STATEMENT ON EQUAL EDUCATIONAL OPPORTUNITY

No person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under any program or activity sponsored by Sul Ross State University, on any basis prohibited by applicable law, including but not limited to, race, color, national origin, religion, sex, age, disability, sexual orientation, or gender identity.

ACCREDITATIONS

Sul Ross State University is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award Associate’s, Bachelor’s, and Master’s 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 Sul Ross State University. The Teacher Education program offered at Sul Ross State University is approved by the Texas Education Agency.

MEMBERSHIPS

Agricultural Consortium of Texas
American Association of Hispanics in Higher Education, Inc.
American Association of State and Colleges of Agriculture and Renewable Resources
American Association of State Colleges and Universities
American Council on Education
American Library Association
American Southwest Conference
Association of Texas Graduate Schools
Council for Higher Education Accreditation
Council of Public University Presidents and Chancellors
Hispanic Association of Colleges and Universities
National Association of College and University Business Officers
National Collegiate Athletic Association
National Intercollegiate Rodeo Association
Texas Library Association

NOTICE

The policies, regulations, procedures, and fees in this catalog are subject to change without prior notice, if necessary, to keep Sul Ross State University policies in compliance with State and Federal laws and rules and regulations of the Board of Regents, Texas State University System.

The University reserves the right to change curricula, rules, fees, admission requirements, and other requirements without notice. The provisions of this catalog do not constitute a contract, express or implied, between any applicant, student, faculty member, or any other person and Sul Ross State University.
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UNIVERSITY CALENDAR
OFFICIAL ACADEMIC CALENDAR 2017-2018

Fall Semester 2017

August 2, Wednesday
Deans to submit recommendations for Associate Graduate Faculty to the Graduate Dean and the Executive Vice President and Provost for Academic Affairs
Curriculum Changes approved in the Spring are effective Fall 2017; update individual web pages

August 4, Friday
Housing assignments will be emailed on or before this date

August 17-18, Thursday - Friday
Texas State University System Board of Regents meeting in Alpine, TX.

August 24, Thursday
Athletic Move-In day 10 a.m.-4 p.m. by team

August 25, Friday
Payment deadline for students who pre-registered, 4:00 p.m.
Last day for regular or online registration
Lobo Days for new and transfer students, 4 p.m. on the Fountain Mall
Residence Halls: Move-In day, 10 a.m-4 p.m. by Housing Department

August 26, Saturday
Residence Halls: Move-In day
Lobo Days for new and transfer students

August 27, Sunday
New Student Convocation
Residence Halls: Move-In day
Lobo Days for new and transfer students

August 28, Monday
First day of classes, 16 week and 1st 8 week terms
Newcomers Breakfast, 7:30 a.m.
College and Departmental Meetings TBA by Colleges/Depts.
Faculty Meeting, 4 p.m., Marshall Auditorium
Late registration and schedule changes begin

August 29, Tuesday
Last day for students to register in Education block courses

August 30, Wednesday
Provost contacts Faculty Affairs Council chair about the number of promotions available

August 31, Thursday
Last day for late registration and schedule changes

September 4, Monday
Labor Day holiday, no classes

September 5, Tuesday
Last day to drop 1st 8 week course without creating an academic record
Curriculum Change Request – Faculty member to Department Chair
Research Enhancement funds made available to researchers

September 13, Wednesday
Twelfth class day, 16 week term
Last day to drop a 16 week term course without creating an academic record
September 18, Monday
Curriculum Change Request -- Department Chair to Dean
Spring and Mid-winter 2017 schedules due to Deans

September 22, Friday
Last day to apply for May graduation without a late fee
Last day for students enrolled in Education block courses to drop a course and receive a ‘W’

September 25, Monday
Deadline for applying to student teach during the Spring Semester 2018
Curriculum Change Request -- Dean to Curriculum Council Chair

September 29, Friday
Last day for students enrolled in 1st 8 week courses to drop a course and receive a ‘W’

October 1-31
Curriculum Change Request – Curriculum Council Review

October 4, Wednesday
Spring & Mid-winter schedules due to the Executive Vice President and Provost of Academic Affairs
University as a Community Meal on the Mall

October 13, Friday
Tenure and Promotion Review: Vitae and dossier to department chair. Dossier to be forwarded to departmental evaluation committee

October 20, Friday
Final exams, 1st 8 week term

October 23, Monday
Final grades for 1st 8 week term students submitted by noon
Mid-term, 16 week term
Classes begin, 2nd 8 week term

October 26, Thursday
Last day for schedule changes, 2nd 8 week term

October 30, Monday
Last day to drop 2nd 8 week course without creating an academic record

November 6, Monday
Call for Research Enhancement and Faculty Development proposals

November 10, Friday
Tenure and Promotion Review: Forward applications for promotion from the chairperson to the dean.
Summer class schedules due to the dean

November 13, Monday
Curriculum Change Request -- Curriculum Council Report to Faculty Assembly
Last day for instructor initiated drop for excessive absences. Must reach the Provost's office by Monday, November 13

November 16-17, Thursday & Friday
Texas State University System Board of Regents meeting at Sam Houston State University

November 17, Friday
Last day to withdraw from the 16-week course/term with grade of ‘W’. Drops must be processed and in the Registrar's Office by 4:00 p.m.

Curriculum Change Request -- Curriculum Council approved documents to Provost

November 20, Monday
Academic Evaluation: Completion of Student Appraisal of Faculty (Form FE-2) for Fall 2017 (to be completed 11/20 - 12/08)

November 22-24, Wednesday-Friday
Thanksgiving Day holiday (Begins after the last scheduled class meets on Tuesday, November 21)

November 27, Monday
Last day for students enrolled in 2nd 8 week courses to drop a course and receive a "W"

December 2017
Curriculum Change Request -- Provost to President

December 1, Friday
Summer schedule due to the Provost and Executive Vice President for Academic Affairs
Dean/Director to submit recommendation for Associate Graduate Faculty to Graduate Dean and Executive Vice President and Provost for Academic Affairs

December 6, Wednesday
Last class day before finals, 16 week term
Second year non-tenured faculty to be notified if appointment will expire by end of current year

December 7, Thursday
Dead Day, 16 week term

December 8, 11-13, Friday, Monday-Wednesday
Final Examinations, end of term, 16 week term

December 13, Wednesday
Final Examinations, end of term, 2nd 8 week term

December 14, Thursday
Final grades for graduating students due; grades must be submitted by noon
Tenure and Promotion Review: Application, dossier and recommendations from the Dean to the College Review Committee

December 15, Friday
Fall Commencement, Pete P. Gallego Center, 7:00 p.m.

December 16, Saturday
Residence Halls, Close at noon for everyone; except Director approvals

December 18, Monday
Final grades for continuing students due; grades must be submitted by noon

Spring Semester 2018

January 1, Monday
Residence Halls: Mid-Winter Move-In

January 2-12
Mid-Winter Semester

January 12, Friday
Payment deadline for students who pre-registered, 4:00 p.m.
Last day for regular registration
Residence Halls: New Resident Move-In, 10 a.m.-4 p.m.
Last day for students to register in Education block courses

January 13-14, Saturday - Sunday
Lobo Days for new and transfer students
Residence Halls: Move In, 10 a.m.-4 p.m.

January 15, Monday
Martin Luther King, Jr. Holiday
Lobo Days for new and transfer students
Residence Halls: Move In, 10 a.m.-4 p.m.

January 16, Tuesday
First day of classes, 16 week and 1st 8 week term
College and Departmental Meetings TBA by Colleges/Depts.
Faculty Meeting, 4 p.m.
Late registration and schedule changes begin
Residence Halls: 5 p.m. deadline to Move-In for Spring Housing Assignment

January 19, Friday
Last day for late registration and schedule changes

January 23, Tuesday
Last day to drop 1st 8 week course without creating an academic record

January 26, Friday
Last day for students enrolled in Education block courses to drop a course and receive a “W”
Academic Evaluation: Annual Report of Teaching/Job Performance, Scholarly/Artistic Activities; Form FE-3 submitted to chairs

January 29, Monday
Fall class schedules due to Deans

January 31, Wednesday
Twelfth class day, 16 week term
Last day to drop a 16 week term course without creating an academic record

February 2018
Curriculum Changes – President to TSUS Board of Regents Meeting

February 9, Friday
Annual Report on Teaching/Job Performance; Form FE-3 Submitted to the Deans.
Deadline for applying to student teach during the Fall Semester, 2018
Tenure/Promotion applications from Dean and from College Review Committee to Faculty Affairs Council
Fall class schedules due to the Executive Vice President and Provost for Academic Affairs

February 15-16, Thursday - Friday
Texas State University System Board of Regents meeting at Lamar University

February 16, Friday
Last day for students enrolled in 1st 8 week courses to drop a course and receive a ‘W’

March 2018
Curriculum Changes: Approved Changes to THECB; Records and Registration implements changes into Banner; Changes Effective Fall 2018; Individual web pages updated

March 2, Friday
Deadline for receiving Research Enhancement proposals for 2018-2019 RE Grants

March 6, Tuesday
Mid Semester, 16 week term

March 9, Friday
Tenure/Promotion applications from Faculty Affairs Council to Provost and Executive Vice President of Academic Affairs
Annual Report on Teaching/Job Performance; Submitted to the Provost and Executive Vice President for Academic Affairs.
Final exams, 1st 8-week term
March 12-16, Monday - Friday
   Spring Break. No Classes. Energy Conservation Days March 14-15; Holiday March 16
March 19, Monday
   Final grades for 1st 8-week term students submitted by noon
   Classes begin, 2nd 8-week term
March 23, Friday
   Tenure/Promotion applications from the Provost and Executive Vice President for
   Academic Affairs to the President (Board recommendations to the Board of Regents
   at the May meeting)
March 26, Monday
   University as a Community Meal on the Mall
   Last day to drop 2nd 8 week course without creating an academic record
March 29, Thursday
   Research Council recommendations for funding to be made to the Provost and
   Executive Vice President for Academic Affairs
March 30, Friday
   Good Friday Holiday; 1 Energy Conservation day
April 2, Monday
   Last day for instructor initiated drop for excessive absences. Must reach the
   Provost's office by Monday, April 2 by 4 p.m.
April 6, Friday
   Last day to withdraw from the 16 week course/term with grade of "W." Drops must be
   processed and in the Registrar's Office by 4 p.m.
April 9, Monday
   Academic Evaluation: Completion of Student Appraisal of Faculty (Form FE-2) for
   Spring to be completed 4/09-4/23)
       Honors Convocation, Marshall Auditorium, 7:30 p.m.
April 20, Friday
   Last day for students enrolled in 2nd 8 week courses to drop a course and receive a
   "W"
April 25, Wednesday
   Announce Research Enhancement grants awarded for September
April 27, Friday
   Last day to apply for December graduation without a late fee
May 2, Wednesday
   Last class day before finals, 16 week term
May 3, Thursday
   Dead Day, 16 week term
May 4, Friday
   Last day to apply for August graduation without a late fee
May 4, 7-9, Friday, Monday - Wednesday
   Final Examinations – End of term, 16 week term
May 9, Wednesday
   Final Examinations – End of term, 2nd 8 week term
May 10, Thursday
   Final grades for graduating students due; grades must be submitted by noon
May 11, Friday
   Spring Commencement, Pete P. Gallego Center, 7 p.m.
Residence Halls: Close at noon for non-graduates or extended residents
May 12, Saturday
  Residence Halls: Close at noon for everyone except director approvals
May 14, Monday
  Final grades for continuing students due; grades must be submitted by noon
May 24-25, Thursday - Friday
  Texas State University System Board of Regents Meeting, location TBA.

