the curriculum at a level beyond that at which a student is enrolled may become graduation requirements for that student. Courses that are incorporated into the curriculum at a level lower than the one at which the student is enrolled are not required for that student. Former students of the college who have been out of school for two consecutive semesters must meet the curriculum requirements in effect at the time of their readmission.

Graduation Requirements

A candidate for a degree in the College of Engineering must satisfy the university's "General Education Requirements" as set forth earlier in the catalog. A candidate for a degree from the College of Engineering must also meet the following requirements in fulfilling one of the degree plans prescribed on the following pages.

- Attain a minimum 2.25 GPA in all engineering and computer science courses; and
- Attain a minimum 2.25 GPA in all mathematics and science courses.

Candidates for the Industrial Management and Technology degree must also possess a grade point average of 2.50 in all course work specified for their major as well as a 2.25 for all business administration course work and a 2.25 for all math/science course work specified for the degree.

Each department in the College may have more stringent requirements. Check with your academic adviser. *It is the candidate's responsibility to ensure that all degree requirements are met.*

Distinguished Graduates

Degree candidates meeting the following criteria will be named Distinguished Graduates in the College of Engineering:

- Attain a minimum 3.0 GPA in all engineering, computer science and industrial management and technology courses;
- Attain a minimum 3.0 GPA in all mathematics and science courses;
- Pass the Fundamentals of Engineering Examination, or an equivalent recognition endorsed by the student's department; and
- Complete an internship or research project occurring over at least one semester and with a culminating experience such as an oral presentation to faculty and students.

This distinction will be awarded after all degree requirements are certified to be complete, although it may be tentatively announced prior to this with the caveat that all degree and distinction requirements must be met.

Minors

Students receiving a Bachelor of Science degree may have a recognized minor. A minor consists of a minimum of 18 hours in a field related to the major. Certain minors require more, see "Recognized Minors" below, but the total required hours should not exceed 24. Six hours in the minor field must be on the advanced level.

Recognized Minors

The following minors are available to the College of Engineering majors:

Aerospace Engineering
Computer Science
Nuclear Engineering
Security Engineering

Any minor offered by the College of Arts and Sciences is subject to approval by the student's major department and the dean.

An interdisciplinary or other specialized minor that meets the minimum requirements indicated above may be recognized in individual cases, subject to approval by the student's major department, the dean and any department in which at least 9 hours of the proposed minor will be taken. The dean's office will circulate a list of minors that has been approved under either of these conditions.

Special conditions apply to the following:

- Aerospace Engineering – see Department of Mechanical and Industrial Engineering
- Arts and Sciences – see College of Arts and Sciences
- Interdisciplinary or Specialized Minors: student’s adviser must be consulted for required courses.
- Nuclear Engineering – see Department of Mechanical and Industrial Engineering

Certificates

Certificate of Facility Management

All students are eligible for an undergraduate Certificate of Facility Management representing a multidisciplinary approach to facility operations. The 12-hour certificate requires 6 hours of engineering, including AEEN 3350 and 6 hours of non-engineering courses which must include 9 hours beyond specific degree requirements. Two courses from outside the College of Engineering are required for engineers and two courses from within the College of Engineering are required for non-engineering majors. AEEN 3350 is a requirement for all students seeking a Certificate of Facility Management. Contact the Department of Civil and Architectural Engineering for information and advising.

Certificate of Heritage Preservation

Administered by the Institute of Architectural Engineering Heritage, the undergraduate Certificate of Heritage Preservation is a 12-hour program open to all students; introducing multidisciplinary methodologies used to document and preserve the history and cultural significance of engineering and architectural heritage sites. Research conducted by participating students will include practical application of skills to provide Texas communities with technical support for documentation, stabilization and development planning of heritage resources. Contact the Institute of Architectural Engineering Heritage for information and advising.

Mobile Applications Development Certificate

The certification is open to engineering major undergraduate students upon completing the required and elective courses with an earned grade of ‘B’ or higher. (Non-engineering majors required dean’s approval.) Certificate requirements include 12 credit hours consisting of three required course, CSEN 3330, CSEN 3331, CSEN 4332, and one elective course selected from the list: CSEN 3314, CSEN 3315, CSEN 3316, and CSEN 4320. The prerequisite to the certificate program is CSEN 2310.

Nano Materials Science and Engineering

The undergraduate Nano Materials Science and Engineering Certificate is a 12-hours program open to all majors and professionals. This certificate will provide students the necessary skills to apply Nano Materials Science effectively in a variety of areas. Multiple Departments participate in the transcribed Nano Materials Science and Engineering certificate. See catalog section UNDERGRADUATE TRANSCRIPTED CERTIFICATE PROGRAMS OFFERED for participating departments.

In order to qualify for the certificate, students need to take four course, two required and two chosen from among electives. Prerequisites for various courses have to be met. Contact the specific department course instructor for information and advising concerning prerequisites.

Choose the two required courses from among the following. The total number of hours should be at least 6:

- CHEM 4313 or CHEM 4363 (3 hours)
- MEEN 3344 (3 hours)

Choose elective courses from among the following. The total number for hours should be at least 6:

- CEEN 4314 (3 hours)
- CHEM 4312 (3 hours)
- CHEN 4311 (3 hours)
- EVEN 4301 (3 hours)
- ITEN 2320 (3 hours)
- EEEN 4310 (3 hours)
- MEEN 3145 (1 hours), plus two hours of the variable-hour course MEEN 4335

- CHEM 4181 (1 hour research course), plus two hours of the variable-hour research course CHEM 3385 or CHEM 4385 (Choose three hours of the variable-hour research courses, if taken without CHEM 4181)
- Any Topics/Special Problems courses within the College of Engineering (numbered 4335 (V1:3) or 4336 (V1:3) focused on a research aspect of materials science.

WAYNE H. KING DEPARTMENT OF CHEMICAL ENGINEERING AND NATURAL GAS ENGINEERING

Patrick Mills, *Chair*

Engineering Complex 303. MSC 193. Extension 2002.

Professors

Mills, Pilehvari

Professor of Practice

Cabezas

Associate Professors

Alexander, Chisholm, Duarte, Lopez Manriquez

Assistant Professor

Xiao

Visiting Assistant Professor

Amaya

Lecturer

Hernandez-Sosa, Rahmani, Xie

Chemical Engineering Program Educational Objectives:

The Chemical Engineering Program seeks to prepare graduates who, after the first few years of their professional career, have:

1. Established themselves either as practicing chemical engineers, or by gaining additional formal education through enrollment in either an engineering or business graduate school program.
2. Adapted to ever-changing demands by updating their core knowledge and abilities through on-the-job training and continuing education courses.
3. Functioned successfully in their professional responsibilities, which include safety, health, environmental, and ethical aspects.
4. Established themselves as critical, flexible thinkers will demonstrated potential as further technology experts or technology managers in their professional and in society.

Natural Gas Engineering Program Educational Objectives:

The Natural Gas Engineering Program seeks to prepare graduates who, after the first few years of their professional career, have:

1. Established themselves either as practicing natural gas engineers, or have gained additional formal education through enrollment in either an engineering or business graduate school program.
2. Adapted to ever-changing, demands by updating their core knowledge and abilities through on-the-job training and continuing education courses.
3. Functioned successfully in their professional responsibilities, which include safety, health, environmental, and ethical aspects.
4. Established themselves as critical, flexible thinkers with demonstrated potential as future technology experts or technology managers in their profession and in society.

CHEMICAL ENGINEERING (CHEN)

1201. Engineering as a Career.

2(1-3)

Introduction to chemical engineering and its role in society. Chemical engineering skills, tools and techniques applied to problem solving and academic and professional survival strategies. Introduction to conservation principles, transport phenomena, design and ethics. Includes a writing component as well as use of computers (spreadsheets, tables, graphing and simulations). For students planning to pursue a career in chemical engineering.

1301. Engineering as a Career.

3(3-0)

Principles of student success in college. Chemical engineering as an academic and professional career. Conversion of problem data to a unified unit system for problem solving.

- 2371. Conservation Principles I.** 3(3-0)
Applications of the conservation laws of mass to the solution of chemical engineering problems. Prerequisites: CHEM 1312 or PHYS 2325/2125.
- 2372. Conservation Principles II.** 3(3-0)
Application of the conservation laws of energy to the solution of chemical engineering problems. Prerequisites: CHEM 1312 or PHYS 2325/2125, and CHEN 2371.
- 3310. Heat Transfer Phenomena.** 3(3-0)
Fundamentals of energy transport and system applications involving this operation including computer applications to heat exchanger design. Prerequisites: CHEN 3392, CHEM 2421 or CHEM 3323/3123 and CHEN 3347 or MEEN 3347.
- 3315. Chemical Process Design I.** 3(3-0)
Basic principles and techniques of economic analysis and cost engineering with applications to problems in chemical process and equipment design. Prerequisites: CHEN 2371 and credit for or registration in CHEN 3310.
- 3321. Process Simulation.** 3(3-0)
The basic numerical methods used in chemical process simulation. An introduction to the use of commercial process simulators, with hands-on applications. Prerequisite: MATH 3320.
- 3347. Chemical Engineering Thermodynamics I.** 3(3-0)
Theory and applications of the first and second laws of thermodynamics to mechanical, chemical, magnetic and electrical interactions for both reversible and irreversible processes. Prerequisite: MATH 2414. Corequisite: PHYS 2326/2126.
- 3371. Chemical Engineering Thermodynamics II.** 3(3-0)
Procedures for deciding when and to what extent chemical reactions and phase changes may be expected to occur according to the basic principles of physical chemistry and the laws of thermodynamics. Application of computers to advanced thermodynamic problems. Prerequisites: CHEM 3331, CHEM 3325/3125 and CHEN 3347.
- 3392. Fluid Transport Phenomena.** 3(3-0)
Fundamentals of momentum transport, including fluid statics, flow of compressible and incompressible fluids, pumps, turbines and compressors, with computer applications. Prerequisite: MATH 3320 and credit or registration in MEEN 2355 or MEEN 2302.
- 4120. Seminar in CHEN.** 1(1-0)
Seminar on contemporary issues in Chemical Engineering. Prerequisite: junior standing
- 4130. Service Learning in CHEN.** 1(1-0)
Service learning experience in a project that engages a community agency and raises awareness of chemical engineering professional issues. Prerequisite: junior standing.
- 4278. Unit Operations.** 2(0-6)
Selected laboratory experiments on fluid flow and heat transfer. Prerequisite: CHEN 3310.
- 4279. Unit Operations Laboratory.** 2(0-6)
Selected laboratory experiments in heat and mass transfer. Prerequisite: CHEN 4389.
- 4311. Biochemical Engineering.** 3(3-0)
Principles involved in the processing of biological materials using biological agents such as cells, enzymes or antibodies. Prerequisites: CHEM 3323/3123 or CHEM 2421 and CHEM 3331.

4316. Chemical Process Design II. 3(3-0)
The application of chemical engineering principles to a sequence of design problems utilizing computer software, such as SIMSCI. Prerequisites: CHEN 3315, CHEN 3371 and CHEN 3310.

4317. Chemical Process Design III. [WI] 3(3-0)
The application of chemical engineering principles, including economic criteria to a comprehensive design problem. Computer software is utilized as a design aid. Prerequisites: CHEN 4316, CHEN 4373, CHEN 4389 and credit for or registration in CHEN 4392.

4335. Special Problems. V:1-3
Individual solution of selected problems in chemical engineering conducted under direct supervision of a faculty member. May be repeated for up to six hours. Prerequisite: senior standing.

4373. Chemical Reactor Engineering. 3(3-0)
Chemical reaction rates and design of chemical reactors. Applications of computers to chemical kinetics and the design of chemical reactors. Prerequisites: CHEN 3371, CHEN 3310 and CHEM 3332.

4383. Natural Gas Processes. 3(3-0)
The design, operation and economics of systems for the utilization of hydrocarbon gases and liquids, the concentration of their components by absorption and fractionalization procedures. Use of computer aided design and economic evaluation of facility designs. Prerequisite: CHEN 4389.

4386. Air Pollution Control. 3(3-0)
A fundamental approach to air pollution testing, control and design of control systems. Introduction to dispersion modeling via computer. Prerequisite: CHEN 3392 and senior standing.

4389. Mass Transfer Phenomena. 3(3-0)
Fundamentals of mass transport, including gas absorption, extraction, membrane separation, binary and multicomponent distillation, with computer design applications. Prerequisites: CHEM 3331 and credit or registration in CHEN 3310.

4392. Process Dynamics and Control. 3(2-3)
Basic operating theory of control instruments and their application to industrial chemical process. Applications of computers to process control. Prerequisites: CHEN 4373 and CHEN 4389.

4399. Internship in CHEN. V:1-3
Internships in industry, government or consulting companies in career-based practical activities to broaden the skills obtained through curricular education. Prerequisite: junior standing.

NATURAL GAS ENGINEERING (NGEN)

3322. Fundamentals of Reservoir Engineering 3(2-3)
Physical properties of petroleum reservoir rocks, lithology, porosity, fluid saturations, permeability and capillary characteristics as they relate to the production of oil and gas. Properties of hydrocarbon systems. Material balance methods. Flow of fluids in porous media. Prerequisites: Credit or registration in CHEM 2421, CHEN 3392/NGEN 3392 and GEOL 1303/1103.

3392. Fluid Transport Phenomena. 3(3-0)
Fundamentals of momentum transport including fluid statics, flow of compressible and incompressible fluids, pumps, turbines and compressors, with computer applications. Prerequisite: MATH 3320; credit or registration in MEEN 2302 or MEEN 2355. (Credit may not be obtained in both CHEN 3392 and NGEN 3392.)

3393. (Formerly NGEN 3493.) Natural Gas Drilling Engineering. 3(2-3)
Introduction to drilling equipment and methods, drilling fluids, casing and cementing of wells. Application of computers to the drilling of wells. Contemporary methods of well completion. Prerequisites: NGEN 3322 and CHEN 3392/NGEN 3392.

- 4279. Unit Operations Laboratory.** 2(0-6)
Selected laboratory experiments in heat and mass transfer. Prerequisite: CHEN 4389. (Credit may not be obtained in both CHEN 4279 and NGEN 4279.)
- 4335. Special Problems.** V:1-3
Individual solution of selected problems in natural gas engineering conducted under direct supervision of a faculty member. May be repeated for up to 6 semester hours. Prerequisite: senior standing.
- 4375. Natural Gas Distribution.** 3(3-0)
Pipeline and compressor station design. Pipeline integrity and environmental issues associated with pipeline placement and design. Prerequisite: NGEN 3392/CHEN 3392.
- 4383. Natural Gas Processes.** 3(3-0)
Design, operation and economics of systems for the utilization of hydrocarbon gases and liquids, the concentration of their components by absorption and fractionation procedures. Use of computer aided design and economic evaluation of facility designs. Prerequisite: CHEN 4389. (Credit may not be obtained in both CHEN 4383 and NGEN 4383.)
- 4387. Seismic Interpretation and Well-Logging.** 3(3-0)
Theory and methods of modern seismic and well log interpretation. Prerequisite: GEOL 3431 or NGEN 3393.
- 4396. (Formerly NGEN 4496). Natural Gas Production, Testing and Evaluation.** 3(3-0)
Theory, design and methods of gas well testing and production forecasting. Estimating the value of gas and oil properties. Environmental issues and professional responsibility. Prerequisites: NGEN 3322 and CHEN 3392/NGEN 3392.
- 4398. Capstone Design Project. [WI]** 3(2-3)
In teams, students complete significant design projects that include two or more aspects of natural gas engineering. Prerequisite: student has 6 or fewer credit hours of NGEN courses to complete the subsequent terms.
- 4478. Natural Gas and Hydrocarbon Measurement.** 4(3-3)
Theory and practice of measurement of hydrocarbon gas and liquid properties and flow. Prerequisites: NGEN 3392/CHEN 3392 and NGEN 4375.

Degree Requirements
Bachelor of Science in Chemical Engineering
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year				Junior Year			
CHEM 1311/1111	4	CHEM 1312/1112	4	CHEM 3331	3	CHEM 3332	3
ENGL 1301	3	ENGL 1302	3	CHEM 3347	3	CHEM 3310	3
MATH 2413	4	MATH 2414	4	CHEM 3392	3	CHEM 3315	3
POLS 2301	3	PHYS 2325/2125	4	POLS 2302	3	CHEM 3321	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	<i>^Communications</i>	3	CHEM 3371	3
	15		16	<i>^Social/Behavioral</i>	<u>3</u>	Elective*	<u>1</u>
					18		16
Sophomore Year				Senior Year			
CHEM 3323/3123	4	CHEM 3325/3125	4	BIOL 1306	3	CHEM 4279	2
CHEM 2371	3	CHEM 2372	3	CHEM 4278	2	CHEM 4311	3
HIST 1301	3	MATH 3415	4	CHEM 4316	3	CHEM 4317	3
MATH 3320	3	MEEN 2355	3	CHEM 4373	3	CHEM 4392	3
<i>^Lang/Phil/Culture</i>	<u>3</u>	PHYS 2326/2126	<u>4</u>	CHEM 4389	<u>3</u>	HIST 1302	3
	16		18		14	<i>^Creative arts</i>	<u>3</u>
							17
						Total Hours Required	130

Electives are selected from the following:

Creative Arts Electives: ARTS 1303, ARTS 1304, MUSI 2308, MUSI 2310.

Communications Elective - ENGL 2374 or COMS 2374.

Lang/Phil/Culture Elective - Any 2000 level course satisfying the General Education Requirement.

*Choose one course from the following: CHEN 4399, CHEN 4120, or CHEN 4130. These courses may be repeated, however, only one hour may be used for the degree.

Degree Requirements
Bachelor of Science in Natural Gas Engineering

Freshman Year				Junior Year			
CHEM 1311/1111	4	CHEM 1312/1112	4	CEEN 3311	3	CHEM 3310	3
ENGL 1301	3	ENGL 1302	3	CHEM 3347	3	CHEM 3321	3
HIST 1301	3	MATH 2414	4	NGEN 3322	3	NGEN 3393	3
MATH 2413	4	PHYS 2325/2125	4	NGEN 3392	3	<i>^Communications</i>	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	POLS 2302	<u>3</u>	Elective	<u>2</u>
	15		16		15		14
Sophomore Year				Senior Year			
CHEM 3323/3123	4	GEOL 4307/4107	4	CHEM 4389	3	NGEN 4279	2
GEOL 1303/1103	4	MEEN 2355	3	NGEN 4375	3	NGEN 4383	3
HIST 1302	3	PHYS 2326/2126	4	NGEN 4396	3	NGEN 4387	3
MATH 3320	3	POLS 2301	3	STAT 4303	3	NGEN 4398	3
<i>^Lang/Phil/Culture</i>	<u>3</u>	<i>^Creative Arts</i>	<u>3</u>	<i>^Social/Behavioral</i>	<u>3</u>	NGEN 4478	<u>4</u>
	17		17		15		15
						Total Hours Required	124

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF CIVIL AND ARCHITECTURAL ENGINEERING

Joseph Sai, *Chair*

Engineering Complex 376. MSC 194. Extension 2267.

Professors

Aguiniga, Faruqi, Leelani, Sai, Sun

Associate Professors

Bailey, Glusing

Assistant Professors

Al-Hamdan, Choi, Hessami, Liu, Shen

Architectural Engineering Program Educational Objectives:

Within a few years of graduation, alumni of the Texas A&M University-Kingsville undergraduate architectural engineering program have distinguished themselves in the following areas:

1. Professional practice in one of the areas appropriate to the interdisciplinary field of architectural engineering (construction management, building service engineering, or structural engineering).
2. Leadership, in areas such as career advancement, community service, and professional society activity, and high standards for professional and ethical behavior.
3. Licensure as professional engineers.
4. Continuing education, having furthered their knowledge through formal graduate education and/or professional development opportunities.

Civil Engineering Program Educational Objectives:

Within a few years of graduation, alumni of the Texas A&M University-Kingsville undergraduate civil engineering program have distinguished themselves in the following areas:

1. Professional practice in the civil engineering field.
2. Leadership, in areas such as career advancement, community service, and professional society activity, and high standards for professional and ethical behavior.
3. Licensure as professional engineers.
4. Continuing education, having furthered their knowledge through formal graduate educational and/or professional development opportunities.

ARCHITECTURAL ENGINEERING (AEEN)

1310. Computer Graphics and Applications.

3(2-3)

Introduction to procedures in computer-aided drafting and computer applications with a programming language element. Required of all freshmen in Civil and Architectural Engineering.

1320. Introduction to Architectural Design.

3(1-6)

Introduction to architectural design principles, concepts and problem-solving approaches. Issues addressed by a series of two- and three-dimensional building studies. Six laboratory hours a week. Prerequisite: AEEN 2325.

2325. Introduction to Development in Architecture.

3(3-0)

Introduction to topics which influence the development of architectural design including; building codes, building elements, major building systems and their selection, and materials and methods of construction. Prerequisite: AEEN 1310.

3303. Structural Analysis.

3(3-0)

Statically determinate structures. Moving loads. Analysis of statically indeterminate structures by consistent deformation, slope-deflection and moment-distribution. Prerequisite: CEEN 3311. (Credit may not be obtained in both AEEN 3303 and CEEN 3303.)

- 3304. Reinforced Concrete Design.** 3(3-0)
Mechanics, behavior and design of reinforced concrete members subject to axial loads, bending, torsion and shear. Prerequisites: AEEN 3303 and C or higher in CEEN 3311. (Credit may not be obtained in both AEEN 3304 and CEEN 3304.)
- 3320. Sustainable Construction and Materials.** 3(3-0)
Introduction to ecological design of buildings and infrastructure, including the study of green buildings, LEED standards, sustainable landscapes and low impact development of the built environment. Prerequisite: junior standing.
- 3325. Design Codes and Ordinances.** 3(3-0)
Design codes and municipal ordinances and their integration in design. Including zoning occupancy, construction classification, building constraints, fire resistant construction, egress, accessibility and plumbing. Prerequisite: AEEN 2325.
- 3331. Building Construction.** 3(3-0)
Discussion of properties of construction materials and components; fabrication and construction technologies, methods and processes; engineered systems characteristic of commercial buildings such as foundation, structural, building envelope, mechanical and electrical systems. (Credit may not be obtained in both AEEN 3331 and ITEN 3331.)
- 3335. Environmental Systems for Buildings.** 3(3-0)
Fundamentals of heating, ventilation and air conditioning systems; moist air properties; analysis of different psychrometric processes; thermal comfort and air quality; infiltration and ventilation; psychrometric tools; and basic heat transfer. Prerequisites: AEEN 3346 and enrollment or successful completion of CEEN 3392.
- 3337. Electrical Systems for Buildings.** 3(3-0)
Introduction to electrical systems for buildings and their applications, including electrical system components, load calculation and basic design principles. Prerequisite: EEEN 3331.
- 3346. Thermal Analysis.** 3(3-0)
Properties of gases, vapors and liquids; the first and second laws of thermodynamics; and power and refrigeration cycles. Prerequisites: CEEN 2301, MATH 2414.
- 3347. Heat Transfer in Buildings.** 3(3-0)
Three heat transfer mechanisms: conduction, convection and radiation are explored. Solar radiation, heat gain through windows, infiltration and natural ventilation in buildings. Heating and cooling load calculation. Prerequisites: AEEN 3346 and PHYS 2326.
- 3348. Building Physics.** 3(3-0)
Theories and mathematical models of heat and mass transfer in buildings. Steady-state conductive heat transfer together with convection and radiation as applied to building materials; heat transfer equipment; evaporation and moisture transfer. Prerequisite: AEEN 3346.
- 3350. Facility Management.** 3(3-0)
Introduction to concepts of facility management, including links between assets and users; owner's perspective; and life cycle costs. Prerequisite: approval of the instructor.
- 3355. Historic Documentation.** 3(3-0)
Introduction to documentation of engineering, architecture, landscapes and industrial processes. Practical documentation experience including research of historical records, large-format photographic documentation, GIS data organization and preparation of submissions for publication and archiving.
- 4279. Senior Design Project I.** 2(1-3)
Application of engineering concepts covered in the upper division courses to architectural engineering problems including design of building structural and services systems, with emphasis on teamwork. Introduction to practical

aspects of construction and professional ethics. Prerequisites: AEEN 3304 or AEEN 4316, and enrollment in or successful completion of AEEN 4320.

4289. Senior Design Project II. [WI] 2(1-3)

Application of engineering concepts covered in the upper division courses to architectural engineering problems including design of building structural and services systems, with emphasis on teamwork. Introduction to practical aspects of construction and professional ethics. Prerequisite: AEEN 4279.

4310. 3D Computer Modeling. 3(2-3)

Introduction to three-dimensional computer modeling. Includes 3D wire frame construction in AutoCAD, extrusion and Boolean for AutoCAD and Viz, basic application of skins, lighting and rendering techniques. Prerequisite: AEEN 1310.

4316. Structural Steel Design. [WI] 3(3-0)

AISC specifications for the design of axially loaded members, beams, columns and connections. Introduction to plastic design. Prerequisite: AEEN 3303. (Credit may not be obtained in both AEEN 4316 and CEEN 4316.)

4320. Building Services Engineering. 3(3-0)

Analysis and design of different types of secondary systems; flow, pumps and piping system; fans, ductwork and building air distribution; and HVAC equipment. Prerequisites: Credit or registration in AEEN 1320, credit in AEEN 3335 with a C or higher; and EEEN 3331.

4326. Construction Engineering. 3(3-0)

Construction methods and management of earthwork with heavy equipment and others. Construction estimating, planning and control. Network theory and critical path methods. Prerequisite: credit or registration in CEEN 3317. (Credit may not be obtained in both AEEN 4326 and CEEN 4326.)

4333. Real Design and Construction. 3(2-3)

Real-world design/build course with projects emphasizing development of design, implementation of best practice construction, field experience and government work. Prerequisites: AEEN 1320 and AEEN 2325.

4336. Selected Topics. V:1-3

One or more topics of architectural engineering. May be repeated when topic changes. Prerequisite: junior standing.

4346. Building System Management. 3(3-0)

Basic concepts in building energy systems. Electrical, heating, ventilation and air conditioning (HVAC) systems; configuration, operation, control, efficiency and evaluation methods. Prerequisite: AEEN 3337 and AEEN 4320.