**Summer I 2018**

May 29, Tuesday
  Opening of Residence Halls, noon
  Last day to register without a late fee
May 30, Wednesday
  First day of classes
  Late registration begins
  Schedule changes begin
June 1, Friday
  Last day for late registration and schedule changes begin
June 4, Monday
  Fourth class day
  Last day to register for Shortened Format courses
June 6, Wednesday
  Shortened Format classes begin
June 15, Friday
  Last day for instructor initiated drop for excessive absences. Must reach the Provost’s office by June 15 at 4 p.m.
June 20, Wednesday
  Mid-term
June 21, Thursday
  Last day to drop a course with a ‘W’. Drops must be processed and in the Registrar’s office by 4 p.m.
July 4, Wednesday
  Fourth of July holiday
July 5, Thursday
  Final Examinations, end of term
July 6, Friday
  Final grades are due; grades must be submitted by noon
  Summer I students check out of residential halls by noon

**Summer II 2018**

July 9, Monday
  Last day to register without a late fee
  Summer II students check in to residential halls
July 10, Tuesday
  First day of classes
  Late registration begins
  Schedule changes begin
July 11, Wednesday
  Last day for late registration and schedule changes
July 12, Thursday
  Fourth class day
Last day to register for Shortened Format courses
July 24, Tuesday
Mid-term

July 27, Friday
Last day for instructor initiated drop for excessive absences. Must reach the Provost's office by July 27 by 4 p.m.

August 2, Thursday
Last day to drop a course with a "W." Drops must be processed and in the Registrar's Office by 4:00 p.m.

August 16-17, Thursday - Friday
Texas State University System Board of Regents Meeting, location TBA

August 16, Thursday
Final Examinations, end of term

August 17, Friday
Final grades for graduating students due; grades must be submitted by noon
Summer II students check out of residential halls, by noon

August 20, Monday
Final grades are due; grades must be submitted by noon

August 18-24, Saturday - Sunday
Residential halls closed. Only students who are pre-approved with an academic group (Rodeo, volleyball, football, Pack Leaders and Resident Advisors)
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Dean, College of Arts and Sciences

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Dean, College of Education and Professional Studies
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GENERAL INFORMATION

This catalog provides information about the academic programs of Sul Ross State University to students, prospective students, faculty, and staff. Included are the academic calendars; information concerning admissions, degree requirements, academic regulations, and student services; a list of the faculty and administrative officers; and the undergraduate and graduate curriculum. Every effort has been made to make this catalog as complete and accurate as possible, and it has been prepared on the basis of the best information available at the time of publication. The University reserves the right to make changes in its contents as changes occur. Such changes will be made known to the administrative offices and the academic departments as they occur.

Students should refer to this catalog for course descriptions, degree requirements, and procedures for admission. The class schedule for each semester or summer session will provide details concerning registration and the courses to be offered.

HISTORICAL BACKGROUND

Sul Ross State University is located in scenic Alpine, Texas, the county seat of Brewster County, at the gateway to the Big Bend Country. The Big Bend Country of Texas—a crucible of cultures: Indian, Spanish, Mexican, Anglo—is a multifaceted region encompassing vast expanses of the great Chihuahuan Desert, picturesque hills and mountains reaching to over eight thousand feet in altitude, rolling plains and lush grasslands, and a wide assortment of plants, wildlife, and geological features which annually attract over half a million visitors from throughout the world. These visitors share with the students and faculty of Sul Ross an environment that is free of pollution, warm in winter and cool in summer, and ideal for combining university studies with a variety of outside recreational activities. Located near Sul Ross are the unique and nationally well-known Big Bend National Park, scenic Davis Mountains and State Park, Fort Davis National Historic Site, University of Texas McDonald Observatory, Balmorhea State Park, and a number of historic towns and sites which vividly depict the region’s diverse history.

Sul Ross State University opened in 1920 as a state supported Normal School for Teachers. In 1923 its name was changed to Sul Ross State Teachers College, and the first baccalaureate degrees were awarded in 1925. Master's degree programs were first offered in 1930. The institution's name was changed in 1949 to Sul Ross State College and again in 1969 to Sul Ross State University. Twelve men have served as president of Sul Ross: Thomas Fletcher, Robert L Marquis, Horace W. Morelock, Richard M. Hawkins, Bryan Wildenthal, Norman L. McNeil, Hugh E. Meredith, C. R. "Bob" Richardson, Jack W. Humphries, R. Vic Morgan, Ricardo Maestas and our current president William Kibler, who assumed office in July of 2014.

The University’s name honors Lawrence Sullivan "Sul" Ross, who was the son of a Waco, Texas, pioneer family and a popular soldier, governor, educator, and humanitarian. As a young man, Sul Ross attended Baylor University and graduated from Wesleyan University in Alabama. He participated in Indian campaigns in northern Texas and Indian Territory and served in the Texas Rangers with the rank of Captain. Upon the outbreak of the Civil War, Ross enlisted in the Confederate Army, serving with distinction and rising to the rank of Brigadier General. His Texas Brigade distinguished itself in 135 engagements during the war. After the war, Ross returned to Waco where he farmed and served as sheriff. In 1875 he was a member of the Texas Constitutional Convention, and in 1880 he was elected to the state Senate. Popular in the legislature and with Texans throughout the state, he was elected Governor in 1886 and reelected in 1888. A strong supporter of public education, charitable institutions, and railroad
regulation, upon leaving the governorship, Ross was appointed president of Texas A&M College, a position he held at the time of his death in 1898.

The campus of Sul Ross State University consists of approximately six hundred acres and a large number of buildings, including nine academic classroom buildings, the Bryan Wildenthal Memorial Library, the Museum of the Big Bend, a maintenance complex, University Center, three residence halls, over one hundred apartments, and the President's home. Football and track and field events are held in Jackson Field and University activities of various types are held in the historic Kokernot Lodge adjacent to the Kokernot Outdoor Theatre of the Big Bend. The Everett E. Turner Range Animal Science Center includes an animal health clinic, a horse science center, meat processing facilities, the San Antonio Livestock Exposition Equine Center, and modern, well-equipped laboratories. The birthplace of the National Intercollegiate Rodeo Association, the University annually sponsors NIRA rodeos. The University is a member of the National Collegiate Athletic Association and the American Southwest Conference, participating in non-scholarship competitive sports events in basketball, football, volleyball, Softball, tennis, and track in both men's and women's athletics.

The Rio Grande College, an upper-level component of the University, offers junior, senior, and graduate work in selected programs in Uvalde, Del Rio, and Eagle Pass, and is headquartered on the campus of Southwest Texas Junior College in Uvalde.

Visitors to the Sul Ross State University campus are always welcome. When touring the campus, persons may obtain information at the information desk in Lawrence Hall. Office hours are 8 a.m. - 5 p.m. Monday through Friday, except for holidays. The University telephone number is (432) 837-8011.

**UNIVERSITY MISSION**

We are committed to developing graduates who will become leading professionals, valued neighbors, and responsible citizens.

We are dedicated to building and sustaining a community of optimal teaching and learning. We will accomplish this through the faithful efforts of our faculty and staff, and through the effective use of our facilities, technological and instructional resources, and student support services.

We are devoted to providing the highest quality undergraduate and graduate education to our students. We are likewise devoted to expanding the horizons of human understanding and creative achievement. Our research and creative efforts will advance knowledge, enrich teaching, and encourage professional growth.

We are privileged to operate in the distinctive environment of the Big Bend and Middle Rio Grande areas of Texas. Here we will serve to enrich the cultural, intellectual, social, and economic life of the region and its people.

To ensure the success of this mission, we will continually communicate and uphold the following goals.

**Sul Ross State University Institutional Goals**

- We will ensure that our students acquire a common set of intellectual, physical, and aesthetic experiences to foster a broad appreciation of the human experience.
- We will confirm that our graduates demonstrate the critical thinking, oral and written communication skills, and quantitative literacy required to become effective leaders.
- We will warrant that our graduates have the extensive knowledge needed to enter professions related to their studies, to achieve advanced levels of professional development, or to succeed in graduate programs.
• We will nurture each student’s development of good citizenship.
• We will cultivate an environment of dignity and respect through which all members of Sul Ross State University will recognize and appreciate the value of diversity.
• We will foster within students a spirit of intellectual curiosity leading to independent, self-reflective, and purposeful life-long learning.

INTERCOLLEGIATE ATHLETICS

Nationally, Sul Ross is a member of the National Collegiate Athletic Association (NCAA Division III). At the conference level, Sul Ross is a member of the American Southwest Conference, a coeducational, non-athletic scholarship conference. The program provides an opportunity for men to participate in football, basketball, baseball, track and field, cross country and tennis. Sports for women include volleyball, softball, basketball, track and field, cross country and tennis. Specific questions about the program and student eligibility for participation should be directed to the Athletic Director.

INTERCOLLEGIATE RODEO

Sul Ross is a founding member of the National Intercollegiate Rodeo Association. Because Sul Ross rodeo team members were instrumental in founding the organization, and the charter was signed at Sul Ross, we are often referred to as the “Birthplace of Intercollegiate Rodeo.” Men’s and Women’s teams compete in the Southwest Region.

PHILOSOPHY OF ATHLETICS

Intercollegiate athletics exist at Sul Ross for the benefit of our students and to provide, among other benefits, a training ground for those who desire to develop their coaching and teaching skills for careers after graduation in public schools and beyond. The philosophy of NCAA Division III athletics is to provide opportunities for athletic participation and competition in the spirit and tradition of college life and activities. Since no student athlete received financial aid for their participation, coaches and other faculty members should make it clear to each participating athlete that their primary commitment and obligation is to complete a course of study leading to a degree in a field of their choosing. Student athletes are students first and shall be held to academic and disciplinary standards that are comparable to those expected of all other students in order to participate in their chosen co-curricular activities.

It is the responsibility of the coaches to conduct themselves as appropriate to provide examples for their student athletes, to recruit student athletes who have the character and ability to participate with honor and dignity, and to ensure that these student athletes maintain their academic and disciplinary eligibility. Coaches are expected to ensure that students learn teamwork and fair play in a competitive atmosphere. Coaches and students should always conduct themselves in a manner that reflects personal integrity and brings honor and respect to themselves and to Sul Ross.

Thus, at Sul Ross State University, we expect student athletes to return each year and graduate. We further expect to field teams that seek to be competitive at the conference, regional, and national level.

Sul Ross athletics emphasize the total wellbeing of the student athletes. In order to achieve this emphasis, the athletic program at Sul Ross will:

1. Maximize the number and variety of athletic opportunities in varsity and intramural sports.
2. Ensure that student athletes receive the same treatment as other students with no special privileges in admissions, academic advising, course selection, grading, living accommodations, or financial assistance. Similarly, student athletes will not be denied rights or opportunities that would be available to them as non-athletes.
3. Control, finance, and staff the athletics program through the same general procedures as other departments of the university.
4. Give equal emphasis to men’s and women’s sports, and ensure that the desired quality of competition is similar in all sports.
5. Support student athletes in their efforts to achieve high levels of performance by providing them with adequate facilities, competent coaching and comparable competitive opportunities with student athletes from similar institutions, and
6. Give primary emphasis to in-season competition, but exceptional teams and individuals may participate in post championship play.

ELIGIBILITY FOR ATHLETICS

A student-athlete may represent Sul Ross State University in intercollegiate athletics competition only when that student-athlete is in compliance with all applicable provisions of the constitution and bylaws of the National Collegiate Athletic Association (Division III), all eligibility rules established by the American Southwest Conference, and all local eligibility requirements established by the University Athletics Council.