CIVIL ENGINEERING (CEEN)

1201. Civil Engineering as a Career. 2(1-3)

Orientation course covering the history of engineering, its disciplines and professional practice with emphasis on social responsibility and ethical behavior. Introduces students to the profession of civil and architectural engineering; provides basic skills, tools and techniques applied to problem solving, teamwork and communication necessary for academic and professional success. A laboratory component will stimulate the student's interest in engineering. Required of all entering civil and architectural engineering freshmen and transfer students with fewer than 16 hours.

2113. Surveying Laboratory. 1(0-3)

Engineering field surveying and practices of taping, leveling, traversing, error adjustments, stadia, earthwork and highway curves. Corequisite: CEEN 2212.

2212. Surveying. 2(2-0)

Engineering principles and practices of plane surveying, taping, leveling, traversing, surveying errors, topographic stadia, earthwork, highway curves and construction surveys. Prerequisites: AEEN 1310 and credit or registration in MATH 2413.

- 2301. Mechanics I.** (ENGR 2301) 3(3-0)
Resultants of force systems. Statics of beams, trusses, frames and other engineering structures. Friction. Distributed forces. Centroids and centers of gravity. Moments of inertia of areas and masses, Mohr's circle. Prerequisite: PHYS 2325/2125. Corequisite: MATH 2414.
- 3143. Geotechnical Engineering Laboratory.** 1(0-3)
Principles and practices of geotechnical engineering laboratory with emphasis on the related ASTM and AASHTO testing standards. Corequisite: CEEN 3342.
- 3145. Construction Materials Laboratory.** 1(0-3)
Engineering principles and practices for testing construction materials based on ASTM testing standards. Prerequisite: Credit for or registration in CEEN 3244.
- 3167. Hydraulics and Fluid Mechanics Laboratory.** 1(0-3)
Open-channel-flow visualization and measurement, hydraulic machinery characteristics and water and wastewater analysis. Corequisite: CEEN 3365.
- 3244. Construction Materials.** 2(2-0)
Engineering properties of materials for design and construction. Related ASTM test specifications of construction materials such as concrete, asphalt, timber, steel, synthetic materials, etc. Prerequisite: CEEN 3311
- 3303. Structural Analysis.** 3(3-0)
Statically determinate structures. Moving loads. Analysis of statically indeterminate structures by consistent deformation, slope-deflection and moment-distribution. Prerequisite: credit in CEEN 3311; or, registration in CEEN 3311, a grade of *B* or higher in CEEN 2301 and approval of instructor.
- 3304. Reinforced Concrete Design.** 3(3-0)
Mechanics, behavior and design of reinforced concrete members subject to axial loads, bending, torsion and shear. Prerequisites: CEEN 3303 and *C* or higher in CEEN 3311. (Credit may not be obtained in both AEEN 3304 and CEEN 3304.)
- 3311. Strength of Materials.** 3(3-0)
Hooke's Law; stress and strain at a point; Mohr's circle; axial stresses; torsion; shear, moment and deflection in beams; shear center; unsymmetrical bending; columns; theories of failure; introduction to fatigue; and statically indeterminate members. Prerequisites: CEEN 2301 and MATH 2414.
- 3317. Engineering Economy.** 3(3-0)
Principles of economic analysis applied to engineering; evaluation of engineering alternatives; economic significance of engineering proposals. Cash flow diagrams, equivalence of cash flow patterns, interest, rate of return comparison, inflation, time value of money, income tax and depreciation, benefit/cost comparison, break even analysis, fixed costs, operating costs and other costs. Prerequisite: junior standing in engineering.
- 3342. Geotechnical Engineering.** 3(3-0)
Principles of geotechnical engineering, soil composition, classification, flownet, compaction, consolidation, effective stress, bearing capacity and slope stability. Prerequisite: CEEN 3311.
- 3365. Environmental Engineering.** 3(3-0)
Treatment and distribution of water. Wastewater conveyance and treatment systems. Physical, chemical and biological treatment processes. Solid waste management. Introduction to air pollution control. Prerequisites: CEEN 3392 and CHEM 1311/1111. Corequisite: CEEN 3167.
- 3389. Structural Vibration.** 3(3-0)
Static analysis of structures using a computer program. Single-degree-of-freedom systems under free and forced vibration. Response spectrum and earthquake engineering. Introduction to vibration of multi-degree-of-freedom systems. Prerequisite: CEEN 3303.

3392. Hydraulics and Fluid Mechanics. 3(3-0)
Fluid statics, flow of fluids through pipes and open channels, hydraulic machines. Prerequisite: CEEN 2301.

In addition to the listed prerequisite for the following 4000 series courses, a student must have an overall grade point average of 2.0 or higher.

4279. Design in Civil Engineering I. 2(1-3)
Engineering concepts integrated from the topics taught in sequences of upper division courses to produce practical, efficient and feasible solutions of civil engineering problems. Computer applications are included. Prerequisites: credit or registration in CEEN 4316 and CEEN 4362.

4289. Design in Civil Engineering II. 2(1-3)
Engineering concepts integrated from the topics taught in sequences of upper division courses to produce practical, efficient and feasible solutions of civil engineering problems. Computer applications are included. Prerequisites: CEEN 3342 and CEEN 4279.

4314. Matrix Methods in Structural Analysis. 3(3-0)
Formulation and application of the direct stiffness method to truss, beam and frame structures; introduction to the finite element method for 2-D problems; and use and interpretation of computer structural analysis programs. Prerequisite: CEEN 3303.

4316. Structural Steel Design. [WI] 3(3-0)
AISC specifications for the design of axially loaded members, beams, columns and connections. Introduction to plastic design. Prerequisite: CEEN 3303. (Credit may not be obtained in both AEEN 4316 and CEEN 4316.)

4317. Computer Methods in Civil Engineering. 3(3-0)
Application of computer methods to solution of civil engineering problems, including the use of mathematical modeling, error analysis, optimization, solution of algebraic and differential equations and integration pertaining to infrastructure system analysis. Prerequisite: CEEN 3303.

4326. Construction Engineering. 3(3-0)
Construction methods and management of earthwork with heavy equipment and others. Construction estimating, planning and control. Network theory and critical path methods. Prerequisite: credit or registration in CEEN 3317. (Credit may not be obtained in both AEEN 4326 and CEEN 4326.)

4336. Selected Topics. V:1-3
One or more topics of civil engineering. May be repeated when topic changes. Prerequisite: senior standing.

4350. Professional Preparation. 3(3-0)
Preparation for the Civil Engineering Fundamentals of Engineering (FE) Examination, including computational skills, fundamental topics listed in the FE exam, and training in resume writing and interview skills. Corequisite: Registration in CEEN 4279 or CEEN 4289.

4359. Principles of Transportation Engineering. 3(2-3)
Principles of transportation engineering, profession of transportation engineering, system and organization, system characteristics, traffic engineering studies, traffic flow, intersection control and capacity, highway alignment and capacity. Prerequisite: senior standing in engineering.

4362. Hydrology. 3(3-0)
Hydrologic cycle; transpiration, evaporation, snow melt and planetary circulation. Rainfall-runoff relations, index, unit hydrographs, synthesized hydrographs. Binomial, normal and extreme-value skewed distributions. Prerequisites: CEEN 3392. Corequisite: STAT 4303.

4364. Design of Water and Wastewater Conveyance Systems. 3(3-0)
Water and wastewater flows and measurement, design of water transportation systems, design of gravity-flow sanitary sewers and stormwater drainage systems, pumps and pump systems, design of pumping stations.

Prerequisite: CEEN 3392.

4367. Introduction to Geoenvironmental Engineering. 3(3-0)

Soil-water-contaminant interaction processes, conduction phenomena, hydraulic conductivity and contaminant transport phenomena, effects of contaminants on soil properties, site characterization and soil remediation techniques; design aspects of waste containment systems such as landfills, seepage barriers and cutoff walls. Prerequisites: CEEN 3342 and CEEN 3365.

4368. Foundation Engineering. 3(3-0)

Soil strength. Bearing capacity of soils and shallow foundation. Immediate and consolidation settlement. Lateral earth pressure theory and retaining walls. Deep foundation and stability analysis of soil slopes. Prerequisite: CEEN 3342.

4369. Transportation Engineering Design. 3(2-3)

Engineering design concepts used to produce practical, efficient, economical and feasible solutions to problems in such transportation areas as highways, traffic freight and materials movement, railroads and air transport. Computer applications are included. Prerequisites: CSEN 2304 and CEEN 3311.

4399. Civil Engineering Internship. V:1-3

Internships in industry, government or consulting companies in career-based practical activities to broaden the skills obtained through curricular education. Prerequisite: senior standing.

Degree Requirements
Bachelor of Science in Architectural Engineering
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year				Junior Year			
AEEN 1310	3	AEEN 2325	3	AEEN 3335	3	AEEN 3304	3
ENGL 1301	3	CEEN 2301	3	AEEN 3337	3	AEEN 4320	3
MATH 2413	4	ENGL 1302	3	CEEN 3143	1	POLS 2302	3
PHYS 2325/2125	4	MATH 2414	4	CEEN 3342	3	Mathematics Elective*	3
UNIV 1101	<u>1</u>	PHYS 2326/2126	4	CEEN 3392	3	^Communications**	<u>3</u>
	15	UNIV 1102	<u>1</u>	CHEM 1311/1111	<u>4</u>		15
			18		17		
Sophomore Year				Senior Year			
AEEN 1320	3	AEEN 3303	3	AEEN 4279	3	AEEN 4289	2
AEEN 3346	3	HIST 1302	3	AEEN 4326	3	CEEN 3244	2
CEEN 3311	3	MATH 3320	3	CEEN 3317	3	CEEN 3145	1
EEEN 3331	3	POLS 2301	3	^Social/Behavioral	3	STAT 4303	3
HIST 1301	<u>3</u>	^Creative arts	3	Engineering Elective†	3	Engineering Elective†	3
	15	^Lang/Phil/Culture	<u>3</u>	Engineering Elective†	<u>3</u>	Science Elective††	<u>3</u>
			18		17		14
Total Hours Required							129

*Mathematics elective recommended: MATH 3415, MATH 4341, MATH 4372, MATH 4374 or any other approved upper-level mathematics course.

**Strongly recommended: COMS 2374 or ENGL 2374.

†Engineering electives: AEEN 3320, AEEN 3325, AEEN 3331, AEEN 3347, AEEN 3348, AEEN 4316, AEEN 4333, AEEN 4336, AEEN 4346, CEEN 2113, CEEN 2212, CEEN 3389, CEEN 4314, CEEN 4317, CEEN 4368; ITEN 4332, ITEN 4353 and MEEN 3348.

††Approved science elective: BIOL 1306, CHEM 1312, GEOL 1303, GEOL 3305.

Degree Requirements
Bachelor of Science in Civil Engineering
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year				Junior Year			
AEEN 1310	3	ENGL 1302	3	CEEN 3143	1	CEEN 3145	1
ENGL 1301	3	HIST 1301	3	CEEN 3303	3	CEEN 3167	1
MATH 2413	4	MATH 2414	4	CEEN 3342	3	CEEN 3244	2
PHYS 2325/2125	4	PHYS 2326/2126	4	CEEN 3392	3	CEEN 3304	3
UNIV 1101	<u>1</u>	UNIV 1102	1	STAT 4303	3	CEEN 3365	3
	15	^Creative arts	<u>3</u>	Science Elective†	<u>3</u>	Math + Sci Elective**	3
			18		16	Special Elective#	<u>3</u>
							16
Sophomore Year				Senior Year			
CEEN 2113	1	CEEN 3311	3	CEEN 3317	3	CEEN 4289	2
CEEN 2212	2	MATH 3320	3	CEEN 4279	2	CEEN 4359	3
CEEN 2301	3	MEEN 2302	3	CEEN 4316	3	Engineering Elective*	3
CHEM 1311/1111	4	Computer Elective##	3	CEEN 4362	3	Engineering Elective*	3
HIST 1302	3	^Communications††	3	POLS 2302	3	^Social/Behavioral	<u>3</u>
POLS 2301	<u>3</u>	^Lang/Phil/Culture	<u>3</u>	Engineering Elective*	<u>3</u>		14
	16		18		17		
Total Hours Required							130

†Approved science electives: BIOL 1306, GEOL 1303, GEOL 3305.

††Strongly recommended: COMS 2374 or ENGL 2374.

#Special Elective: AEEN 3346 or EEEN 3331.

##Computer Elective: CSEN 2303 or MEEN 1320.

*Engineering electives: CEEN 3389, CEEN 4314, CEEN 4315, CEEN 4317, CEEN 4326, CEEN 4336, CEEN 4350, CEEN 4364, CEEN 4367, CEEN 4368, CEEN 4369 or any other approved upper level engineering elective.

**Additional mathematics and science electives recommended: CHEM 1312 or any approved upper-level biology, chemistry or physics course. MATH 3415, MATH 4341, MATH 4372, MATH 4374 or any other approved upper-level mathematics course.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF ELECTRICAL ENGINEERING AND COMPUTER SCIENCE

Rajab Challoo, *Chair*

Engineering Complex 207. MSC 192. Extension 2004.