1. Good Standing with the University. In order to compete in intercollegiate athletics, the student-athlete shall not currently be on any type of University probation, either academic or disciplinary. Student athlete must be making satisfactory progress toward a baccalaureate degree.
2. Satisfactory Progress. Satisfactory progress means that a student-athlete must maintain at least a 2.00 cumulative grade point average and have accumulated the following semester credit hours:
3. Second Season. To participate in the second season in a sport the student-athlete must have accumulated at least twenty-four semester credit hours (24 SCH) which can be applied to the student-athlete’s degree plan.
4. Third Season. To participate in the third season in a sport the student must have accumulated at least forty-eight semester credit hours (48 SCH) which can be applied to the student-athlete’s degree plan.
5. Fourth Season. To participate in the fourth season in a sport the student-athlete must have accumulated at least seventy-two semester credit hours (72 SCH) which can be applied to the student-athlete’s degree plan.
6. Full Time Enrollment. According to the NCAA bylaws a student-athlete shall be enrolled in at least 12 semester credit hours (12 SCH) to be eligible for intercollegiate competition. This is known as the 12-hour enrollment rule. However, graduate students who have received an undergraduate degree from SRSU may compete while enrolled in at least 9 semester credit hours (9 SCH) of graduate courses.
7. Repeat Courses. Undergraduates may count a maximum of one repeat course passed with a grade of “D” per semester or the Inter-Term towards satisfying the 12-hour enrollment rule. Repeat courses previously passed with a grade of “C” or better shall not count toward satisfying the 12-hour enrollment rule.
8. Inter-term Courses. Courses taken during an Inter-term shall be included on the transcript for the Fall or Spring semester as selected by the student-athlete.
9. Developmental Courses. Developmental courses required by the University may be used to satisfy the 12-semester credit hour rule and included in the student-athlete’s grade point average for eligibility purposes. However, developmental courses may not
be used to satisfy the total of required semester credit hours for the third and fourth seasons of competition.

Student-athletes may appeal to have their eligibility restored if there are mitigating circumstances related to their academic progress. All appeals must be submitted to the Athletics Council in writing, with copies of all transcripts, degree plans, and extensive documentation of any mitigating circumstances. The decision of the Athletics Council will be final.

DIVISION OF LIBRARY AND INFORMATION TECHNOLOGIES

The Division of Library and Information Technologies is located in the Bryan Wildenthal Memorial Library and consists of three organizational units: Public Services (including Reference Services, Interlibrary Loan, and Circulation Services), Technical Services, (including Acquisitions, Cataloging, and Serials), and the Archives of the Big Bend. The mission of the Division is to provide the learning resources, facilities, services, and technologies necessary to support the research and informational needs of the University, the Alpine community, and the Big Bend area. The Library’s website is: http://library.sulross.edu.

WILDENTHAL MEMORIAL LIBRARY

The primary purpose of the Bryan Wildenthal Memorial Library is to contribute to the instructional and research programs of the University by collecting, organizing, making readily available, and assisting in the use of books, periodicals, electronic services, and other information resources needed by the students, faculty, and staff of the University (including those at Rio Grande College or taking Distance Education courses). The Library also participates in the cooperative sharing of information resources.

Secondarily, the library seeks to provide resources, services, and information relevant to the general informational and recreational needs of the University, the Alpine community, and the Big Bend Area.

1. Public Services librarians and staff members manage and maintain print and electronic reference resources, the circulating book collection, the Juvenile collections, and maps. Reference librarians assist patrons with locating information, planning research strategies, and using the online catalog and electronic resources. They also teach library research skills, conduct tours of the facilities, and write research aids. Circulation Desk staff manage and circulate reserve materials and circulating books. Interlibrary Loan staff obtains materials that the Library does not own for Sul Ross students, faculty, and staff. They also provide document delivery services.

2. Technical Services is responsible for identifying, acquiring, cataloging, and processing materials for the collections of the Library and Archives of the Big Bend. Other functions include creating and maintaining records in the Library’s electronic catalog; repairing or withdrawing torn/damaged materials; binding journals; receiving and acknowledging gifts and donations; and assisting faculty with the selection and purchase of appropriate materials.

3. Specific objectives of the Library are to provide the following resources and services:
   a. A strong, well-balanced core collection of materials in a variety of formats to support the teaching function of the University.
   b. In-depth collections in disciplines offering Master's degrees.
   c. Up-to-date reference and general information sources to support the informational and recreational needs of the University, the Alpine community and the Big Bend area.
Such special collections as are deemed essential to fulfill the purpose of the Library. Convenient bibliographic and, where feasible, full-text access to materials for campus and distance users (including Rio Grande College students, faculty, and staff) through effective utilization of the campus network, adequate library hours and document delivery.

- Professional assistance in locating and using library materials and other information resources all hours the library is open.
- An active program of bibliographic instruction
- Services for locating and obtaining materials from other libraries through a strong Interlibrary Loan department.
- Facilities to allow the appropriate duplication of materials.
- A professionally trained staff to develop and administer the resources and services of the library.

**THE ARCHIVES OF THE BIG BEND**

The Archives of the Big Bend is responsible for collecting, preserving, arranging, and making available the University Archives, books, manuscript collections, photographs, oral histories, maps, and other research resources which pertain to the Big Bend Region of Texas. Although the emphasis is on Brewster, Presidio, and Jeff Davis counties, the Archives includes materials concerned with the area west of the Pecos River and east of El Paso County in Texas and related areas of northern Mexico. The Archives holdings document the history and diversity of cultures in the region.

Services of the Archives include reference assistance, reproduction of photographs and print materials, instruction to library patrons on the proper handling and use of archival materials, and general and/or course specific presentations on Archives holdings. Arrangements for class activities may be made by contacting the Archivist and should be made well in advance of the class date. Hours are 8 am – 5 p.m. Monday through Friday and by appointment.

**MUSEUM OF THE BIG BEND**

The Museum of the Big Bend completed a renovation in August 2007 of the Emmett and Miriam McCoy Building. The McCoy building, the original Texas Centennial museum structure, now houses the collections, education program and exhibits. The mission of the Museum is to collect, preserve, and exhibit and interpret the cultural, historic and natural materials that relate to the prehistory and history of the Big Bend of Texas and northern Mexico. Collections in archeological, historical and natural history materials are extensive. Many are exhibited in the main gallery that includes videos. One of the signature pieces is a full scale model of *Quetzalcoatlus northropi*, the Big Bend Pterodactyl.

The Yana and Marty Davis Map Collection consists of over 1000 pieces and five centuries of maps of Texas, Mexico and the Southwest. Housed in a special room, the collection is open for research by scholars and students of Sul Ross State University. In addition, the Museum houses a special reference library of over 2000 volumes related to the history of the region, material culture and museum studies. The library is open for use by scholar and students on premises.

Activities include tours, special events, volunteer opportunities, and special education program activities for area children. Every summer, the museum invites students to apply for the Larry Francell Museum of the Big Bend internship in order to gain hands-on experience in a museum-related field. Each spring the museum hosts *Trappings of Texas* one of the longest running...
exhibits of contemporary cowboy art and gear.

The Museum is open from Tuesday through Saturday, 9:00 am to 5:00 pm and on Sunday from 1:00 to 5:00. It is closed on Monday and all major holidays. Admission is free. For information, please call 432-837-8143 or visit our website at www.museumofthebigbend.com. The mailing address is Box C-101, Sul Ross State University, Alpine, Texas 79832.

CENTER FOR BIG BEND STUDIES

The purpose of the Center for Big Bend Studies is to support and promote programs and interdisciplinary scholarly activities relating to the cultural, historical, and archaeological development of the Big Bend region of Texas. The region is broadly defined to include the Rio Grande borderlands of Texas and Mexico from El Paso and Cuidad Juarez to Del Rio and Cuidad Acuña, the Pecos River valley from the Rio Grande to southern New Mexico, and the entire Trans-Pecos region of Texas. The Center publishes The Journal of Big Bend Studies, an interdisciplinary annual with emphasis on historical and archaeological studies related to the region, and La Vista de la Frontera, an annual newsletter.

In addition to working with academic departments and programs on campus to provide research opportunities for faculty and students, the Center works with Big Bend National Park, Guadalupe Mountains National Park, Big Bend Natural History Association, Texas Parks and Wildlife Department, Texas Historical Commission, county historical commissions, and the general public in cooperative educational, research, and public service projects. The Center sponsors an Annual Conference for the presentation of research papers and maintains an extensive library on the archaeology and history of the Southwestern United States and north-central Mexico. For information, visit our website at http://cbbs.sulross.edu/ or call us at 432-837-8179.

BORDERLANDS RESEARCH INSTITUTE FOR NATURAL RESOURCE MANAGEMENT

Formed in 2007, the goal of the Borderlands Research Institute is to provide land managers with the most current scientific information on the management of the natural resources of the area. To meet this goal, we plan and conduct research investigations on various aspects of our natural world. Ultimately, we hope to provide science-based management alternatives to land owners and managers to enhance their ability to serve as land stewards.

The Borderlands Research Institute serves as the "sister institution" to the Department of Natural Resource Management within the College of Agricultural and Natural Resource Sciences at Sul Ross State University in Alpine, Texas. For more information visit our web site http://bri.sulross.edu/ or call us at 432-837-8615. The College of Agricultural and Natural Resource Sciences and the Borderlands Research Institute are housed in the Turner Range Animal Science Center, which is located 1 mile east of the main campus on U.S. Highway 90.

OFFICE OF INFORMATION TECHNOLOGY

The Office of Information Technology (OIT) oversees all technology related matters at Sul Ross State University. The mission for OIT is to empower the customer and introduce innovation and automation with a keen focus on sustainability, ease of use, increased customer satisfaction, reliability and bridge the gap between pedagogy and technology.

OIT consists of four departments, which are Customer Service and Instructional Technology, Infrastructure Services, Enterprise Application Services and RGC-OIT operations. Our staff is
located on all four campuses: Alpine, Del Rio, Uvalde and Eagle Pass. In Alpine we have offices in the Academic Computer Resource Center (ACR), Briscoe Administration Building, and the Bryan Wildenthal Memorial Library.

Please check our website www.sulross.edu/oit for updated information on the services and support we offer. We invite you to visit our online OIT Knowledge Center (www.sulross.edu/oit) that has documented information and video tutorials on the various technologies, software and services that OIT has to offer. OIT has a long-standing tradition to provide you with the support and service you need in pursuit of excellence and success in your education and we hope to continue the same moving forward.

You can contact us via:

- **Phone:** You can call the LTAC helpdesk at 8888. Off Campus, dial 432-837-8888 between 7:30 a.m. to 7:30 p.m. Monday to Friday and 12 p.m. to 5 p.m. on Saturday and Sunday. For more details please visit us online at www.sulross.edu/LTAC
- **Online:** For technology help, https://techassist.sulross.edu, For general OIT information, www.sulross.edu/OIT
- **Walk-in:** The main LoboTAC Support Counter is located in the Briscoe Administration Building (BAB) room 101. The Alternate Support Counter is located on the first floor of the Bryan Wildenthal Memorial Library. To get to us, enter through the main doors, take a right at the circulation desk, and proceed to the back of the library. The support counter is located on the first floor in the back of the library.

**CUSTOMER SERVICE AND INSTRUCTIONAL TECHNOLOGY**

The department of Customer Service and Instructional Technology (CSIT) in the Office of Information Technology assists with technology needs via the OIT helpdesk, support counters and open access computer labs. Staff in CSIT are trained to assist you with computer and technology related matters. CSIT provides training to faculty and staff on various instructional and productivity technologies such as Blackboard, Microsoft office suite and Adobe products. CSIT manages and maintains the OIT Knowledge Center (http://www.sulross.edu/OIT) that provides information and instruction on various services delivered by OIT. Our department is also responsible for the technology in classrooms and ITV rooms.

SRSU helpdesk is located on-campus in Alpine. The Lobo Technology Assistance Center (LTAC) Staff is excited about the opportunity to serve you!

Contact us via:

- **Phone:** You can call the LTAC helpdesk at 8888. Off Campus, dial 432-837-8888 between 7:30 am to 7:30pm Monday to Friday and 12pm to 5pm on Saturday and Sunday. For more details please visit us online at www.sulross.edu/LTAC
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There are two open access computer labs on the Alpine campus that are open to all faculty, staff and students. One lab is in ACR 106 and the other is on the second floor of the Bryan Wildenthal Memorial Library. Please check out website www.sulross.edu/oit for updated information on timings and other information about the labs.
Infrastructure Services
The Infrastructure Services department in OIT maintains and administers the University’s computing infrastructure including but not limited to the Data Center, Network, Wireless, Internet, Firewalls, Server-farm, Telecommunications, and other infrastructure related technologies. Other services that we offer include VPN, E-mail, online storage, and server management. Staff in Infrastructure Services is trained and certified to support the voice, data and video infrastructure for the University.