Professors

Alam, Challoo, Nekovei, Noore, Omar, Park

Associate Professors

Hicks, Lee, Leung, McLauchlan, Nijim, Verma, Yilmaz, Yilmazer

Assistant Professors

Aurangzeb, Hossain, Khan, MD., Kim, Zhang

Visiting Assistant Professor

Goyal, Fu, Toscano, Wang

Lecturers

Trivedi

Faculty Emeriti

Diersing, Gorakhpurwalla

Computer Science Program Educational Objectives:

1. Graduates will demonstrate a synthesis of theory and practice in computer science and electrical engineering that will be expanded upon throughout their professional careers.
2. Graduates will act according to their ethical, global, social, legal, information security and other professional responsibilities.
3. Graduates entering industry positions will contribute effectively to the technology projects carried out by their respective employers.
4. Graduate who continue to advanced studies will successfully complete their chosen degree programs.

Electrical Engineering Educational Objectives:

1. Graduates will be capable of pursuing professional careers and/or advanced studies.
2. Graduates will pursue state-of-the-art solutions to engineering problems and evaluate/embrace new technologies.
3. Graduates will exhibit personal commitment to continuous learning, high ethical standards, sound business decisions and engineering excellence.

Minor in Computer Science – Since principles of computer science are applicable in the sciences, engineering, business and other disciplines, the department offers a minor in Computer Science. A minor in Computer Science requires the fundamental course work CSEN 2304, CSEN 2306, CSEN 2310 and CSEN 3316. In addition, at least two advanced CSEN courses usually selected from CSEN 3314, CSEN 3315, CSEN 4317, CSEN 4320, CSEN 4340, CSEN 4362 and CSEN 4366 are required. Other choices must be approved by the department chair of Electrical Engineering and Computer Science.

Mobile Applications Development Certificate

The certification is open to engineering major undergraduate students upon completing the required and elective courses with an earned grade of ‘B’ or higher. (Non-engineering majors required dean’s approval.) Certificate requirements include 12 credit hours consisting of three required course, CSEN 3330, CSEN 3331, CSEN 4332, and one elective course selected from the list: CSEN 3314, CSEN 3315, CSEN 3316, and CSEN 4320. The prerequisite to the certificate program is CSEN 2310.

COMPUTER SCIENCE (CSEN)

2303. Introduction to Computing Using Visual Basic and Excel.

3(3-0)

Problem solving methods and algorithm development. Computer programming using Visual Basic. How to use Excel. Designing, coding, debugging and documenting programs using techniques of good programming style. Prerequisites: MATH 1314 and MATH 1316 or equivalent.

2304. Introduction to Computer Science. (ENGR 2304) 3(3-0)
Introduction to computer systems, problem solving methods and algorithm development. Structured programming using a programming language such as C. Designing, coding, debugging and documenting programs using techniques of software development cycle. Prerequisites: Credit or registration in MATH 1314.

2306. Object-Oriented Programming. 3(3-0)
Fundamental features of C++ programming, introduction to objects and classes, major concepts of object-oriented programming such as data abstraction, encapsulation, polymorphism and inheritance. Prerequisite: CSEN 2304.

2310. Object-Oriented Software Engineering. 3(3-0)
Object-oriented analysis and modeling, object-oriented design and implementation using an object-oriented language, such as JAVA, object-oriented software development, Unified Modeling Language (UML), Graphical User Interface (GUI). Prerequisite: CSEN 2304.

2328. Data Structures and Algorithms. 3(3-0)
Specification and implementation of data types and associated algorithms; lists, stacks, queues, trees, hashing, priority queues, sorting and graphs. Prerequisite: CSEN 2304.

2330. Assembly Language and Computer Organization. 3(3-0)
Basic concepts of computer systems and computer architecture. Machine instructions and basic data types. Representation of information. Arithmetic and logical operations. Addressing operands in storage. Assembly language programming. Prerequisite: CSEN 2304.

In addition to the listed prerequisite for the following 3000 and 4000 level courses, a student must have an overall grade point average of 2.0 or higher.

3314. (Formerly CSEN 4314). Database Systems. 3(3-0)
File and database organization techniques. Network, hierarchical and relational data models. Normalization. Commercially-available DBMS. Query languages. DBMS design and implementation.

3315. (Formerly CSEN 4315). Computer Graphics. 3(3-0)
Man-machine communication in graphical form. Graphics hardware and software. Use of a commercial graphics package. Representation and manipulation of two- and three-dimensional data. Use of color. Prerequisites: CSEN 2304 and MATH 1348.

3316. (Formerly CSEN 4316). Software Engineering I. 3(3-0)
Introduction to formal software design principles. An engineering approach to software development. Software project management. Software requirements analysis, specification, design, development and validation. Prerequisite: 6 semester hours of computer science or information systems.

3330. Android Mobile Application Development. 3(3-0)
Strategies and techniques for designing and developing Android mobile applications, including user interface screen layouts, the definition of program logic, and the connection between them. Prerequisite: CSEN 2310.

3331. iOS Mobile Application Development. 3(3-0)
Technologies, tools, and techniques used to develop iOS mobile applications including user interface development, gender-based interfaces, integrated location services, multi-touch event handling, Apple iOS platform, Xcode IDE, Objective-C, and Swift programming languages. Prerequisite: CSEN 2310.

4201-4202. Senior Project. [WI-4202] 4(1-3)
A major project of an original nature carried to completion over a period of two semesters. Normally taken in the final academic year prior to graduation. Prerequisite: senior standing in computer science.

4317. Software Engineering II. 3(3-0)
Advanced software design principles. An engineering approach to software development emphasizing advanced techniques for validation and verification. Prerequisite: CSEN 3316.

4320. Computer Networks. 3(3-0)
Data communication networks and ISO reference model, the electrical interface, data transmission, data link and its protocols, local area network and its protocols, wide area network and its protocols, internetworking. Prerequisite: 6 hours of upper level computer science.

4332. Web Mobile Application Development. 3(3-0)
Concepts and technologies to design and develop mobile web applications, including system environment and architecture, system development methodologies, user interface design, data processing, and operations of data management. Prerequisite: CSEN 2310.

4335. Selected Topics. V:1-3
One or more topics of computer science. May be repeated for a total of 6 semester hours. Prerequisite: consent of instructor.

4336. Special Problems. V:1-3
Individual solution of selected problems in computer science conducted under direct supervision of a faculty member. May be repeated for up to 6 semester hours. Prerequisite: consent of instructor.

4340. Computer Security. 3(3-0)
Theory and practice of computer security. Cryptographic tools used to provide security, such as shared key encryption, public key encryption, key exchange and digital signature, with application to security in computer programs, operating systems, database management systems and networks. Prerequisite: CSEN 4320.

4362. Operating Systems. 3(3-0)
Study of operating system principles, including process management, memory management, resource allocation and input, output and interrupt processing. Prerequisite: CSEN 2330 or EEEN 3449.

4366. Programming Languages. 3(3-0)
Formal definition of programming languages including specification of syntax and semantics. Precedence, infix, prefix and postfix notation. Global properties of algorithmic languages. List processing, string manipulation, data description and simulation languages. Run-time representation of program and data structures. Prerequisite: CSEN 2328.

4367. Data Mining. 3(3-0)
Data mining techniques; implementation, benefits and the outcome expectations from this new technology. Prerequisite: senior standing.

4399. Internship in Computer Science. V:1-3
An off-campus learning experience allowing the acquisition, development and application of computer science and information technology skills. Prerequisite: approval of program head or department head.

ELECTRICAL ENGINEERING (EEEN)

1201. Introduction to Electrical Engineering. (ENGR 1201) 2(1-3)
Introduction to electrical engineering and its role in society. Electrical engineering skills, tools and techniques applied to problem solving and academic and professional survival strategies. Introduction to electrical circuits, electrical measurements, digital logic and ethics. Includes a writing component as well as use of computers (spreadsheets, tables, graphing and simulations). For students planning to pursue a career in electrical engineering or computer science.

2323. Network Analysis I. 3(3-0)
Introduction to linear network analysis techniques. Phasor analysis and sinusoidal steady-state response. Single-phase and polyphase circuits. Prerequisites: MATH 2414; Corequisites: MATH 3320 and PHYS 2326/PHYS 2126.

2340. Digital Logic Design. 3(3-0)
Hardware implementation of arithmetic and logical functions, organization and design of digital systems. Prerequisite: CSEN 2304.

In addition to the listed prerequisite for the following 3000 and 4000 level courses, a student must have an overall grade point average of 2.0 or higher.

3212. Circuits and Electronics Lab. 2(1-3)
Laboratory course to correlate with circuits and electronics. Prerequisite: credit for or registration in EEEN 3325.

3321. Network Analysis II. 3(3-0)
Two-port networks, Fourier analysis, time domain response, transient response and Laplace transform techniques. Prerequisites: CSEN 2304, EEEN 2323, and MATH 3320.

3324. Electromagnetics. 3(3-0)
Vector analysis, electrostatics, steady magnetic fields. Maxwell's equations, uniform plane waves, circuit concepts, propagation and radiation. Prerequisites: MATH 3320 and PHYS 2326/PHYS 2126.

3325. Electronics I. 3(3-0)
Solid state fundamentals. Nonlinear devices and networks. Fabrication of integrated circuits. Two-port models. Prerequisites: EEEN 2323 and PHYS 2326/PHYS 2126.

3331. Circuits and Electromagnetic Devices. 3(3-0)
General network analysis, steady-state AC/DC circuits. Energy conversion and applications. Prerequisite: PHYS 2326/2126.

3333. Linear Systems and Signals. 3(3-0)
Signal representation, sampling and quantization, Laplace and z-transforms, transfer functions and frequency response, convolution, stability, Fourier series, Fourier transforms and applications. Prerequisite: EEEN 3321.

3334. Random Signals. 3(3-0)
Probability, random variables, white noise and band-limited system, narrowband Gaussian process, pseudorandom signals and random signal response of linear systems. Prerequisite: MATH 2414.

3449. Microprocessor Systems. 4(3-3)
Basic computer structure, the instruction set, addressing modes, assembly language programming, assembly language subroutines, arithmetic operations, programming in C, implementation of C procedures, elementary data structures, input and output and a survey of microprocessor design. Prerequisites: EEEN 2340.

4224. Electrical and Computer Engineering Projects Laboratory. [WI] 2(0-6)
Participation in engineering design activity. Prerequisite: EEEN 4252.

4252. Advanced Laboratory. 2(1-3)
Capstone design project development to completion over two semesters in EEEN 4252 and EEEN 4224. The design project will take into account global, societal, environmental and economic constraints to solve or analyze practical electrical engineering problems. Students first research and develop a Capstone Design Project proposal in EEEN 4252 and then complete the design in EEEN 4224. The two-course sequence is normally taken in the final academic year prior to graduation. Prerequisites: EEEN 3212, EEEN 3333, EEEN 3449 and communication elective.

4310. Introduction to VLSI Circuit Design. 3(3-0)
Introduction to design and fabrication of micro-electronic circuits via Very Large Scale Integrated (VLSI) circuitry; structured design methods for VLSI systems, use of computer-aided design (CAD) tools and design projects of small to medium scale integrated circuits. Prerequisites: EEEN 2340 and EEEN 3325.

4329. Communications Engineering. 3(3-0)
Transmission of information. Probability, stochastic process and spectral analysis. Sampling, quantization, decision theory, coding and decoding. Digital communication system and secure communications. Introduction to DSP. Prerequisites: EEEN 3333 and EEEN 3334.

- 4335. Special Problems.** V:1-3
Individual solution of selected problems in electrical engineering conducted under direct supervision of a faculty member. May be repeated for up to 6 hours. Prerequisite: consent of instructor.
- 4336. Selected Topics.** V:1-3
One or more topics of electrical engineering. May be repeated when topic changes. Prerequisite: consent of instructor.
- 4340. Power Electronics.** 3(2-3)
Classical and modern design and analysis methods of power electronic circuits and the feedback control designs of power electronic converters and related laboratory experiments. Topics include diode rectifiers, thyristor converters, DC-DC converters and associated controls, DC/AC inverters, power-factor correction and control, isolated switch-mode power supplies, applications of power electronic converters and related hardware and virtual laboratory experiments. Prerequisite: EEEN 3325 or consent of instructor.
- 4342. Electronics II.** 3(3-0)
Analysis and design of analog electronic circuits; differential, multistage and power amplifiers; frequency response; feedback and stability. Prerequisite: EEEN 3325.
- 4343. Microprocessor-based Control Systems.** 3(3-0)
Design of microprocessor-based real-time control systems. Application of theoretical principles in electrical engineering to control small-scale systems, such as a mobile robot incorporating sensors, actuators and intelligence. Controller design; signal conditioning and drive circuits for interfacing with various sensors and actuators; programming and programmable logic controllers. Prerequisites: EEEN 3333 and EEEN 3449.
- 4344. Computer Architecture and Design.** 3(3-0)
Basic computer organization, data representation and arithmetic, instruction sets and addressing modes, assembly language, data path and control, memory, input and output and communication. Prerequisites: EEEN 3449 or CSEN 2330, EEEN 2340.
- 4354. Linear Control Systems.** 3(2-3)
Analysis and design techniques for linear feedback control systems. Controller functions and compensation, applications to serve and process control problems. Prerequisite: EEEN 3333.
- 4355. Digital Systems Engineering.** 3(2-3)
Principles in digital system design and testing, digital integrated circuits, digital system design with PLDS and FPGAS, introduction to an HDL, memory, microprocessors and design for testability. Prerequisites: EEEN 3325 and EEEN 2340.
- 4357. Wireless Sensor Networks.** 3(3-0)
Foundations of wireless sensor networks, localization, routing, optimization, security, energy-aware systems and algorithms, design/analysis and applications of wireless sensor networks. Prerequisites: completed general education natural sciences requirement.
- 4358. Embedded Systems.** 3(2-3)
System level embedded design exploring hardware/software co-design, Linux sysfs, bash shell, firmware partitioning, I/O interfaces, IP cores, system specifications to hardware-software implementation and synthesis. Prerequisites: EEEN 3449 and EEEN 4355.
- 4360. Robotics II.** 3(3-0)
Multidisciplinary development to robotics, combining concepts from electrical engineering, mechanical engineering and computer science. Topics include sensing, communication, localization, planning and navigation. Prerequisite: MEEN 4355 or consent of instructor.