Our offices are located on the first and second floors of the Bryan Wildenthal Memorial Library and in ACR 104. You can reach us via the LTAC helpdesk by calling extension 8888 on-campus or from off Campus, dial 432-837-8888 between 7:30am to 7:30pm Monday to Friday and 12pm to 5pm on Saturday and Sunday.

You can find more information about our department and the services we offer at www.sulross.edu/oit.

Enterprise Application Services
The department of Enterprise Application Services (EAS) in the Office of Information Technology manages and supports application development for the University’s Enterprise Resource Planning System (ERP) and Website/ Web resources. Staff in EAS are engineers and programmers who develop and integrate applications for automation and smooth processing of information across all systems that are utilized by faculty, staff, and students.

EAS serves as the central contact point for students, faculty, and staff using the Banner system, which is the academic and administrative information system. This system is used for processing prospective and current students, financial aid, finance, advancement, and employee records. Our 24/7 Banner Self Service portal allows students to register for classes, pay tuition and fees, and access their records at their convenience.

EAS develops, supports, and manages web services, which include the management of the University’s web site, content management system, online custom forms, automated workflows, etc.

You can reach us via the LTAC helpdesk by calling extension 8888 on-campus or from off Campus, dial 432-837-8888 between 7:30am to 7:30pm Monday to Friday and 12pm to 5pm on Saturday and Sunday. You can find more information about our department and the services we offer at www.sulross.edu/oit.

Information Security Office
The Information Security Office (ISO) in OIT is responsible for ensuring the confidentiality, integrity and availability of the University’s computing and informational assets. The Information Security Officer drafts and enforces security controls and policies that protect personnel records and matters that require protection and compliance as per federal, state and industry regulations such as FERPA, HEOA, PCI, etc. Some services administered by the ISO are firewall policies, VPN, anti-malware solutions and anti-spam filters. From time to time the ISO conducts security awareness sessions and training for students, faculty and staff. The ISO conducts events such as the PC clinic during the security awareness month in October.

You can reach us via the LTAC helpdesk by calling extension 8888 on campus or from off campus, dial 432-837-8888 between 7:30am to 7:30pm Monday to Friday and 12pm to 5pm on Saturday and Sunday.

You can find more information about our department and the services we offer at www.sulross.edu/oit.

Rio Grande College (RGC) OIT Operations
The Rio Grande College (RGC) OIT operations is the department in OIT that manages and oversees the technology infrastructure and support for the RGC campuses. All services delivered for all sites at SRSU are centralized, however, trained and certified staff at RGC provide hands-on support for technology issues that may be computer, network, telecomm or software related. RGC OIT operations manages three computer labs and 12 distance learning/ITV classrooms spread throughout the Del Rio, Uvalde and Eagle Pass campuses.

You can reach us via the LTAC helpdesk by calling extension 8888 on-campus or from off Campus, dial 432-837-8888 between 7:30am to 7:30pm Monday to Friday and 12pm to 5pm on Saturday and Sunday.

You can find more information about our department and the services we offer at www.sulross.edu/oit.

**RIO GRANDE COLLEGE**

Sul Ross State University Rio Grande College offers educational opportunities for students through campuses in Uvalde, Del Rio, and Eagle Pass. Upper-level and graduate courses are offered in Teacher Education, Business Administration, Humanities, and Natural and Behavioral Sciences. Undergraduate students who enroll in Rio Grande College must have earned a minimum of forty-two (42) transferable semester credit hours from accredited colleges and universities. All students who enroll in Rio Grande College must fulfill requirements for admission and comply with academic regulations stated in the Catalog. The deadlines for withdrawing from classes and applying for graduation for students enrolled in Rio Grande College are published in the Academic Calendar in the Rio Grande College Catalog.

Information concerning degree programs, admission requirements, and registration may be obtained from any of the following:

Sul Ross State University Rio Grande College
205 Wildcat Dr.
Del Rio, Texas 78840
Telephone (830) 703-4808

Sul Ross State University Rio Grande College
3107 Bob Rogers Drive
Eagle Pass, Texas 78852
Telephone (830) 758-5005

Sul Ross State University Rio Grande College
2623 Garner Field Road
Uvalde, Texas 78801
Telephone (830) 279-3004
ADMISSIONS

Sul Ross State University accepts applications for admission from students of accredited secondary schools and students transferring from accredited colleges without regard to race, color, sex, age, religious commitment, or national origin. Any person who desires to apply for admission should contact the Center for Enrollment Services, Box C-2, Sul Ross State University, Alpine, Texas 79832 or go to Apply Texas to begin the application process.

Sul Ross State University requires the same personal standards and applies the same criteria in considering applications for admission as it uses in the retention of students who are enrolled. To be consistent with this policy, the University reserves the right to refuse acceptance to prospective or former students who are on disciplinary suspension or expulsion from any college or university, or who have committed other offenses of serious nature, which, in the judgment of the University, are likely to have an adverse effect on the University. The personal standards of conduct expected of students who enroll at Sul Ross State University are provided in the Student Code of Conduct contained in the Student Handbook.

UNDERGRADUATE ADMISSIONS

Beginning Freshman Students
A beginning freshman student (has not attempted college hours after high school graduation) must graduate from an accredited high school on the foundation or recommended graduation program and submit ACT or SAT test scores.

Admissions Requirements for Students on the Recommended/Distinguished/or Foundation with Endorsements High School Graduation Plan

<table>
<thead>
<tr>
<th>Rank in Class</th>
<th>Minimum ACT Composite Score</th>
<th>Minimum SAT (Total Score)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Top Half</td>
<td>Submit Scores – No Minimum Required</td>
<td>Submit Scores-No Minimum Required</td>
</tr>
<tr>
<td>Third Quarter</td>
<td>20</td>
<td>1000</td>
</tr>
<tr>
<td>Fourth Quarter</td>
<td>20</td>
<td>1000</td>
</tr>
</tbody>
</table>

Items necessary for admissions:
- The Apply Texas application with the non-refundable $25.00 application fee.
- Official copy of ACT or SAT test scores.
- Official copy of high school transcript showing class rank. Upon graduation from high school, applicant must provide a final official high school transcript showing final class rank, date of graduation, and graduation plan.

A beginning freshman student who has attempted college/university course work while enrolled in high school or in the semester prior to entering Sul Ross State University must provide official transcripts(s) indication the completion of all hours.

Probationary Admission for Beginning Freshman
Applicants, NOT meeting the above standards may be considered for probationary admission on an individual basis. Because of changing demographic trends, diversity, and population increases in the state, Sul Ross State University will consider the following factors in making first-time freshman admissions decisions:
- Specific class rank (on a seven-semester transcript)
- Size of the graduating class
• Qualify and competitive level of high school courses taken and grades earned (e.g., AP, Honors classes, Dual Credit)
• Academic progress and achievements
• Region of residence, and
• Scores on either the ACT or SAT

Graduates of a Non-Accredited High School Including Home School
Sul Ross State University admits qualified students graduating from non-accredited high schools of home schooled graduates who meet the following criteria:
• Meet 4th Quarter Admissions Requirements for graduation on the Standard/Minimum/Foundation Plan.
• Present a notarized high school/home schooled transcript that meets the Texas State Graduation Requirements as approved by the State Board of Education. (see Texas Administrative Code (TAC) Chapter 74)

Graduates of a non-accredited high school, including home school, submit the following documentation:
• The Apply Texas application with non-refundable $25.00 application fee.
• Official copy of ACT Composite of SAT I Total (Critical Reading + Math) score.
• Official, copy of high school transcript showing class rank. If home school, provide notarized copy of transcript. Upon graduation, applicant must provide a final official transcript showing final class rank and date of graduation.
• Meet admissions requirements for those graduating on the Foundation or Minimum/Standard Plan

Students Who Earned the GED
Sul Ross State University admits qualified students who have earned their GED and who score at least 20 on the ACT Composite or 920 on the SAT I Total (Critical Reading + Math) and submit the following documentation.
• The Apply Texas application with non-refundable $25.00 application fee.
• Official copy of ACT Composite or SAT I Total (Critical Reading + Math) score.
• Official copy of GED certificate with GED test scores.

Individual Admissions
Sul Ross State University admits students who have earned their high school diploma or GED and are age 24 or older at the time of application. These students must submit the following documentation:
• The Apply Texas application with non-refundable $25.00 application fee
• Official copy of GED certificate with GED test scores or official copy of final high school transcript showing date of graduation

Individually admitted students are not required to take or provide ACT or SAT scores but they must take the Texas State Initiative Assessment (TSIA) placement exams prior to advising and registration.

Transfer Students
A transfer student is defined to mean an undergraduate student who has attempted transferable academic course work from an accredited college or university. “Transferable academic course work” is defined to mean those attempted hours of course work which are applicable to a baccalaureate degree program.

Transfer Students from U.S. Colleges or Universities
Undergraduate students who transfer to Sul Ross State University from another regionally accredited college or university with less than 12 transferable academic hours must meet the
standards of beginning freshman students (see Beginning Freshman Students above) and must provide the following documentation.

- The Apply Texas application with non-refundable $25.00 application fee.
- Official transcript(s) from all accredited colleges and universities attended.
- Official transcript(s) indicating the completion of 12 or more collegiate academic hours

Undergraduate students, who transfer to Sul Ross State University from another regionally accredited college or university with 12 or more transferable academic hours, as defined by this policy, must provide the following documentation.

- The Apply Texas application with non-refundable $25.00 application fee.
- Official transcript(s) from all accredited colleges or universities attended.

Official transcript(s) indicating the completion of 12 or more transferable academic hours (excluding developmental, remedial, vocational/technical, continuing education, or lifelong learning courses). All students must present a cumulative transfer grade point average based on the following:

**Total College Hours Minimum Grade Point Average**

<table>
<thead>
<tr>
<th>Undertaken:</th>
<th>Required for Admission:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 12</td>
<td>2.0 overall GPA and meet first time in college admissions requirements</td>
</tr>
<tr>
<td>12 or more</td>
<td>2.0 overall GPA</td>
</tr>
</tbody>
</table>

Students who are currently suspended from another college or university are not eligible for admission to Sul Ross State University.

**Transfer Credit Policy**

All collegiate-level academic courses (excluding developmental, remedial, vocational/technical, continuing education, or lifelong learning courses) attempted at a regionally accredited U.S. college or university will be transferred. Grades received are used to calculate the student’s overall GPA. Applicability of transferred courses to degree requirements is determined by the individual departments and colleges.

Sul Ross State University reserves the right to accept courses taken at U.S. schools other than regionally accredited colleges or universities.

Of courses transferred, no more lower division hours than are required for non-transfer students in the same program may be applied to a baccalaureate degree. No more than ninety lower and upper division hours combined may be applied to a baccalaureate degree.

Courses taken at community colleges do not satisfy the advanced hours required at Sul Ross State University.

**Transfer Dispute Resolution**

The Texas Higher Education Coordinating Board has established guidelines for resolving transfer disputes between Texas colleges and universities. These guidelines are designed to facilitate the transfer of lower division courses and to clarify for students what their rights and responsibilities are as potential transfer students. Specifically excluded are courses designated as ESL/ESOL, technical, developmental, or remedial.

Lower division credit is defined as those courses offered in the first two years of college study which

a. are identified by a majority of public four-year undergraduate institutions in the state as courses intended to comprise the first two years of college study,

b. stress development of disciplinary knowledge and skill at an introductory level, and
c. includes basic principles and verbal, mathematical, and scientific concepts associated with an academic discipline.