4362. Image Processing and Biometrics.

3(3-0)

Basic image processing: intensity transformations, spatial and frequency domain filters, image restoration and compression. Biometric applications: fingerprint and facial recognition; biometric issues: privacy, legal concerns, testing and standards. Prerequisite: EEEN 3333 or consent of instructor.

4422. Electric Drives.

4(3-3)

Introduction to power electronic converters for motor drives and controls, single and three phase transformers, DC motors and generators, feedback control design of DC motor drives, PMAC drives, synchronous generators, induction motor drives, speed and vector control of induction motor drives. Laboratory experiments to identify electric machine parameters and characteristics, and DC/AC motor drive controls, by designing and conducting experiments using digital computers. Prerequisite: EEEN 3321.

Degree Requirements
Bachelor of Science in Computer Science
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year				Junior Year			
CHEM 1311/1111	4	CSEN 2306	3	CSEN 3315	3	CSEN 3314	3
CSEN 2304	3	ENGL 1302	3	EEEN 2340	3	CSEN 3316	3
ENGL 1301	3	HIST 1301	3	STAT 1342	3	EEEN 3449	4
MATH 2413	4	MATH 2414	4	[^] Communications*	3	MATH 3370	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>	[^] Social/Behavioral	<u>3</u>	POLS 4324	<u>3</u>
	15		14		15		16
Sophomore Year				Senior Year			
CSEN 2310	3	CSEN 2328	3	CSEN 4201	2	CSEN 4202	2
HIST 1302	3	PHYS 2326/2126	4	CSEN 4317	3	CSEN 4340	3
MATH 3320	3	POLS 2302	3	CSEN 4320	3	CSEN 4362	3
PHYS 2325/2125	4	[^] Creative arts	3	EEEN 4344	3	CSEN 4366	3
POLS 2301	<u>3</u>	[^] Lang/Phil/Culture	<u>3</u>	Approved Elective**	<u>3</u>	Approved Elective**	<u>3</u>
	16		16		14		14
						Total Hours Required	120

* COMS 2374 or ENGL 2374 is strongly recommended.

**The approved electives must be selected with the consent of the student's adviser, and would normally be more advanced courses in computer science, information systems, mathematics, statistics or one of the sciences taken in the freshman and sophomore years. However, a meaningful sequence of courses in any discipline, such as engineering or agriculture, may be taken with the consent of the student's adviser, except that all such courses must be at the 2000-level or above.

Degree Requirements
Bachelor of Science in Computer Science with Teacher Certification

Freshman Year				Junior Year			
CHEM 1311/1111	4	CSEN 2306	3	CSEN 3315	3	CSEN 3314	3
CSEN 2304	3	ENGL 1302	3	EEEN 2340	3	CSEN 3316	3
ENGL 1301	3	HIST 1301	3	STAT 1342	3	EDED 3310**	3
MATH 2413	4	MATH 2414	4	[^] Communications*	3	EEEN 3449	4
UNIV 1101	<u>1</u>	UNIV 1102	1	[^] Social/Behavioral	<u>3</u>	POLS 4324	<u>3</u>
	15	[^] Creative arts	<u>3</u>		15		16
			17				
Sophomore Year				Senior Year			
CSEN 2310	3	CSEN 2328	3	CSEN 4201	2	CSEN 4202	2
HIST 1302	3	MATH 3370	3	CSEN 4317	3	CSEN 4340	3
MATH 3320	3	PHYS 2326/2126	4	CSEN 4320	3	CSEN 4362	3
PHYS 2325/2125	4	POLS 2302	3	EDED 3302**	3	CSEN 4366	3
POLS 2301	<u>3</u>	[^] Lang/Phil/Culture	<u>3</u>	EDED 3333**	3	EDED 3332**	3
	16		16	EEEN 4344	<u>3</u>	EDED 3362**	<u>3</u>
					17		17
						Total Hours Required	141
Certification Semester							
EDED 4623**	6						
EDRG 4314**	3						
EDSE 4329**	<u>3</u>						
	12						

*COMS 2374 or ENGL 2374 is strongly recommended.

**27 credit hours in education courses are required for teacher certification

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

Degree Requirements
Bachelor of Science in Electrical Engineering
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year			Junior Year				
CHEM 1311/1111	4	EEEN 2340	3	EEEN 3321	3	CEEN 3317	3
CSEN 2304	3	ENGL 1302	3	EEEN 3325	3	EEEN 3212	2
ENGL 1301	3	HIST 1301	3	EEEN 3334	3	EEEN 3324	3
MATH 2413	4	MATH 2414	4	MATH 3415	4	EEEN 3333	3
UNIV 1101	<u>1</u>	PHYS 2325/2125	4	<i>^Social/Behavioral</i>	<u>3</u>	EEEN 4355	3
	15	UNIV 1102	<u>1</u>		16	MATH 4341	<u>3</u>
			18				17
Sophomore Year			Senior Year				
EEEN 3449	4	EEEN 2323	3	EEEN 4252	2	EEEN 4224	3
HIST 1302	3	POLS 2302	3	EEEN 4342	3	EEEN 4329	2
MATH 3320	3	<i>^Lang/Phil/Culture*</i>	3	EEEN 4354	3	Approved Elective***	2
PHYS 2326/2126	4	<i>^Communication**</i>	3	EEEN 4422	4	Approved Elective***	3
POLS 2301	<u>3</u>	<i>^Creative arts</i>	<u>3</u>	Approved Elective***	<u>3</u>	Approved Elective***	<u>3</u>
	17		15		15		14
						Total Hours Required	127

*All general education elective courses must be chosen from the approved elective list, after discussions with the academic advisor.

*COMS 2374 or ENGL 2374 is strongly recommended.

**Approved major-related electives must be chosen as a sequence of courses to satisfy a professional objective and must be chosen with the consent of the academic advisor or the department chair.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF ENVIRONMENTAL ENGINEERING

David Ramirez, *Interim Chair*

Engineering Complex 376. MSC 213. Extension 2096.

Regents Professor

Jones

Professors

Clapp, Ren

Associate Professor

Ramirez

Assistant Professors

Bezares-Cruz, Camacho, Sinha, Wu, Zhong

Lecturer

Al-Qudah

Visiting Assistant Professor

Lynn

Environmental Engineering Program Educational Objectives:

Within a few years of graduation, alumni of the TAMU-K undergraduate EVEN program will demonstrate achievement in the following areas:

1. Graduates will practice in one of the areas appropriate to the interdisciplinary field of environmental engineering (water quality engineering, air quality engineering, water resource management, hazardous and solid waste management, ecological engineering or engineering management).
2. Graduates will demonstrate leadership qualities (such as career advancement, community service and professional society activity) and maintain high standards for professional and ethical behavior.
3. Graduates will pursue continuing education opportunities.

ENVIRONMENTAL ENGINEERING (EVEN)

1201. Environmental Engineering as a Career.

2(2-0)

Definition and role of the engineering in society. Engineering skills, tools and techniques applied to problem solving, academic and professional survival strategies.

2304. Computer Methods for Environmental Engineering.

3(3-0)

Basic computer methods useful for environmental engineering analysis and design. Introduction to programming, analysis and application software, with hands-on applications. Applications of structured, object-oriented and event-driven programming and relational databases for environmental problems.

2310. Introduction to Environmental Engineering.

3(3-0)

Science basics, law and regulations, protection of human health and the environment from air, water, solid/hazardous and product pollution. Structure of the environmental industry. Prerequisite: sophomore standing in physical science, engineering or agriculture.

2311. Environmental Engineering Ethics and Policy.

3(3-0)

Recognition and formulation of ethical questions and issues in engineering professional practice with topics linking environmental policy and economics with philosophical and cultural considerations, along with the U.S. experience of environmental policy, economics and regulations.

2372. Environmental Engineering in a Global Society.

3(3-0)

This course focuses on current global environmental issues including environmental pollution, climate change, energy and sustainability. It also discusses the interactions between human behavior and environmental crisis, studies the impact of global environmental issues, and evaluates the prospect of changing lifestyle for promoting sustainable development. Prerequisite: sophomore standing or higher.

- 2373. Sustainability Principles & Economics.** 3(3-0)
The social, economic and environmental dimensions of sustainability including environmental ethics and philosophy, and critical planning issues surrounding new technology, energy development, water management, climate science, environmental impact assessment, ecological economics and systems thinking in a global context.
- 3320. Chemical Principles for Environmental Engineers.** 3(3-0)
Fundamental chemical principles for determination of the source, fate and transformation of chemical compounds in natural and polluted environments. Climate change, air pollution, stratospheric ozone depletion, pollution and treatment of water sources and the utilization of insecticides and herbicides. Prerequisite: CHEM 1112, CHEM 1312.
- 3321. Environmental Engineering Lab.** 3(1-4)
Overview of contaminant transport and partitioning processes, chemical processes, biological processes and particle dynamics and separations processes. Design and performance of experiments to generate data for environmental engineering design. Statistical analyses and interpretation of experimental data. Prerequisites: EVEN 2310 and CHEM 1312/1112.
- 3328. Environmental Engineering Process Fundamentals.** 3(3-0)
Physicochemical fundamentals and applications using mass and energy balances for the design of water treatment systems with consideration of water characteristics, reaction kinetics, and process reactors. Fundamental principles are used in environmental engineering processes for water and air quality applications. Prerequisite: EVEN 2310.
- 3336. Environmental Microbiology.** 3(3-0)
Use and control of microorganisms in engineered systems and the effects of microorganisms on the environment and on human activity, health and welfare. Microbial structure, function, growth, metabolism and diversity, as well as microbial involvement biogeochemical cycling and in water and waste treatment, waterborne diseases and pollution control. Prerequisite: CHEM 1311.
- 3399. Nuclear Environmental Protection.** 3(3-0)
Nuclear fuel cycle and associated environmental impacts and safety concerns related to nuclear chemistry, nuclear physics, health physics and environmental engineering. Prerequisite: junior standing.
- 4102. Environmental Engineering Design I.** 1(1-0-1)
Application of the scientific, engineering, technical and communications skills to develop engineering alternatives and economics analysis for an environmental engineering design topic. Students will meet one hour per week with an additional hour of recitation period to present ideas and proposal work products to the instructor. Prerequisites: CEEN 3392, EVEN 2310, EVEN 3320 and EVEN 3328.
- 4105. Engineering Management.** 1(1-0)
Principles and fundamentals of engineering management and leadership. Prerequisite: junior or senior standing.
- 4301. Water and Wastewater Treatment.** 3(3-0)
Engineering analysis and design of water and wastewater treatment processes. Water quality evaluation; physical, chemical and biological treatment systems; design of facilities for production of drinking water and treatment. Prerequisites: EVEN 2310, EVEN 3320, and MATH 3320.
- 4303. Environmental Engineering Design II. [WI]** 3(3-0)
The application of environmental engineering principles, including sustainability and economic criteria to a comprehensive air pollution control design problem. Computer software is utilized as a design aid. Prerequisites: EVEN 3320, EVEN 3328 and CHEN 4386.
- 4304. Water Resources and Advanced Computer Methods.** 3(3-1)
Application of advanced computer techniques and methods for numerical analysis and solution of complex environmental engineering problems including geospatial analysis, mathematical model development and numerical solutions to non-linear differential equations and their applications to water resource problems. Prerequisite: EVEN 2304 or equivalent.

- 4306. Solid and Hazardous Waste Fundamentals.** 3(3-0)
Solid and hazardous waste engineering and planning. Landfill technology development and design. Waste to energy concepts and technology development, and resource conservation and recovery perspectives. Prerequisite: EVEN 3328.
- 4317. Environmental Engineering Fundamentals.** 3(3-0)
Introductory course in Environmental Engineering: science basis, law and regulations, protection of human health and the environment from air, water, solid/hazardous and product pollution. Structure of the environmental industry. Prerequisite: junior standing in B.S. program in physical science, engineering or agriculture.
- 4336. Selected Topics.** V:1-3
One or more topics of environmental engineering. May be repeated when topic changes. Prerequisite: senior standing.
- 4357. Environmental Aspects of Engineering Works and Products.** 3(3-0)
Environmental transformations, contaminant transport, ideal reactor models, design and application of exposure assessment models to solve waste load allocation problems. Prerequisite: senior standing in engineering.
- 4386. Air Pollution Control.** 3(3-0)
Fundamental approach to air pollutants classification, sources and effects; theories of air quality, air pollution control and atmospheric science; control technologies of particulate and gaseous air pollutants, and process design variables; introduction to air pollution meteorology and dispersion modeling. Prerequisites: CEEN 3392 and senior standing. (Credit may not be obtained in both CHEN 4386 and EVEN 4386.)
- 4399. Internship in Environmental Engineering.** V:1-3
Internships in industry, government or consulting companies, designed to broaden the skills obtained through curricular education. Prerequisite: junior or senior standing.