Upper division credit is defined as those courses offered only in the third or fourth years of a baccalaureate program which
a. are identified by a majority of public four-year undergraduate institutions in the state as courses intended to comprise the third and fourth years of post-secondary study,
b. involve theoretical or analytical specialization beyond the introductory level, or
c. requires knowledge and skills provided by previous courses for successful performance.

The Coordinating Board has also provided for a state-wide appeal procedure concerning the evaluation of transfer credit. This appeal must be filed within 15 calendar days after the SRSU evaluation has been made available to the student through Lobo OnLine. Before filing the appeal, the student must complete the on-campus transfer dispute resolution process.

A student with a question regarding the evaluation of transfer credit should immediately direct the question to the Center for Enrollment Services. If, after research by admissions personnel, the problem resolution results in a change to the evaluation, the evaluation will be adjusted and the student will have the updated evaluation made available to them via Lobo OnLine. If the evaluation is appropriate as originally prepared, admissions personnel will explain to the student how the credit was determined. If the question is one of degree applicability rather than transferability, the student will be directed to the appropriate academic dean.

If the dispute is still not resolved, Coordinating Board form, CB-TDR, "Transfer Dispute Resolution," must be completed to initiate dispute action. This appeal must be filed within 15 calendar days after the SRSU evaluation has been submitted to the student. Forms are available in the Office of the Provost and Vice President for Academic and Student Affairs Office and at the Center for Enrollment Services. Assistance in completing the form will be available in either of those two offices.

If the dispute involves the transfer of credits to Sul Ross, the form must be completed by the appropriate official at the institution where the credit was earned and by the Registrar at Sul Ross. Disputes that are not resolved by the institutions involved within 45 days after written notice of denial will be forwarded to the Commissioner of Higher Education for resolution.

Sul Ross students who have difficulty having SRSU credit accepted at another Texas public institution should contact the Registrar at Sul Ross for initiation of the transfer dispute resolution process.

Former Students
All former SRSU students who did not attend one long semester (fall or spring) must submit an application for undergraduate admission in order to re-enter Sul Ross State University. Any former SRSU student who attends another institution is responsible for complying with the requirements outlined above for “Transfer Students”.

A student who leaves Sul Ross State University on scholastic probation is readmitted on scholastic probation, even if the student has attended another institution after leaving and re-entering Sul Ross State University.

Admission of Undergraduate International Students
All undergraduate international students must file the Texas Common Application and pay the non-refundable $75.00 application fee in U.S. currency.

Sul Ross State University has five categories of undergraduate international students: beginning freshmen who have graduated from a high school outside the United States, beginning freshmen who have graduated from a high school in the U.S., transfer students who have
attended a college or university from outside the U.S. and have obtained 60+ hours or an associate degree, and transfer students who have attended a college or university in the U.S. and have obtained less than 60 hours.

International students who are beginning freshmen graduating from a high school outside the U.S. must provide the following:
- TOEFL minimum scores: 69 (internet based); 190 Computer based; 520 (paper based)
- Official high school transcript
- Evaluation or high school transcript from an accredited evaluation company
- Support documents (see Requirements for Registration by Undergraduate International Students below)

International students who are transfer students and attended a college or university outside the U.S. must provide the following:
- TOEFL minimum score: 69 (internet based); 190 (computer based); 520 (paper based)
- Official transcripts from all colleges/universities attended
- Evaluation of all transfer work from an accredited evaluation company
- Supporting documents (see Requirements for Registration by Undergraduate International Students listed below)

Requirements for Registration by Undergraduate International Students

To ensure that all undergraduate admission and immigration papers are in order, international students are required to visit the Center for Enrollment Services immediately upon arrival on campus.

All international students are required to provide the following information 30 days in advance of registration. Applications will not be processed, and no authorization for a Visa (1-20) can be issued until the following is satisfactorily met.

A. Evidence of Financial Responsibility. This may be satisfied by an Affidavit or Support (Immigration Service Form I-134) or a signed statement from a U.S. citizen or foreign national committing the necessary resources in U.S. dollars for student's entire educational expenses.

B. Evidence of English language proficiency as demonstrated by any one of the following:

TOEFL minimum scores: 69 (internet based); 190 (computer based); 520 (paper based)
1. TOEFL minimum scores: 69 (internet based); 190 (computer based); 520 (paper based) or
2. Twenty-four hours of undergraduate work with a C average at an accredited U.S.
college or university, or 12 graduate hours with a B average at an accredited U.S. college or university; or
3. A bachelor's or master's degree from an accredited U.S. college or university; or
4. Prospective students may petition the Dean of the College in which the major resides in writing requesting an individual oral assessment of English proficiency. Applications granted an interview will be notified of the date, time, and location of the interview. The interview panel must deem the applicant's oral English proficiency adequate to successfully complete the program. The interview panel will file the results of the assessment in the Center for Enrollment Services. The Registrar will notify the student of the decision in writing.

C. An application fee of $75 in U.S. currency (non-refundable).
D. A housing deposit of $200 in U.S. currency.
E. Health insurance and immunization records.

Transient and Special Students
Transient - A student who is pursuing a degree at another institution may be considered for transient admission. The student must present a statement of good standing from the college in which the student is pursuing a degree and proof of compliance with TSI requirements. Transient admission is granted for a maximum of twenty-four semester credit hours. Credit earned as a transient student may be applied toward a degree at Sul Ross AFTER regular admission is granted.

Special - A student over 21 years of age who does not intend to work toward a degree at Sul Ross and who has a high School diploma from an accredited high School or a GED may be admitted to Sul Ross to enroll in a part-time schedule for enrichment purposes. Credit earned as a special student may be applied toward a degree at Sul Ross AFTER regular admission is granted. At that time, a student may be required to take and pass the TSI test.

Early Admission (Dual Credit High School Credit)
The Early Admission Program enables qualifying secondary School students to take a limited number of courses at Sul Ross while enrolled in the secondary School. The purpose of the program is to encourage students to complete secondary school graduation requirements while simultaneously earning credit toward a university degree.

Secondary School students wishing to participate in the Early Admission Program must meet the following requirements:
- Submit a completed Apply Texas application
- Submit an official transcript of high school records
- Submit a completed SRSU Dual Credit Form with all signatures (student, parent, counselor or principal)
- Evidence of college readiness in the area of enrollment

The requested documents and supporting material must be on file in the Center for Enrollment Services no later than the last day of regular registration of each semester.

Appeals Process for Undergraduate Admissions
An applicant who has been denied admission may appeal that decision in writing to the Undergraduate Academic Appeals Committee, Center for Enrollment Services, Box C-102, Alpine, Texas 79832.

PROGRAMA DE ASISTENCIA ESTUDIANTIL (PASE)
Mexican citizens are eligible for the Programa de Asistencia Estudiantil (PASE) under which they qualify for in-state tuition and fees. Only Mexican citizens are eligible for PASE. U.S.
citizens holding dual U.S./Mexican status are not eligible for PASE.
For more information on PASE or for a PASE application form, contact the Center for Enrollment Services, Box C-2, Alpine, Texas 79832.

REGISTRATION

Procedures for registration may be found at http://www.sulross.edu.

RESIDENCY FOR TUITION

The determination of residency classification for tuition purposes is governed by statutes enacted by the Texas Legislature and rules and regulations promulgated by the Texas Higher Education Coordinating Board. Texas Higher Education Coordinating Board Rules are available at www.collegeforalltexans.com.

A student or applicant is classified as either a resident of Texas, a non-resident, or a foreign student for tuition purposes. An individual’s residency classification is based on information from his or her admission application.

If an applicant or student is classified as a non-resident and wishes to be considered for reclassification as a resident, the Residency Core Questions must be submitted to the Office of the Registrar. Documentation may be requested by the institution in order to resolve issues raised by the information provided in response to the Residency Core Questions.

It is the duty of each student to register under the proper residency classification and pay the appropriate tuition and fees. If there is any possible question whether or not a student qualifies as a resident of Texas, he or she should consult with the Registrar in the Center for Enrollment Services at (432) 837-8049 or Box C-2, Sul Ross State University, Alpine, Texas, 79832.

GENERAL CAMPUS REGULATIONS AND CONDUCT

All students are expected to conduct themselves in a manner consistent with the University’s functions as an educational institution. It is also expected that all students who enroll at Sul Ross State University agree to assume the responsibilities of citizenship in the university community. Association in such a university community is purely voluntary, and any student may resign from it at any time when he/she considers the obligation of membership disproportionate to the benefits. All students are subject to University authority, and those students whose conduct is not within the policies of the University rules and regulations are subject to dismissal. Students are responsible for abiding by all published University rules and regulations. Failure to read publications will not excuse the student from the requirements and regulations described therein. The SRSU Student Handbook and other official University publications outline specific regulations and requirements.

PRIVACY RIGHTS OF STUDENTS

Notice is hereby given that Sul Ross State University has adopted institutional procedures in compliance with The Family Educational Rights and Privacy Act of 1974 (FERPA), assuring the right of a student to review his or her educational records upon request. For more information, please inquire at the Center for Enrollment Services.
EDUCATIONAL RECORDS DEFINED

Education records are defined by FERPA 34 CFR 99.3 as follows:

(a) Educational records includes those records that are:
   (1) Directly related to a student; and
   (2) Maintained by an educational agency or institution or by a party acting for the agency or institution.

(b) Educational records do not include:
   (1) Records that are kept in the sole possession of the maker, are used only as a personal memory aid, and are not accessible or revealed to any other person except a temporary substitute for the maker of the record.
   (2) Records of the law enforcement unit of an educational agency or institution, subject to the provisions of § 99.8.
   (3)(I) Records relating to an individual who is employed by an educational agency or institution, that:
      (A) Are made and maintained in the normal course of business:
      (B) Relate exclusively to the individual in that individual's capacity as an employee; and
      (C) Are not available for use for any other purpose.
      (ii) Records relating to an individual in attendance at the agency or institution who is employed as a result of his or her status as a student are education records and not excepted under paragraph (b)(3)(i) of this definition.
   (4) Records on a student who is 18 years of age or older, or is attending an institution of postsecondary education, that are:
      (i) Made or maintained by a physician, psychiatrist, psychologist, or other recognized professional or paraprofessional acting in his or her professional capacity or assisting in a paraprofessional capacity;
      (ii) Made, maintained, or used only in connection with treatment of the student; and
      (iii) Disclosed only to individuals providing the treatment. For the purpose of this definition, “treatment” does not include remedial educational activities or activities that are part of the program of instruction at the agency or institution; and
   (5) Records created or received by an educational agency or institution after an individual is no longer a student in attendance and that are not directly related to the individual's attendance as a student.
   (6) Grades on peer-graded papers before they are collected and recorded by a teacher.
   (Authority: 20 U.S.C. 1232g(a)(4))

CONFIDENTIALITY OF EDUCATIONAL RECORDS

Sul Ross State University has adopted procedures in compliance with The Family Educational Rights and Privacy Act of 1974. The Act provides students the right to review their educational records upon request. To preserve strict confidentiality of records, the University does not permit access to or release of educational records or personal information, other than directory information, or without the written consent of the student.

Exceptions to this restriction are limited to the following:

- Judicial subpoena of records, upon condition that the University makes a reasonable effort to notify the student in advance of the release of records.
- Emergency situations, if knowledge of personal information is necessary to protect the health and safety of a student or other person (s).

Directory information is defined as:
Student's name, address, telephone listing, Sul Ross email address, date and place of birth, major field of study, dates of attendance, classification, participation in officially recognized activities and sports, weight and height of members of athletic teams, degrees, honors, and awards received, and the most recent educational agency or institution attended.

Students may request that the University not release directory information by completing a Request for Non-Disclosure of Directory Information form. For more information regarding your privacy rights, contact the Center for Enrollment Services.

**GRAMM-LEACH-BLILEY ACT**

In accordance with the Gramm-Leach-Bliley Act (GLB Act), Public law 106-102 (1999), Sul Ross State University protects the private non-public information of students and employees. SRSU collects information such as:

- Name
- Gender
- Social Security Number
- Financial Status
- Date and location of birth
- Salary History
- Personal Check Information
- Credit Card Numbers
- Driver’s License Numbers

SRSU’s policy is to identify and safeguard this information with the appropriate procedures to insure compliance with the GLB Act. SRSU manages private non-public information in accordance with all applicable state and federal guidelines relating to use, disclosure and retention of private non-public information.