Degree Requirements
Bachelor of Science in Environmental Engineering
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year				Junior Year			
CHEM 1311/1111	4	AEEN 1310 or	3	CHEM 3323/3123	4	CEEN 3317	3
ENGL 1301	3	MEEN 1310		EVEN 3320	3	CEEN 3392	3
HIST 1301	3	ENGL 1302	3	EVEN 3321	3	EVEN 2372** or	3
MATH 2413	4	MATH 2414	4	POLS 2302	3	^Social/Behavioral	
UNIV 1101	<u>1</u>	PHYS 2325/2125	4	^Communications	<u>3</u>	EVEN 3328	3
	15	UNIV 1102	1		16	MEEN 3347 or	3
		^Lang/Phil/Culture	<u>3</u>			CHEN 3347	
			18			Engineering Elective*	<u>3</u>
							18
Sophomore Year				Senior Year			
CHEM 1312/1112	4	BIOL 1306	3	EVEN 4102	1	EVEN 4301	3
EVEN 2310	3	EVEN 2304	3	EVEN 4105	1	EVEN 4303	3
HIST 1302	3	EVEN 2311	3	EVEN 4306	3	EVEN 4304	3
MEEN 2355†	3	MATH 3320	3	EVEN 4386	3	GEOL 4425 or	4
POLS 2301	<u>3</u>	PHYS 2326/2126	4	STAT 4303	3	PLSS 3410	
	16		16	^Creative arts	<u>3</u>	Engineering Elective*	<u>3</u>
					14		16
						Total Hours Required	129

*Engineering Electives (Choose six hours from one focus area):

For Focus Area of Water Resources: EVEN 3336, EVEN 3399, **EVEN 4399, EVEN 4336, CEEN 4362, CHEN 3321, EEEN 3331 or MEEN 3344.

For Focus Area of Air Pollution: EVEN 3399, **EVEN 4399, EVEN 4336, EEEN 3331 or MEEN 3344.

For Focus Area of Geo-environmental: EVEN 3336, EVEN 3399, **EVEN 4399, EVEN 4336, CEEN 4362, ITEN 4332, EEEN 3331 or MEEN 3344.

For Focus Area of Sustainability and Green Engineering: EVEN 3336, EVEN 3399, **EVEN 4399, EVEN 4336, CHEN 3321, EEEN 3331 or MEEN 3344.

**EVEN 4399 – Internship in Environmental Engineering can be used as an Engineering Elective if approved by the department.

^ For courses listed under Core Curriculum “Components” see “General Requirements for Graduation with a Baccalaureate Degree” in an earlier section of this Catalog

DEPARTMENT OF INDUSTRIAL MANAGEMENT AND TECHNOLOGY (ITEN)

Farzin Heidari, *Interim Chair*

Gross Industrial Technology Building 100. MSC 203. Extension 4056.

Associate Professors

Heidari, Marsh

Assistant Professors

Dakeev, Polastri

Lecturers

Lewis, Rabe, Rosenkranz

The department prepares students for a wide array of management-oriented positions within manufacturing, construction, fabrication and oil field service as well as educational and governmental organizations.

A minor in Industrial Technology requires the following course work: ITEN 1311, ITEN 1315, ITEN 2301 and at least three approved advanced ITEN courses in a specified concentration.

The Educational Objectives of the Industrial Management and Technology Program are:

1. To prepare students for technology-related careers within industry, education, business and government.
2. To provide students with an academic base for advanced studies and life-long learning opportunities and expectations.
3. To provide students with a sense of ethics and ethical responsibility to their profession and society.

1201. Careers in Industrial Technology. 2(2-1)

An overview of career fields within the field of Industrial Technology. Course activities explore technological systems in manufacturing, construction, communication, energy, transportation and computer applications used within the field of Industrial Technology.

1311. Technical CAD. 3(3-1)

An introduction to a variety of mechanical drafting applications and techniques, including orthographic projection, pictorials, geometric dimensioning and tolerancing in pencil and Computer Assisted Drafting and Design.

1315. Introduction to Manufacturing Processes. 3(3-1)

Manufacturing processes of products using metal, plastic and wood. Laboratory experiences include projects related to machine tool operations, injection molding, thermoforming, CNC lathe and milling machining.

2301. Industrial Electronics. 3(3-1)

Industrial applications of electricity and electronics, including passive components, power utilization, solid state devices and electronic production techniques. Prerequisite: MATH 1314.

2303. Selected Topics in Industrial Management. 3(3-0)

Content examination in a topic area relating to the field of industrial management and technology. May be repeated up to a total of 6 semester hours.

2320. Industrial Materials. 3(3-1)

An introduction to the sources, properties and testing of a variety of industrial materials. Laboratory experiences include destructive and nondestructive materials testing. Prerequisite: CHEM 1405 or equivalent and PHYS 1375 or equivalent.

2330. OSHA for General Industry. 3(3-0)

An introduction to OSHA's general industry standards and an overview of the requirements of the more frequently referenced standards. Standards will be reinforced with laboratory exercises and related problems.

- 2331. Construction Safety.** 3(2-2)
Study of plant layout and safety procedures, including information for employees, accident reporting, first aid practices, emergency procedures, fire prevention and plant environmental conditions.
- 3300. Manufacturing Technology.** 3(3-1)
An introduction to basic manufacturing concepts, processes and tools, with examples in machine tool operations and mass production. Prerequisite: junior standing.
- 3306. Manufacturing Processes.** 3(3-1)
Survey of traditional and nontraditional manufacturing processes used in product development and production. Prerequisite: ITEN 1315.
- 3308. Industrial Plastics.** 3(2-2)
A survey of the characteristics and the processes utilized in producing products from industrial plastics. Includes laboratory experiences in fabrication, injection molding, laminating and vacuum-forming. Prerequisites: CHEM 1405 and ITEN 3300 or equivalent.
- 3310. Fluid Power.** 3(3-1)
Systems, instruments and concepts utilized in the area of fluid power with emphasis on fundamental theories of operation, system design, component selection, maintenance and safety considerations. Includes an overview of fluid logic and electrical controls circuits. Prerequisite: 3 SCH of PHYS counting toward degree.
- 3311. Manufacturing Facilities.** 3(3-0)
Study of principles, methods and techniques utilized in planning, operating and maintaining manufacturing and industrial facilities.
- 3313. Energy Systems.** 3(3-1)
An introduction to the basic principles of energy and power transmission for industrial technologists and non-engineers. Prerequisite: 3 SCH of PHYS counting toward degree.
- 3315. CAD/CAM.** 3(3-0)
Survey of computer-aided design (CAD) and manufacturing (CAM) that includes 2D and 3D geometry construction and tool path creation. Prerequisites: ITEN 1315 and credit or registration in ITEN 3300.
- 3321. Architectural CAD.** 3(3-1)
Planning, design and drafting of residential and commercial buildings. Prerequisite: ITEN 1311 or consent of instructor.
- 3323. Cost Estimating.** 3(3-0)
Practical methods used in development of cost estimates in industrial management and technology, with emphasis on software used in the construction industry. Prerequisite: junior standing.
- 3324. Industrial Controls.** 3(3-1)
Digital electronics and the application of microprocessors to industrial controls. Laboratory experiences include problems in programming and control system interfacing. Prerequisite: junior standing.
- 3331. Construction Technology.** 3(2-2)
Systems, materials and equipment utilized in residential and commercial construction. Includes regulatory and economic analysis of construction projects.
- 3333. Industrial Scheduling.** 3(3-0)
Planning, scheduling and monitoring of construction projects including development of critical path networks (CPM and PERT), Gantt bar charts and construction cost control and reporting practices. Prerequisite: credit or registration in ITEN 3323.

- 3336. Industrial Hygiene I.** 3(3-0)
Introduction to industrial hygiene and recognition of industrial hazards. Prerequisite: ITEN 2330.
- 3338. Industrial Hygiene II.** 3(3-0)
Industrial Hazard Evaluation and control methods, duties of safety professionals and government regulations. Prerequisites: ITEN 2330, credit in ITEN 3336 recommended.
- 3343. Advanced Manufacturing Processes.** 3(3-0)
Survey of the latest manufacturing processes that are used in order to produce products that cannot be produced with conventional manufacturing processes. Processes covered will include, non-traditional machining methods, abrasive machining, advanced casting methods, specialized welding methods and other high-end manufacturing processes used in manufacturing industries.
- 3345. Advanced Graphics and Modeling.** 3(3-0)
Advanced graphics with an emphasis in 3D design and solid modeling. Prerequisite: credit or registration in ITEN 3300.
- 3349. Lean Production. [WI]** 3(3-0)
Planning and developing benchmarks for manufacturing operations; measuring, assessing and enhancing productivity within industrial settings, including an overview of Lean Production concepts. Prerequisite: junior standing.
- 3352. Inspection and Gaging.** 3(3-1)
Systems, instruments and concepts utilized in the area of inspection and gaging with emphasis on traditional instruments and overviews into in-process and post-process inspection, contact and noncontact gaging and digital gaging.
- 3399. Industrial Internship I.** 3(3-0)
Supervised on-the-job experience in an industrial/technical area related to the field of Industrial Technology. Prerequisites: junior or senior standing and an internship position within an industrial environment/company approved prior to course scheduling.
- 4303. Selected Topics.** 3(3-0)
Investigations with industrial experts on one or more topics in current technologies. May be repeated up to a total of 6 semester hours. Prerequisite: senior standing.
- 4320. Safety Program Administration.** 3(3-0)
Examination of safety administration issues that affect the workplace including safety awareness and loss control, regulation and compliance and behavior assessment and modification. Prerequisites: ITEN 3336 or ITEN 3338.
- 4330. Manufacturing Systems.** 3(3-0)
Holistic overview of manufacturing; design and solid modeling, robotics, CAD/CAM principles and tradition and nontraditional manufacturing concepts with an emphasis in design analysis and production enhancement. Prerequisites: ITEN 3306 and ITEN 3315 or ITEN 3345.
- 4332. Hazardous Waste and Fire Safety.** 3(3-0)
Study of fire prevention and hazardous substances. Hazard mitigation and containment polities will be reviewed. Prerequisite: CHEM 1405 or CHEM 1311/1111
- 4333. Industrial Scheduling II.** 3(3-0)
Resource allocation and resource leveling, money and network schedules, project monitoring and control are covered with an emphasis on integrating costs and schedule, earned value, CPM in dispute resolution and litigation, schedule risk management. Prerequisite: ITEN 3333.

- 4335. Senior Projects.** 3(3-0)
Individual solution of selected problems in industrial technology under the direct supervision of a faculty member.
Prerequisite: senior standing in industrial technology.
- 4336. Industrial Employment Research.** 3(3-0)
Survey of career opportunities in construction, manufacturing and oil field service through class discussion, field trips and independent research. Includes job hunting skills development, resume development and mock interviews.
Prerequisite: junior standing.
- 4340. Leadership and Supervision.** 3(3-0)
Supervision in industrial settings; ways and means to assess, motivate and train technical employees to help meet production goals and safety guidelines. Emphasis on the supervisor's functional and essential areas of knowledge, relations with others and personal development. Prerequisites: ITEN 3300 and ITEN 3331.
- 4352. Quality Assurance.** 3(3-1)
Methods used to ensure quality production through the measurement and maintenance of desired product characteristics in manufacturing processes. Prerequisite: MATH 1316 or equivalent.
- 4353. Construction Management.** 3(3-0)
Study of management techniques to solve the unique problems associated with a construction project. Emphasis on the management of manpower, materials, money and machinery. Prerequisite: ITEN 3331 or equivalent.
- 4362. Data Analysis and Decision Making.** 3(3-1)
Concepts of data analysis, distributions, probability, regression analysis and other statistical analysis techniques with technological and industrial applications, reinforced by laboratory exercises using a spreadsheet application program. Prerequisite: junior standing.
- 4399. Industrial Internship II.** 3(3-0)
Supervised on-the-job experience in an industrial/technical area related to the field of Industrial Technology.
Prerequisites: senior standing, ITEN 3399 and an internship position within an industrial environment/company approved prior to course scheduling.

Degree Requirements
Bachelor of Science in Industrial Management and Technology
with a Certificate in Business Administration
Accredited by the Association of Technology, Management and Applied Engineering (ATMAE)

Freshman Year			Junior Year				
ENGL 1301	3	ENGL 1302	3	ACCT 2301	3	ITEN 3313	3
ITEN 1311	3	HIST 1301	3	ECON 2301	3	MGMT 3322	3
ITEN 1315	3	UNIV 1102	1	ITEN 3306	3	Elective	3
UNIV 1101	1	[^] Lang/Phil/Culture	3	ITEN 3331	3	Elective	3
MATH ¹	<u>3</u>	MATH ¹	3	POLS 2302	<u>3</u>	ITEN, adv. ⁴	<u>3</u>
	13	PHYS ³	<u>3-4</u>		15		<u>15</u>
			16-17				
Sophomore Year			Senior Year				
HIST 1302	3	ITEN 2301	3	ITEN 3323	3	ITEN 4336	3
ISYS 1301	3	ITEN 2320	3	ITEN 3349	3	ITEN 4332	3
ITEN 2330	3	ISYS 2302	3	ITEN 4352	3	ITEN 4340	3
POLS 2301	3	[^] Communications	3	ITEN, adv. ⁴	3	ITEN, adv. ⁴	3
CHEM ²	<u>4</u>	[^] Creative arts	<u>3</u>	ITEN, adv. or	<u>3</u>	ITEN, adv. ⁴ or	<u>3</u>
	16		15	Business, adv. ⁵	15	Business, adv. ⁵	15
						Total Hours Required	120

Notes:

ITEN majors must complete at least 6 credit hours of program specific Math/Science courses and possess a Math/Science GPA of 2.0 before any ITEN 3000-4000 level courses can be scheduled.