**CAMPUS SEX CRIMES PREVENTION ACT**

SRSU is in compliance with the Campus Sex Crimes Prevention Act (Section 1601 of Public Law 106-386), Jacob Wetterling Crimes Against Children and Sexually Violent Offender Registration Act, Jenne Clery Disclosure of Campus Security Policy and Campus Crime Statistics Act, and Family Educational Rights and Privacy Act of 1974. Sex offenders are required to register at the University Department of Public Safety in BAB 100 when the offender is employed, carries on a vocation, or is a student at SRSU.

**TUITION AND MANDATORY FEES**

**FALL 2017 - SPRING 2018**

All students will pay, by the due dates specified in the class Schedule bulletin, the required tuition and fees based on the number of semester credit hours for which they register.

Required tuition and fees for each semester of the 2017-2018 academic year and the 2018 summer terms may be determined by using the following table. Laboratory and individual instruction fees will be in addition to these amounts.

**Undergraduate**

**Fall 2017/Spring 2018**

<table>
<thead>
<tr>
<th>Semester Credit Hours</th>
<th>Texas Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<td>$815.02</td>
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<tr>
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</tr>
<tr>
<td>4</td>
<td>1,204.08</td>
<td>2,864.08</td>
</tr>
<tr>
<td>Semester Credit Hours</td>
<td>Texas Resident</td>
<td>Non-Resident</td>
</tr>
<tr>
<td>-----------------------</td>
<td>----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>1</td>
<td>$338.25</td>
<td>$753.25</td>
</tr>
<tr>
<td>2</td>
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<td>5,446.50</td>
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<tr>
<td>9</td>
<td>2,365.25</td>
<td>6,100.25</td>
</tr>
</tbody>
</table>

Includes the following tuition and mandatory fees:

**Resident Student Tuition**
The State tuition for students classified as residents of the State of Texas during 2017-18 is $50 per semester hour.

**Non-Resident Tuition**
Tuition for a student who is classified as a non-resident student is equal to the cost of attending a State University in Texas as determined annually by the Texas Higher Education Coordinating Board. For 2017-18, this amount is $465 per semester credit hour. See Residence Status in this catalog.

**Board Authorized Tuition**
Section 54.008 of the Education Code provides authority for the governing board to set state tuition for graduate programs at higher rates than the minimum tuition required by the chapter. Board authorized tuition is set at $12 per school for graduate courses.

**Designated Tuition**
A mandatory Designated Tuition Fee of $147 per semester credit hour is assessed to all students. This fee is used to help cover the costs of services, use and/or availability of all or any of the University's property, building, structures, activities, operations or other facilities. These funds are used to support the Educational and General operations of the University (i.e. scholarships, equipment, and development).
Student Service Fee
A mandatory Student Service Fee of $22 per semester credit hour with a maximum of $238 per long semester, or $119 per summer term is required from all students. This fee is used to help cover the cost of Student Services. Student Services are activities which are separate and apart from the regularly Scheduled academic functions of the institution and directly involve or benefit students (i.e. Student Government, Student Counseling, and Athletics).

Student Center Fee
A mandatory Student Center Fee of $5 per semester credit hour with a maximum of $50 per long semester, or $25 per summer term is required from all students. This fee is used to help cover the cost of constructing, operating, maintaining, improving and/or programming a student center (i.e. Student Center Program Council).

Computer Access Fee
A mandatory Computer Access Fee of $7 per semester credit hour is required from all students. This fee is used to help cover the cost of operations of the Academic Computer Resource Center. This includes staff salaries, equipment, software, and other operating costs.

Technology Services Fee
A mandatory Technology Service Fee of $17.50 per semester credit hour is required from all students. This fee is used to cover technology salaries, equipment, software and other operating costs.

Recreational Sports Fee
A mandatory Recreational Sports Fee of $85.00 per semester for the long semester or $42.50 for the summer term is required from all students. This fee is used to cover the cost of operations for the recreational sports facility.

International Education Fee
A mandatory International Education Fee of $1 per semester is required from all students. This fee is used to assist students participating in international student exchange or study programs. This assistance would be in the form of scholarships or other stipends.

Publication and Records Fee
A mandatory Publication and Records Fee of $12 per semester is required from all students. This fee is used to cover the costs of materials or services of publications, including transcripts.

Library Fee
A mandatory Library Fee of $8 per semester credit hour is required from all students. This fee is used to help cover the costs of acquisitions for the Wildenthal Library.

Medical Service Fee
A mandatory Medical Service Fee of $34 per long semester or $17 for the summer term is required. This fee is used to cover the cost of operations of the university health center, and for the costs of professional medical services.

Athletic Fee
A mandatory Athletic Fee of $11.52 per long semester credit hour or $9.25 per summer semester credit hour is required from all students. This fee is used to help cover the cost of Intercollegiate Athletics.

Other Mandatory Fees - Fall 2017 through Summer 2018
Application Fee .......................................................................................................................... 25.00
Biology Lab Fee .......................................................................................................................... 8.00
Chemistry Lab Fee ..................................................................................................................... 8.00
Distance Learning per SCH ....................................................................................................... 48.00
(Includes waiver of certain fees)

Education (Student Teaching/Internship Fee) ................................................................. 125.00-300.00
Geology Lab Fee .............................................................................................................. 8.00
Industrial Technology .................................................................................................... 15.00-20.00
Mediated Math ............................................................................................................... 75.00

Music:
   1 Hour Private Lesson .................................................................................................. 25.00
   2 Hour Private Lesson ............................................................................................... 35.00

Physics Lab Fee .............................................................................................................. 8.00
Physical Education ......................................................................................................... 8.00

Safety Education (Driver Training) ................................................................................ 15.00

Animal Science:
   Laboratory .................................................................................................................... 8.00

Field Schools .................................................................................................................. 175.00-1,800.00
LVN ................................................................................................................................ 50.00

Audit Fee (per course) * ............................................................................................... To Be Determined
Housing Application Fee ............................................................................................... 50.00

*Permission must be obtained from the instructor of the course to be audited and from the Center for Enrollment Services prior to paying this fee. In addition, conditions under academic regulations in the University Catalog apply.

Tuition and fees presented herein are estimates and are subject to change by the Texas Legislature and/or the Board of Regents, Texas State University System.

OPTIONAL FEES AND DEPOSITS

Optional Fees (All optional fees and deposits are due and payable in FULL at which time the service is rendered or contracted):

Parking Fee:
   All faculty, staff and students who expect to operate a vehicle on University property:
   Yearly (September 1 –August 31) ................................................................. $30.00
      Summer (May 31 - August 31) ................................................................. 21.00
   Additional Vehicle ......................................................................................... 10.00

Post Office Box Rental:
   Per long semester ............................................................................................. 6.00
   Per summer term ......................................................................................... 3.00
   Entire year .................................................................................................. 17.00

Graduation, by deadline ............................................................................... 30.00
Graduation, after deadline ........................................................................ 55.00
Diploma Insert Fee ..................................................................................................... 5.00
Late Registration Fee ................................................................................................. 25.00
Installment Fee ........................................................................................................... 25.00
Thesis Binding Fee (Additional copies 15.00) .................................................. 208.00
Music Instrument Deposit ......................................................................................... 10.00
Music Instrument Rental ............................................................................................ 10.00
Deficiency Plan Preparation Fee
   SRSU Graduate ............................................................................................... 15.00
   Non-SRSU Graduate ..................................................................................... 25.00
American College Testing Program Test Residual Administration (ACT)* .................. 25.00
CLEP Advance Standing Examination fee (per exam) .............................................. 45.00
Correspondence Exam Fee ................................................................. 10.00
*This fee is subject to change in accordance with requirements of the American College Testing Program and is for administering the test on campus.

Deposits (Refundable):
  Property Deposit ........................................................................... 10.00
  Housing Deposit ........................................................................... 200.00
  Orientation Fee (new students) ....................................................... 125.00

Optional fees and deposits presented herein are estimates and are subject to change by the Board of Regents, Texas State University System.

If a student fails to make full payment of tuition and fees, including any incidental fees, by the due date, he/she may be prohibited from registering for any classes until full payment is made. A student who fails to make full payment prior to the end of the semester may be denied credit for work done during the semester.

**REFUNDS**

**Refund of Fees.** Any student who has paid the registration fees and officially withdraws by submitting a withdrawal form to the Center for Enrollment Services is entitled to a refund of tuition and fees as follows:

**Session length 10 weeks or greater**
- Prior to the first regularly Scheduled class day .................................................. 100%
- During the first five class days ........................................................................ 80%
- During the second five class days ................................................................. 70%
- During the third five class days ................................................................. 50%
- During the fourth five class days ................................................................. 25%
- After the fourth five class days ........................................................................ None

**Session length greater than 5 weeks and less than 10 weeks**
- Prior to the first regularly Scheduled class day .................................................. 100%
- During the first, second or third class day ......................................................... 80%
- During the fourth, fifth or sixth class day ..................................................... 50%
- Seventh day of class and thereafter .............................................................. None

**Session length less than 5 weeks**
- Prior to the first regularly Scheduled class day .................................................. 100%
- During the first class day ............................................................................... 80%
- During the second class day .......................................................................... 50%
- Third day of class and thereafter ......................................................................... None

**Special Notes:**
- Refund percent is applicable to tuition and mandatory fees only. Optional fees are not refundable.
- If a student has not paid the total amount of the tuition and mandatory fees by the date the student withdraws, Sul Ross State University will credit the amount to be refunded toward the payment of outstanding tuition and mandatory fees owed by the student. If any portion of the amount to be refunded remains after the outstanding tuition and mandatory fees have been paid, a refund will be issued in that amount.

**Refund for Dropped Courses**
Should a student reduce his/her semester hours by officially dropping a course or courses in a term, the following refund rates will apply, provided the student remains enrolled in the term at
Sul Ross State University:

**Regular Session (16 weeks)**
During the first twelve class days .................................................................................. 100%
After the twelfth class day .............................................................................................. None

**1st or 2nd 8-Week Session in a Fall or Spring**
During the first four class days ..................................................................................... 100%
After the fourth class day .............................................................................................. None

**Summer Session I or II (5-6 weeks)**
During the first four class days ..................................................................................... 100%
After the fourth class day .............................................................................................. None

**Mid-winter Session (2 weeks)**
During the first class day ............................................................................................... 100%
After the first class day ................................................................................................. None

A class day is a regular day of Scheduled classes at the University (i.e. a full week, Monday to Friday, will have 5 class days). The first twelve class days are the first twelve days of regular class meetings on the University campus. These rates apply to total tuition and fee charges for the semester. An immediate refund will not be made at the time a student withdraws or reduces his/her hours during a semester, but upon request, a check covering all refunds due will be mailed within approximately 30 days to the address left at the Cashier's Office.

**STUDENT LIFE PROGRAMS AND SERVICES**

Sul Ross State University recognizes the importance of providing opportunities for the academic, career, and personal development of its students. Co-curricular activities, programs, and services which enhance the student’s total development are therefore, viewed as an integral aspect of the student’s college education.

The purpose of the Student Life Division is to support and enhance the educational mission of the University. The goals of the Student Life Division are based on the following beliefs:
1. Each student is unique.
2. Growth and learning should be geared toward the development of the whole individual.
3. Student involvement enhances both growth and learning.

Some functions of the Student Life Division are:
1. To plan and provide programs, services, and activities to broaden students’ opportunities for personal, educational, social, and cultural development.
2. To develop leadership through participation in campus and community activities.
3. To design programs and services that complement classroom activities.
4. To assist students toward realization of their personal, academic, and career goals.
5. To help students achieve their potential as human beings and become self-directed individuals.
6. To provide a safe and healthy environment, in and out of the classroom, in which students can grow and learn.

Student Life programs and policies are designed to complement and enhance the students’ educational goals. Any student in need of assistance or information may contact the Student Life Office located in the University Center, Room 211, and telephone (432) 837-8037.
DINING ON CAMPUS

Sul Ross State University partners with ARAMARK Higher Education, Campus Dining, to provide dining experiences throughout the University. Campus Dining offers an all you care to eat residential dining room located in the University Center. The options include several venues which offer made to order entrees, healthy salads and wraps, as well as sandwiches, burgers, and a variety of pizza, pasta, and sauces. Campus Dining is open seven days a week with menu options changing for breakfast, lunch, and dinner. Retail outlets are available in the University Center and in the Lobo Village Community Building offering convenience items and snacks.

The University Food Committee meets regularly with the Director of Dining Services to discuss menus and service in the dining room and the retail outlets. This committee also assists in planning special events throughout the semester.

COUNSELING AND ACCESSIBILITY SERVICES

The staff of the Counseling and Accessibility Services Department strives for student success and for Sul Ross State University to be a safe, healthy learning environment for all involved-students, staff and faculty.

The Counseling and Accessibility Services office is located in Ferguson Hall, Rm. 112, (432) 837-8203.

Counseling

Counseling is an integral part of the Counseling and Accessibility Services office and the student-centered educational mission at Sul Ross State University. This office provides a supportive environment that helps facilitate positive change and promotes mental health and emotional well-being on campus.

The office is staffed with Licensed Professional Counselors. Services are confidential and free of charge to students, staff, and faculty of Sul Ross as well as their immediate family members. Any problem which is interfering with a person’s ability to function well in the academic or non-academic environment is appropriate for counseling.

The services provided include but are not limited to the following:

* Brief, short-term individual and group counseling to address such issues as:
  Adjusting to college
  Homesickness
  Anxiety and Stress
  Test anxiety
  Depression
  Suicidal thoughts and feelings
  Relationship issues
  Substance and alcohol abuse
  Self-esteem
  Eating disorders
  Personal Growth and Development
  Other related issues

* Workshops, presentations, and screenings promoting mental health.

* A comprehensive referral network to off-campus providers.

* Crisis intervention.

Services may be obtained by calling 432-837-8203 or coming by Ferguson Hall Rm. 112,
ACCESSIBILITY SERVICES

Sul Ross State University supports equal employment and educational opportunities for all persons. No person shall be excluded from participation in, denied the benefits of, or be subject to discrimination under any program or activity sponsored by Sul Ross State University on any basis prohibited by applicable law, including but not limited to race, color, national origin, religion, sex, age, or disability.

Sul Ross State University is committed to compliance with the Americans with Disabilities Act of 1990 (ADA) and Section 504 of the Rehabilitation Act of 1973. Qualified students with disabilities needing academic or other accommodations to facilitate full participation in our programs, services and activities should contact the Accessibilities Coordinator, Ferguson Hall Room 112, Monday – Friday 8:00 a.m. – 5:00 p.m., 432-837-8203.

Documentation by appropriate professionals should be provided to this office well in advance of the anticipated need for disability accommodations. An appointment should be made with the Coordinator to discuss individual needs, and specific requests. Please allow time for our office to process each request on a case-by-case basis, make recommendations and arrange for appropriate and reasonable accommodations. Counseling services are provided for interested students.

CAMPUS ACTIVITIES OFFICE

The Campus Activities Office, located in the University Center, Room 108, operates under the concept of a broad-based educational environment. Co-curricular activities, available through campus organizations, Sully Productions offer valuable experiences which complement the educational mission of the University. Through Campus Activities, students are offered the opportunity to interact with other students, faculty, and staff, maximizing professional and personal development. Students are encouraged to take advantage of leadership opportunities and are supported through leadership training and communication with advisors. The Campus Activities staff members serve as resources to all campus organizations.

STUDENT TRAVEL POLICY

The University sponsors numerous off-campus activities involving students. To effectively manage these activities, the University has developed guidelines, which may be found in the Student Life Office, UC 211. These policies pertain to any official travel undertaken by one or more students to reach an event or activity that is located more than 25 miles from the campus. These policies are also to be in effect whenever a University vehicle is used or University funds are used to lease a vehicle. One individual who oversees the activity is identified as the responsible university official and is responsible for insuring compliance with this policy.

CAMPUS ORGANIZATIONS

Campus organizations provide an important aspect of student life at the University. Membership in organizations enhances students' social, personal, career, and academic interests. The educational and recreational values gained from such membership are rewarding. The Campus Activities Office will assist organizations and help students interested in forming new organizations.
STUDENT GOVERNMENT ASSOCIATION

The Student Government Association, as the student governance organization, exists for the sole purpose of serving the student community. The University recognizes the need for, and the worthwhile contribution of, student input in all facets of the University decision-making process. The Student Government Association is active in this regard and works for the betterment of student life and academic quality. The Student Government Association Senate meets weekly in open meetings, and students are encouraged to participate in their government. Copies of the Constitution and other information may be secured at the Student Government Association Office, located in the University Center, Room 201.

RECREATIONAL PROGRAMS

The Recreational Sports Program at Sul Ross State University is housed at the Graves-Pierce Recreational Complex. As part of recreational programs, we offer a comprehensive Intramural Program. Intramural activities are both team and individual oriented which include offerings such as flag football, volleyball, basketball, indoor soccer, water polo, softball, kickball, dodgeball, and racquetball. These programs are open to all students, faculty and staff and are geared to both competitive and recreational sides.

Wellness and Fitness Classes are offered daily in the Graves-Pierce Complex. These classes include Yoga, Pilates, BOSU, Tia Chi, Spinning, Self Defense, Dance, Qigong, and Meditation. The Schedule is set at the beginning of each semester and is determined by the instructor. Please stop by and try something new and challenging to both your body and mind.

The Graves-Pierce Complex has numerous opportunities for you to exercise or take part in drop-in activities. The Complex has four racquetball/handball courts, basketball/volleyball court, indoor track, cardio room, weight room, dance studio, sauna, hot tub, and locker rooms.

The Swimming Pool is another amenity we have on campus. The pool is heated using solar power and has recently been changed to a salt-water pool. It is a great way to get in a full body workout or just come and relax and have a good time. The hours of operation are determined at the start of each semester.

Employment opportunities in the Recreational Sports Department abound. From Intramural officials in basketball, flag football, and many others, to front desk attendants, lifeguards, and special events staff. For more information, contact us at 432-837-8299.

STUDENT SUPPORT SERVICES

Student Support Services is an academic support program designed to increase the academic performance, retention rates, and graduation rates of 160 program participants. A grant program funded through the U. S. Department of Education, SSS offers academic advising, career/major counseling, personal support, academic support programs, financial aid counseling, and social/cultural activities.

You may qualify for Student Support Services if you have a need for academic support and meet any of the following eligibility criteria:

- Meet federal low-income guidelines.
- Neither parent has a baccalaureate degree
- Have a federally recognized disability

You must fill out an application in order to participate in Student Support Services. Applications can be obtained by visiting the Student Support Services office in Ferguson Hall 105, by calling
the office at (432) 837-8118, or online at http://www.sulross.edu/page/3448/student-support-services-program-application.

UNIVERSITY HOUSING

The University offers on-campus residential living, which provides unique educational and social exchanges that are an integral part of an overall education. Each student has the responsibility for respecting the rights of others and for maintaining an atmosphere conducive to studying and to harmonious social life.

General Housing Policy

Sul Ross State University requires all single undergraduate students who are enrolled for 9 or more credit hours in the long semesters (fall and spring) and 5 or more credit hours in the summer semesters to reside in the residence halls for the first two full academic years (August – May) of their education.

Exceptions to this policy are made for students who: (1) live at home within a 100-mile radius with their parent(s), legal guardian, or grandparents; (2) are married; (3) are a single parent with children living with them; (4) are veterans and have spent at least twelve months on active duty; or (5) are 21 years of age or older by the first class day of the fall semester. Permission to live outside a residence hall must be obtained from the Director of Residential Living prior to the start of class in any semester or summer term for which the exemption is sought. Proper documentation must be presented. All students living in a residence hall are required to be on one of the University meal plans.

The University reserves the right to terminate any permission to live off campus. Failure to comply with housing requirements may result in disciplinary action, which may include forfeiture of deposits and/or the cancellation of registration for the student.

Housing Facilities

Sul Ross provides two residence halls with 484 beds for single students and 60 efficiency apartments for individual students 21 years or older. There are 40 university housing units available for married couples and students with children. To qualify for University student housing, a student must enroll in classes on a full-time basis each academic term.

Reservations

Prospective students should first obtain official admission to the University from the Admissions Office before applying for housing. Application for admission to the University and application for University housing accommodations are separate transactions. Space in University housing is reserved on a first-come, first-served basis.

A. Residence Hall: Students wishing to make housing reservations should fill out a housing application, which may be obtained from the Residential Living Office. The housing application must be accompanied by $50 non-refundable application fee. A $200 housing deposit is due before the first day of occupancy. Suite mate requests are granted when space is available and when both applications indicate the same preference. Theme community requests are assigned by order of preference as space permits. All students who apply for accommodations in the residence halls and are accepted sign an agreement for the full academic year (August-May).

B. Efficiency Apartments: Individual students who are 21 years or older, may apply to live in the efficiency apartments by filling out an apartment application which can be obtained from the Residential Living Office. The apartment application must be accompanied by $50 non-refundable application fee. A $200 housing deposit is due before the first day of occupancy. All individuals living in University apartments must be enrolled in classes on
a full time basis each academic term. Apartment rent continues during the entire time the student has occupancy of the unit. Students who apply for an efficiency apartment are placed on a first come first served waiting list based on the date the deposit is received by Residential Living.

C. **Family Housing:** A family housing application, which may be obtained from the Residential Living Office, should be filled out and submitted to the Residential Living Office with a $50 non-refundable application fee. A $200 housing deposit is due before the first day of occupancy. A spouse or children (full custod of children) must be living with the student in order to obtain family housing and only immediate /dependent members of the same family may reside in a unit. The official (not common-law) marriage certificate must be presented. Rent continues during the entire time of occupancy. The student renting the unit must be enrolled full time each term. Students who apply for a family housing apartment are placed on a first come first served waiting list based on the date the application fee is received by Residential Living.

D. **Theme Communities:** Themed halls and/or wings bring together students with similar interests, goals, and attitudes and provide specialized programming to explore those ideas. Theme communities will provide opportunities for civic responsibility, self-awareness, discipline, as well as a strong sense of community. We don’t have themed housing anymore until we implement it.

**REFUND OF ROOM AND BOARD FEES**

If you have requested a room reservation and wish to cancel it, the request must be done in writing by the following dates in order to receive a refund: by August 1 for Fall, by December 15 for Spring; by May 1 for Summer I; and by June 1 for Summer II.

When you finish your schooling, you may request a refund of your deposit. This request may be submitted in writing at the time of checkout or after the checkout process is completed. Any damage, cleaning charges for incurred or money owed to the university, may be deducted before the balance is refunded. If a deposit goes unclaimed or unused for one year, the deposit will be forfeited.

If you live on campus and withdraw from the University during the semester or summer term, you must check out with a Residential Living staff member. If a student moves out of a residence hall during the semester, the deposit will be forfeited. Students leaving Alpine during the semester to complete their student teaching, who are still enrolled, may check out of University housing without forfeiting their deposit.

You must complete the checkout procedures with the Residential Living staff at the end of your contract term. The living quarters must be clean, all trash and personal items removed, and the key must be returned at the time of checkout. You will be assessed for any damages sustained during the occupancy period and/or for a cleaning charge if your room or housing unit is left unclean. Such charges will be deducted from your housing deposit or unused housing payment. If charges exceed your deposit or unused payment, you will be billed for the remainder of the damage charge.