By completing ACCT 2301, ECON 2301, ISYS 2302 and MGMT 3322, ITEN majors earn a Certificate in Business Administration.

¹ MATH 1314, MATH 1316, MATH 1324 or MATH 1325.

² CHEM 1311/1111 or CHEM 1405.

³ PHYS 1301/1101, PHYS 1375 or PHYS 2325/2125.

⁴ Chosen from ITEN 3308, ITEN 3310, ITEN 3311, ITEN 3315, ITEN 3321, ITEN 3324, ITEN 3333, ITEN 3336, ITEN 3338, ITEN 3345, ITEN 3352, ITEN 3399, ITEN 4303, ITEN 4330, ITEN 4340, ITEN 4353, ITEN 4362 and ITEN 4399; ITEN 4336 is the department's capstone course.

⁵ MTEN majors who elect to complete advanced business electives instead of advanced ITEN electives (maximum of two), with the intent of fulfilling Minor in Business Administration requirements, must compete at least one of the following four courses: MKTG 3324; MGMT 3325; MGMT 4324; BUAD 3355; second business elective can be any approved advanced business course.

[^] For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

DEPARTMENT OF MECHANICAL ENGINEERING AND INDUSTRIAL ENGINEERING

Larry D. Peel, *Chair*

Engineering Complex 303. MSC 191. Extension 2003.

Professors

Barakat, Elkassabgi, Jin, Ozcelik, Peel, Worek, Zhou

Associate Professor

Li, Oh

Assistant Professors

Alam, Demirocak, He, Hossain, Lee, Park, Yang

Visiting Assistant Professor

Zhang

Lecturers

Isensee, Mogiligidda, Phadke

Mechanical Engineering Program Educational Objectives:

The Educational Objectives of Mechanical Engineering Program are to prepare graduates who, after the first few years of their professional career, have:

1. Established themselves as practicing mechanical engineers or advanced their studies through graduate school, and
2. Adapted to ever-changing demands by updating their core knowledge and abilities, and
3. Functioned successfully in their professional responsibilities, which may include economic, environmental, safety, health and ethical aspects, and
4. Established themselves as critical, flexible thinkers and leaders in their profession and in society.

The department houses three minors.

Aerospace Engineering. The student shall complete three of the following courses with a grade of C or better in each: MEEN 3347, MEEN 3392, MEEN 3344, MEEN 3360, MEEN 4344 and CEEN 3311. The student shall also complete three of the following aerospace engineering minor elective courses with a grade of C or better in each: MEEN 4301, MEEN 4303, MEEN 4305, MEEN 4307, MEEN 4371, and MEEN 4385. Even though the MEEN undergraduate curriculum allows the student to select 3 engineering electives, the aerospace engineering minor student is allowed to count only 2 of the aerospace engineering minor elective courses towards his/her BS in Mechanical Engineering, and thus must take at least 1 extra minor course beyond that needed for a BS in Mechanical Engineering. The student must have a minimum overall cumulative GPA of 3.0.

Nuclear Engineering. The student shall complete three of the following courses with a grade of C or better in each: MEEN 3398, MEEN 4395, MEEN 4396, MEEN 4397, EEEN 3399. The student shall also complete three of the following courses with a grade of C or better in each: MEEN 3347/CHEN 3347, MEEN 3348/CHEN 3310, MEEN 3392/CHEN 3392, MEEN 4344, CEEN 3311 and EEEN 3331.

Security Engineering. The student shall complete three of the following courses with a grade of C or better in each: MEEN 4371, MEEN 4372, MEEN 4373, EEEN 4357, CSEN 4367. The student shall also complete three of the following courses with a grade of C or better in each: MEEN 4344, MEEN 4351, EEEN 3331, EEEN 4329, EEEN 4354, EEEN 4355, CSEN 3314, CSEN 4320 and CSEN 4340.

GENERAL ENGINEERING (GEEN)

1201. Engineering as a Career. (ENGR 1201)

2(1-3)

Overview of the history of engineering, its disciplines and professional practice with emphasis on social responsibility and ethical behavior. Introduces each engineering discipline using three-week modules. It also provides basic skills, tools and techniques applied to problem solving, teamwork and communication necessary for academic and professional success.

1250. Engineering Math Lab. 2(0-6)
Introduction to the use of differential and integral calculus with emphasis on engineering applications relevant to the fundamental courses in engineering and computer science. Prerequisite: credit or registration in MATH 1348 or equivalent placement.

4301. Multi-Disciplinary Engineering Design I. V:1-3
Phase one of major project of an original nature carried to completion over a period of two semesters. Completed course sequence may be substituted for senior design sequence (architectural, civil, environmental, and mechanical engineering and computer science) or final design course (chemical, electrical, and natural gas engineering) as appropriate to student's major. Prerequisite: Permission of student's department chair and senior standing in engineering. Prerequisite: permission of student's department chair and senior standing in engineering.

4302. Multi-Disciplinary Engineering Design II. [WI] V:2-3
Phase two of major project of an original nature carried to completion over a period of two semesters. Completed course sequence may be substituted for senior design sequence (architectural, civil, environmental, and mechanical engineering and computer science) or final design course (chemical, electrical, and natural gas engineering) as appropriate to student's major. Prerequisite: GEEN 4301.

MECHANICAL ENGINEERING (MEEN)

1201. Introduction to Mechanical Engineering as a Career. 2(1-3)
The art and practice of mechanical engineering and its role in society. Promotes critical and analytical thinking; gives basic skills for the engineering approach to problem-solving, engineering design process and reverse engineering; and introduces engineering ethics.

1310. Engineering Graphics I. 3(2-3)
Introduction to computer-aided engineering design and analysis; principles of graphics, solid modeling, integrated applications of software in engineering drafting, design and problem solving.

1320. Elementary Numerical Methods and Engineering Problem Solving. 3(2-3)
Engineering problem-solving using high level programming language and numerical computing software. Programming logic; linear algebra and matrices; solutions to systems of linear equations; interpolation and curve fitting; numerical integration and differentiation.

2146. Engineering Measurements. 1(0-3)
Basic experimental techniques and instrumentation commonly found in industry. Experimental planning and analysis. ASTM methods introduced. Data acquisition means studied. Significance of data and presentation (written and oral). Computer usage and report writing emphasized. Prerequisite: PHYS 2325/2125.

2302. Mechanics II (Dynamics). (ENGR 2302) 3(3-0)
Kinematics of particles and rigid bodies; motion relative to translating and rotating reference frames. Kinetics of particles and rigid bodies: Newton's second law, work-energy and impulse and momentum. Introduction to vibrations. Prerequisite: CEEN 2301.

2355. Statics and Dynamics of Rigid Bodies. (ENGR 2303) 3(3-0)
Resultants of force systems. Equilibrium of rigid bodies. Friction. Centroids and moments of inertia. Kinematics and kinetics of particles and rigid bodies. This course cannot be taken for credit by CEEN and MEEN majors. Prerequisites: MATH 2414 and PHYS 2325/2125.

3145. Material Science Laboratory. 1(0-3)
Tensile, impact, fatigue, hardness and hardenability, creep, phase and microstructure, corrosion testing and microscopic analysis. Ferrous and non-ferrous materials and polymers are studied. ASTM methods are introduced and applied. Introduction to data acquisition and recording. Reporting in both written and oral format. Prerequisite: credit or registration in MEEN 3344.

3344. Materials Science. 3(3-0)
Atomic and crystal structure of materials. Chemical, mechanical, electrical and thermal properties of engineering materials. Materials selection and design. Prerequisites: CHEM 1311/1111 and MATH 2413, and credit or enrollment in PHYS 2326.

3347. Thermodynamics. 3(3-0)
Basic laws governing energy transmission. Thermodynamic properties of liquids and vapors, the ideal gas law and the behavior of ideal gases. Concept of reversible process. Prerequisites: MATH 2414 and PHYS 2325/2125.

3348. Heat Transfer. 3(3-0)
Fundamental laws relating to heat transfer including steady and transient heat conduction, forced, convection, natural convection and radiation. Introduction to heat exchanger design. Prerequisites: MATH 3320, MEEN 3347, and MEEN 3392.

3349. Fundamentals of Manufacturing Processes. 3(2-3)
Selection criteria for manufacturing processes, processing of castings, bulk deformation process, sheet metal working, polymer and polymer-matrix composite production, machining and welding processes. Prerequisite: MEEN 3344.

3350. Design of Machine Elements. 3(3-0)
Application of principles of mechanics and physical properties of materials to the design of machine elements such as shafts, springs, power screws and gears. Prerequisites: CEEN 3311, MEEN 2302 and MEEN 3344.

3352. Kinematics of Machines. 3(3-0)
Linkages, mobility analysis, Grashof condition, instant centers, analysis and synthesis of mechanisms, cams, gears and gear trains. Prerequisites: MATH 2414 and MEEN 2302.

3360. Engineering Design and Simulations. 3(3-0)
Introduction to the engineering design process via team-based projects utilizing commercial Computer Aided Engineering software packages. Engineering design process; problem definition, conceptual design, modeling, analysis, system design and optimization. Communicating the design via drawings, models, verbal and written reports. Prerequisites: MEEN 1310 and MEEN 1320. Co-requisites: MEEN 3350 and MEEN 3348.

3392. Fluid Mechanics. 3(3-0)
Basic properties of fluids. Fluid statics. Fluids in motion. Continuity, energy and linear and angular momentum equations in integral and differential forms. Incompressible viscous flow; Navier-Stokes equations, parallel flow, pipe flow and the Moody diagram. Introduction to laminar and turbulent boundary layers and free surface flows. Prerequisites: MATH 3320 and credit for or registration in MEEN 2302.

3398. Computer Applications in Nuclear Engineering. 3(3-0)
Applications of computer software to solve nuclear engineering problems; nuclear data and cross-section libraries; deterministic and stochastic models; single and multi-objective optimization; applied nuclear engineering codes. Prerequisite: junior standing.

In addition to the listed prerequisites for the following 4000 series courses, a student must have an overall grade point average of 2 or higher.

4131. Mechanical Engineering Laboratory. 1(0-3)
Experimental investigation of mechanical engineering systems: piping, fluid flow, and heat transfer systems used in various mechanical engineering applications. Prerequisites: MEEN 2146 and MEEN 3348.

4263. Mechanical Engineering Design Projects I. [WI] 2(1-3)
Capstone design course emphasizing quantitative analytical/computer and experimental methods including optimization and simulation as applied to the design process for a broad range of practical problems in mechanical engineering. Integrates knowledge gained from all required mechanical engineering courses in a major system design project. Prerequisites: senior standing in mechanical engineering, MEEN 3350, and MEEN 3360.

- 4264. Mechanical Engineering Design Projects II.** 2(1-3)
Capstone design course emphasizing the application of analytical/computer and experimental methods to the solution of a broad range of practical problems in mechanical engineering. Integrates knowledge gained from all required mechanical engineering courses via the completion of a system design project. Prerequisite: MEEN 4263.
- 4301. Designs in Aerospace Structures.** 3(3-0)
Advanced strength of materials analysis and design of light-weight elastic structures with aerospace applications. Failure modes and criteria, buckling, matrix methods for analysis, plane truss design. Energy and Castigliano methods for statically determinate and indeterminate structures. Torsion and bending of asymmetrical thin-walled sections. Design project. Prerequisites: senior standing in mechanical engineering, credit or registration in MEEN 3349 and MEEN 3360.
- 4303. Aerodynamics.** 3(3-0)
Aerodynamics of airfoils and wings in subsonic, transonic, and supersonic flight. Laminar and turbulent boundary layers and effects of viscosity on aerodynamic performance. Prerequisites: senior standing in mechanical engineering, MEEN 3347, and MEEN 3392.
- 4305. Aerospace Flight Dynamics.** 3(3-0)
Three-dimensional rigid body dynamics, aircraft equations of motion, static and dynamic stability, flight control design, introduction to aeroelastic phenomena. Orbit and altitude dynamics, interplanetary transfers, altitude coordinates, stability, control, and estimation. Prerequisites: senior standing in mechanical engineering, MEEN 3352, credit or registration in MEEN 4344.
- 4307. Aerospace Systems Design.** 3(3-0)
Aircraft/Spacecraft design of systems and subsystems. Preliminary design or study of complete flight vehicle. Application of mission and spacecraft design principles in developing a space flight mission concept. Prerequisites: senior standing in mechanical engineering, MEEN 3352, MEEN 3360, credit or registration in MEEN 4303.
- 4317. Internal Combustion Engines.** 3(3-0)
Thermodynamics of cycles, comparison of characteristics and performance of several forms of internal combustion engines including Otto and Diesel types of piston engines. Fuels, combustion, injection and supercharging. Prerequisite: senior standing in engineering, MEEN 3392, and MEEN 4341.
- 4335. Special Problems.** V:1-3
Individual solution of selected problems in mechanical engineering conducted under direct supervision of a faculty member. May be repeated for up to 6 semester hours. Prerequisite: senior standing.
- 4336. Selected Topics.** V:1-3
One or more topics of mechanical engineering. May be repeated when topic changes. Prerequisite: senior standing.
- 4341. Application of Thermodynamics.** 3(3-0)
Design of power and refrigeration systems, mixing (or separation), multiphase, air conditioning and energy conversion processes. Prerequisites: MATH 3415 and MEEN 3347.
- 4343. Dynamics of Systems.** 3(3-0)
Analysis of dynamic-mechanical, electrical, fluid and thermal system elements; modeling, analysis and design of physical, dynamic systems composed of these elements. Prerequisites: senior standing in mechanical engineering, MATH 3320, MEEN 1320, and MEEN 2302.
- 4344. Control of Systems.** 3(2-3)
Analysis and design of controlled, dynamic, linear mechanical, electrical, fluid and/or thermal systems; introduction to concepts of stability, controllability, observability and to discrete time; sampled data control systems; optimal control systems and nonlinear control theory. Prerequisite: senior standing in engineering.

- 4345. Engineering Vibrations.** 3(3-0)
Free and forced vibrations, degrees of freedom, energy methods, transients, harmonic analysis, damping. Prerequisites: senior standing in mechanical engineering, MEEN 2302, and MATH 3320.
- 4346. Computational Methods in Mechanical Engineering.** 3(3-0)
Applications of numerical techniques to the solution of mechanical engineering problems. Prerequisites: senior standing in mechanical engineering, MEEN 1320, and credit or registration in MEEN 3348 and MEEN 3350.
- 4347. Hydraulics of Pipeline Systems.** 3(3-0)
Design and select hydraulic machines, pipeline, pressure vessels, pumps and control scheme. Understanding of ASME design codes for power and process piping, series and parallel pipe network and pumping power required, and techniques and tools for controlling pipeline network. Prerequisites: senior standing in mechanical engineering, MEEN 3350, and MEEN 3392.
- 4348. Gas Dynamics.** 3(3-0)
Basic concepts and fundamental equations of gas dynamics. Emphasis on the subsonic and supersonic steady flow. Analysis of shock wave phenomena. Prerequisites: senior standing in mechanical engineering, MATH 3320 and credit or registration in MEEN 3348.
- 4349. Air Conditioning.** 3(3-0)
Application of factors of temperature and humidity to the design of air conditioning systems. Design and applications of heating and cooling requirements, total energy systems, etc. Prerequisite: senior standing in mechanical engineering, MEEN 3392, and MEEN 4341.
- 4351. Machine Design.** 3(3-0)
Design techniques of brakes, clutches, bevel, worm and helical gears, thick cylinders, flywheels, impact and elastic bodies, curved beams, flat plates and cams. Prerequisite: MEEN 3350.
- 4352. Design of Turbomachinery.** 3(3-0)
Design and application of centrifugal and axial flow pumps and turbines, consideration of similarity parameters, real machine performance characteristics, materials and methods of construction, selection process for various applications. Prerequisites: senior standing in mechanical engineering, MEEN 3392, and MEEN 4341.
- 4354. Introduction to the Finite Element Method.** 3(3-0)
Principles and applications of the finite element method. Matrix and vector operations, structure and organization of finite element computer programs. Structural and nonstructural elements and applications. Prerequisites: CEEN 3311, MATH 3320, MEEN 1320, and senior standing.
- 4355. Robotics I.** 3(3-0)
Multidisciplinary introduction to robotics, combining concepts from the fields of electrical engineering, mechanical engineering and computer science. Topics include locomotion, maneuverability, actuating, trajectory planning, motion control and sensing. Prerequisite: senior standing.
- 4371. Introduction to Unmanned Aerial Vehicles.** 3(3-0)
Foundations and basic components of Unmanned Aerial Vehicles (UAVs) from a system point of view, design considerations, payloads, communications, control and stability, navigation, UAV system roles and operations, control stations. Prerequisite: senior standing.
- 4372. Resource Optimization for Homeland Security.** 3(3-0)
Linear Programming, Simplex Method, Duality Theory and Sensitivity Analysis, The Transportation and Assignment Problems, Network Optimization Models, Dynamic Programming, Integer programming, Game Theory and Decision Analysis. Prerequisite: senior standing.
- 4373. Introduction to Information Analysis and Modeling in Security Engineering.** 3(3-0)
Fundamental methods and tools used for information analysis and modeling related to homeland security. Also introduces engineering and technical challenges of homeland security, including modeling and analysis,

technological issues, command, control and situational awareness and data integration requirements. Prerequisite: senior standing in mechanical engineering, electrical engineering or computer science or approval from instructor.

4385. Manufacturing of Composites. 3(2-3)

Introduction to composites manufacturing processes; hand lay-up, air and oven curing, filament winding and pultrusion. Structural design criteria of marine, aerospace, chemical and civil structures applied. Practical case studies and projects. Prerequisites: CEEN 3311 and MEEN 3344. Purchase of lab supplies required.

4395. Thermal Hydraulics of Nuclear Reactors. 3(3-0)

Thermal hydraulics of nuclear reactor cores; two-phase flow regimes, the boiling curve, dry-out phenomena, natural circulation in reactor core, transients and instabilities of two-phase flow. Prerequisites: senior standing in mechanical engineering, MATH 3320, MEEN 3392, or PHYS 2325.

4396. Nuclear Safety and Reliability. 3(3-0)

Introduction to nuclear safety systems and licensing principles. Design criteria and regulations. Deterministic and probabilistic and reliability analysis. Radiological consequences and risk assessment. Design-based accidents and severe-accident management. Implications for advanced reactors. Prerequisite: senior standing.

4397. Introduction to Nuclear Power Plants. 3(3-0)

Introduction to basic topics in the analysis and design of nuclear power plants. Prerequisites: senior standing in mechanical engineering, MATH 3320, and PHYS 2326.

4399. Internship in Mechanical Engineering. V:1-3

Internships in industry, government or consulting companies, designed to broaden the skills obtained through curricular education. Prerequisite: senior standing.

Degree Requirements
Bachelor of Science in Mechanical Engineering
Accredited by the [Engineering Accreditation Commission of ABET](#)

Freshman Year				Junior Year			
CHEM 1311/1111	4	ENGL 1302	3	MEEN 3347	3	CEEN 3317	3
ENGL 1301	3	HIST 1302	3	MEEN 3349	3	EEEN 3331	3
HIST 1301	3	MATH 2414	4	MEEN 3352	3	MEEN 3348	3
MATH 2413	4	MEEN 1320	3	MEEN 3392	3	MEEN 3350	3
MEEN 1310	3	PHYS 2325/2125	4	<i>^Lang/Phil/Culture</i>	<u>3</u>	MEEN 3360	3
UNIV 1101	<u>1</u>	UNIV 1102	<u>1</u>		15	MEEN 4341	<u>3</u>
	18		18				18
Sophomore Year				Senior Year			
CEEN 2301	3	CEEN 3311	3	MEEN 4131	1	MEEN 4264	2
MATH 3320	3	MATH 3415	4	MEEN 4263	2	<i>^Social/Behavioral</i>	3
PHYS 2326/2126	4	MEEN 2146	1	MEEN 4344	3	Engineering Elective	3
POLS 2301	3	MEEN 2302	3	MEEN 4351	3	Engineering Elective	3
<i>^Creative Arts</i>	<u>3</u>	MEEN 3145	1	POLS 2302	3	MATH Elective	<u>3</u>
	16	MEEN 3344	3	Engineering Elective	<u>3</u>		14
		<i>^Communications*</i>	<u>3</u>		15		
			18				

Total Hours Required 132

Engineering electives: MEEN 3398, MEEN 4317, MEEN 4335, MEEN 4336, MEEN 4343, MEEN 4345, MEEN 4347, MEEN 4348, MEEN 4349, MEEN 4352, MEEN 4354, MEEN 4355, MEEN 4371, MEEN 4372, MEEN 4373, MEEN 4385, MEEN 4395, MEEN 4396, MEEN 4397, EVEN 3399, EEEN 4357, CSEN 4367.

Math Electives: MATH 4341, MATH 4370, MATH 4371, MATH 4372, MATH 4373, MATH 4374, STAT 4303.

*ENGL 2374 or COMS 2374 is required unless otherwise approved by adviser and department chair.

^ For courses listed under Core Curriculum "Components" see "General Requirements for Graduation with a Baccalaureate Degree" in an earlier section of this Catalog

EAGLE FORD CENTER FOR RESEARCH, EDUCATION AND OUTREACH

William Worek, *Director*

Engineering Complex 301. MSC 188. Extension 2001.

The Eagle Ford Center for Research, Education and Outreach (EFCREO) was established in 2013 to partner with industry, government, and academia to conduct applied and fundamental interdisciplinary research specifically tailored to the technical needs of the development, delivery, storage and utilization of energy from renewable and nonrenewable sources in South Texas and beyond. Additionally, EFCREO provides social-economic analyses of the societal impacts of energy development and utilization at local and regional scales and effective training for young professionals to meet the needs of the energy sector in South Texas.

INSTITUTE FOR ARCHITECTURAL ENGINEERING HERITAGE

James Glusing, *Director*

Engineering Complex 376. MSC 194. Extension 2266.

The Institute for Architectural Engineering Heritage (IAEH) was established in 2013 with the mission of documentation and preservation of significant examples of the planned, built and virtual environment important to the history and heritage of Texas and its communities through assessment, digitization, publication and planning. The Institute provides multi-disciplinary support for heritage and cultural projects including engineering, architecture, geosciences, urban planning, art and history. IAEH projects are conducted by Texas A&M University-Kingsville students. Faculty provide instruction, mentorship and a framework for operation. The program is designed to develop marketable skills and give real world experience to participating students in engineering, architecture, history, planning and media production.

THE INSTITUTE FOR SUSTAINABLE ENERGY AND THE ENVIRONMENT

Kim Jones, *Director*

Engineering Complex 376. MSC 213. Extension 3046

The Institute for Sustainable Energy and the Environment (previously South Texas Environmental Institute) was established in 2001 with the mission to promote regional sustainability by fostering the ideals of environmental protection while encouraging regional economic growth. The Institute promotes applied research, technology development and transfer and environmental education to the South Texas region by 1) promoting the use of innovative sustainable technologies in all aspects of South Texas life, 2) fostering applied research for the development and transfer of technologies that ensure an equitable balance between ecological, environmental and occupational health and continued economic growth of the region, 3) providing individuals, institutions and communities access to resources that ensure a knowledgeable populace equipped with an understanding of environmental issues for making informed decisions and 4) promoting and providing for coordination and consolidation environmental activities on a regional scale. Trans-boundary environmental issues with Mexico and the Gulf of Mexico along its coast are a key focus area in the Institute's charter. Activities such as the South Texas Environmental Conference Series, held annually in both the Coastal Bend and the Rio Grande Valley, in addition to the regional research emphasis, has resulted in partnerships and collaborations with organizations and individuals from throughout the South Texas region.

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(As of 4/10/2018)

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The following are the keys to the prefixes used with the course numbers:

ACCT	Accounting	IEEN	Industrial Engineering
ADED	Adult Education	IMEN	Industrial Management
AEEN	Architectural Engineering	INRW	Integrated Reading and Writing
AGBU	Agribusiness	ISYS	Information Systems
AGRI	General Agriculture	ITEN	Industrial Technology
AGSC	Agriculture Science		
ANSC	Animal Science	MATH	Mathematics
ANTH	Anthropology	MEEN	Mechanical Engineering
ARTS	Art	MGMT	Management
		MKTG	Marketing
BCOM	Business Communications	MUSA	Music (Applied)
BIOL	Biology	MUSI	Music
BLAW	Business Law		
BUAD	Business Administration	NCBR	Non-Course Based Option Reading
		NCBW	Non-Course Based Option Writing
CEEN	Civil Engineering	NGEN	Natural Gas Engineering
CHEM	Chemistry		
CHEN	Chemical Engineering	PHIL	Philosophy
COMJ	Journalism	PHYS	Physics
COMM	Communications	PLSS	Plant and Soil Science
COMS	Speech	POLS	Political Science
CRIJ	Criminal Justice	PSYC	Psychology
CRIM	Criminology		
CSDO	Communication Sciences and Disorders	RAMT	Ranch Management
CSEN	Computer Science	READ	Reading
CULS	Cultural Studies	RELG	Religion
		ROTC	Military Science
ECON	Economics	RWSC	Range and Wildlife Science
EDAD	Educational Administration		
EDBL	Bilingual Education	SCWK	Social Work
EDCG	Counseling and Guidance	SOCI	Sociology
EDEC	Early Childhood	SPAN	Spanish
EDED	Education	STAT	Statistics
EDHL	Health	SWBS	Southwest Borderlands Studies
EDKN	Kinesiology		
EDLD	Educational Leadership	THEA	Theatre Arts
EDRG	Reading (Education)		
EDSE	Special Education	UNIV	University Learning
EDSL	English as a Second Language		
EEEN	Electrical Engineering	VETT	Veterinary Technology
ENGL	English		
ENVS	Environmental Science	WGST	Women and Gender Studies
EVEN	Environmental Engineering	WRIT	Writing
		WSCI	Wildlife Science
FINC	Finance		
FREN	French		
GEEN	General Engineering		
GEOG	Geography		
GEOL	Geology		
HIST	History		
HSCI	Human Sciences		