Students who have paid housing fees during a regular semester and officially withdraw and check out of the residence hall or, if permitted, move out of the residence hall to live off campus, are entitled to a refund of housing fees as follows:

<table>
<thead>
<tr>
<th>Period</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prior to the first regularly Scheduled class day</td>
<td>100%</td>
</tr>
<tr>
<td>During the first five class days</td>
<td>70%</td>
</tr>
<tr>
<td>During the second five class days</td>
<td>60%</td>
</tr>
<tr>
<td>After the second five class days until first installment plan due date</td>
<td>40%</td>
</tr>
</tbody>
</table>
After the first installment due date until the second installment due date ................................ 15%
After the second installment plan due date ................................................................. none

**Family Housing and Apartments**
Rent is due at the beginning of each semester, or can be set up on an installment plan. Rent fees may not be carried over to future academic terms. If rent is not paid within 30 days of the due date, the resident may be asked to leave. Rent charges begin when the key is issued and continue until the key is returned and checkout completed through the Resident Assistant or the Office. Residents are expected to move out within three days of the end of finals of the last semester for which they are enrolled or plan to live in University housing. All University housing units are completely furnished and include all utilities except telephone. The student may contact the local telephone company to install telephone service as needed. A background check is required for eligibility for apartments and family housing.

**STUDENT HEALTH SERVICE**
Student Health Service is located in the University Center, Suite 211. The office is staffed by a registered nurse who can assess student health needs, treat minor injuries and illness. Over-the-counter medication is available for symptomatic relief.

In addition to the on-campus nurse, itemized routine care is outsourced through a local medical provider. In office screens for strep throat, pregnancy, urinary tract infection, blood sugar and anemia are covered. Students are responsible for the cost of diagnostic tests, medical procedures, prescription medications and all health care received outside the university’s medical vendor and campus nurse.

**Immunization Status**
**Meningococcal vaccination** is required by Texas law for new and transfer students under 22 years of age who are on campus. Student must be vaccinated against meningococcal no later than ten days before the semester begins. Proof of immunization may be faxed to (432) 837-8411. Although not mandated, students are encouraged to have their other immunizations reviewed and updated. They also need to check with their academic advisor about special vaccination needs for their educational program(s). International students must show evidence of childhood immunizations and have a recent tuberculin skin test with a negative result or proof of medical clearance.

**STUDENT HEALTH INSURANCE**
Sul Ross does not sponsor a Student Health Insurance Plan (SHIP). For this reason, non-insured students are strongly encouraged to purchase comprehensive health insurance. International students must have a health and repatriation policy that is good in the United States. Athletes should check with the university’s physical education department about limited supplemental accident coverage.

For more information on health services, phone (432) 837-8102 or see the menu under student life at [http://www.sulross.edu](http://www.sulross.edu).

**CAREER SERVICES AND TESTING CENTER**
Career Services is located in the University Center, Room 211B (432-837-8178). Web site [http://www.sulross.edu/page/111/career-services](http://www.sulross.edu/page/111/career-services). We provide career and testing services for students and alumni. Office hours are 8:00 a.m. to 5:00 p.m., Monday through Friday. Staff members are available to provide assistance in initiating, developing, and effectively
implementing career plans. The office also assists students in locating on campus and off-campus employment. Services are provided to:

- Entering students, in selecting a major by exploring career options;
- Freshmen and sophomores, in tailoring career decisions, considering options such as graduate study, and specializing in a chosen field;
- Juniors and seniors, in selecting a graduate program, securing an internship, writing a resume and cover letters, preparing for interviews, career planning and job search strategies.
- Graduating students and alumni, in accessing job openings career planning and job search strategies.

Individual consultations are available to assist students with college and career related concerns. Job fairs are held annually giving students the opportunity to visit formally with prospective employers. Reference material is maintained and software programs on colleges, school directories, career exploration, self-assessment, job search skills, and resume writing are available.

A web page is maintained by the office as a starting point for conducting job searches via the internet, http://www.sulross.edu/page/111/career-services.

**TESTING SERVICES**

Testing Services, available through the Career Services in Room 211B, University Center (432) 837-8357, administers all standardized testing for the University. Students and prospective students may acquire applications for national/state tests. Local tests require registration or appointments. Exams for college credit (such as CLEP), proficiency examinations (such as the GED), and others may be taken through the Career Services by appointment.

Information on fees, test dates and registration packets are available in the office or on the web at http://www.sulross.edu/page/113/testing-services. The following tests are scheduled for administration on campus on selected national test dates:

- **ACT** (American College Test)
- **GRE** (Graduate Record Examination), General paper based and subject tests
- **LSAT** (Law School Admission Test)
- **SAT** (Scholastic Assessment Test)
- **TExES** (Texas Examinations of Educator Standards) Other tests administered by arrangement/appointment include:
  - **ACT-Residual** (scores reported only to SRSU admissions and used for consideration for admission to SRSU only. Test is offered prior to summer registrations only)
  - **TSIA** (Texas Success Initiative Assessment)
  - **CLEP** (College Level Examination Program)
  - **COMPASS AND Accuplacer**
  - **DANTES** (Defense Activity for Nontraditional Education Support)
  - **GED** (General Educational Development); high school equivalency.
  - **TEAS** (Test of Essential Academic Skills)
  - **TCLEOSE Peace Officer and Jailer Exams**
  - **Online and Correspondence course exams proctoring services**
  - **Aptitude/Interest assessments**
Students are encouraged to register for testing by calling the Career Services Center. Upon arrangement, the Career Services Center will administer exams to groups and classes.

**VEHICLE REGISTRATION**

All faculty, staff, and students, full or part-time, and visitors, who operate a vehicle on university property, regularly or occasionally, are required to register the vehicle with the University Department of Public Safety and obtain a parking permit. Parking and Traffic Regulations governing the operation of motor vehicles on university property are published in the Student Handbook and on the [UDPS website](#).

**POST OFFICE**

The University Post Office serves students, faculty, and staff. All students are required to have a local mailing address and the campus post office provides a convenient, economical service. The post office window is open from 8:00 a.m. - 4:30 p.m., Monday through Friday. Money orders may be purchased from the Post Office on weekdays when the window is open.

**UNIVERSITY CENTER**

Located at the north end of the mall, the University Center is the focal point of campus life. This 8.5 million dollar, 57,000 square foot facility is a gathering place for students, faculty, and staff wishing to relax and visit with members of the University community. The University Center houses the offices of Student Life, UC Services, Career Life Center, Student Health Services, Campus Activities, Alumni Affairs and the Student Government Association.

The University Center provides students with easy access to the bookstore, post office, food court, and an ATM. The Game Room has pool tables, flat screen television complete with video games, as well as ping-pong and a variety of board games. The student lounge is equipped with a large-screen television for students to enjoy.

A variety of meeting rooms can accommodate groups from 30 to 300, with state-of-the-art audio-visual equipment. These rooms are used extensively by campus groups, as well as organizations and individuals from the surrounding community. For information on room use, fees and configurations contact the UC Services Coordinator at (432) 837-8191 or visit our [University Center website](#).

**SULLY PRODUCTIONS**

Sully Productions consists of students, faculty, and staff who volunteer their time to select, promote, and produce a variety of programs. Concerts, comedians, movies, and other activities are provided for little or no admission charge. Experience gained in working with Sully Productions can be of tremendous value while in school, as well as after graduation. For information about membership, contact the Campus Activities Office, Box C-190, Alpine, Texas 79832, or call (432) 837-8191.

**UNIVERSITY BOOKSTORE**

The Bookstore is owned by the University and leased to Texas Book Company. Its purpose is to serve the campus community by stocking required books and academic-related supplies. The Bookstore also stocks art and drafting supplies, gifts, candy, souvenirs, novelties, first-aid supplies, drug items, and University imprinted clothing. Books may also be special ordered
Refund Policy
A valid receipt and picture identification are required for all refunds. Refunds will be given in the same form as original payment.

Textbooks
- FULL REFUND, IF RETURNED WITHIN FIVE DAYS AFTER CLASS STARTS
- Scratch Web Access codes or books outside wrapping may not be returned.
- With proof of schedule change, a full refund will be given with a receipt during the first 30 days of classes.
- No refunds given on textbooks without a receipt.
- No refunds on custom course materials, outlines, or study guides.
- Textbook returned must be in original condition
- Medical & specialty reference book refunds will be given if presented with a receipt within three days of purchase.

All Other Merchandise
- FULL REFUND WITH A RECEIPT.
- With a receipt, unopened software may be exchanged or refunded.
- All merchandise returned must be in original condition.

Buyback Policy
The best time to sell your used books is during finals week.

We will pay you 50% of the book’s selling price, if it was requested by your professor for required use next term and the bookstore is not overstocked.

If the book does not meet these criteria, the prices we pay are based on the current national demand. All books must be in good condition.

Some books have little or no monetary value. Out of print books and old editions are not in national demand, and we cannot buy them.

Please remember: For the protection of the students on campus, we always require those selling books to show current student identification.

TELEPHONE SERVICE

Students have access to local calls and emergency numbers 24 hours a day. For emergencies dial 911, or dial 8100 for the University Department of Public Safety. The University switchboard number is (432) 837-8011. To dial a local off-campus call, dial "9," wait for the dial tone and dial the local number. Long distance calls may be made by dialing "0" for the campus operator. The campus operator will connect the call for the student. All calls must be billed as collect, 3rd party or calling card calls. Toll free "800" numbers, MCI, and Sprint systems are accessible through the companies "1 + 800" numbers. NO STUDENT IS ALLOWED TO ACCEPT COLLECT CALLS OR BILL TO AN ON-CAMPUS NUMBER. For information, dial the campus operator at "0" from an on-campus telephone or 432-837-8011 from an off campus telephone. Switchboard hours are Monday-Friday 8:00 a.m. to 5:00 p.m. Students must provide their own telephone sets. A single line telephone is the best type of telephone to use with our Northern Telecom Meridian 1 telephone system.

Arrangements for telephone service in apartments and married housing must be made by the occupant directly with the telephone company.
FINANCIAL AID

The Center for Enrollment Services strives to develop and implement programs and activities designed to enhance the image and visibility of the University as a quality educational institution.

Services include answering questions about financial aid and giving financial aid talks to area high schools. This office strives to maintain good public relations with high schools through regular visitation. Financial Aid Specialists also serve as liaisons between parents and other University offices. The Center staff coordinates all scholarships offered at Sul Ross State University.

It is the philosophy of the administration at Sul Ross State University that any deserving and capable student who wishes to attend the University should not be deprived of that opportunity due to financial need. Underlying this philosophy is the belief that the primary responsibility of financing a student's education rests with the student. However, because of the variety of financial backgrounds from which students come, it is sometimes necessary to seek outside help to cover normal education costs, which cannot be met by the family. It is the purpose of the Center for Enrollment Services at Sul Ross State University to assist students in obtaining financial aid necessary to cover this cost.

Students desiring to obtain information on how financial aid awards are determined, basic education expenses, method of financial aid disbursement, financial aid refund requirements for students withdrawing from the University, satisfactory academic progress requirements, or more information concerning any of the financial aid programs should contact the Center for Enrollment Services at (432) 837-8050 or by mail at Box C-2, Alpine, Texas 79832 or visit Lawrence Hall Room 100 on the SRSU campus.

ORIENTATION PROGRAMS

Orientation programs are coordinated through the Lobo Den Freshmen Center to help new and transfer students adjust more easily and successfully to Sul Ross State University. Participation in orientation programs helps students and their parents better understand the University’s expectations for students, available programs, as well as co-curricular, social, and recreational activities.

**Sully's Orientation, Advising and Registration (SOAR)**

In the summer, one-day advising and registration events are offered to all new incoming students. Students are able to come to campus for one day and meet with their academic advisors, get advised and registered in classes as well as take care of any university business such as residential living, cashiers, and financial aid. There is no fee for SOAR. The schedule for SOAR can be viewed on the Sul Ross web site.

**Lobo Days Orientation/Welcome**

All new students are required to attend Lobo Days Orientation, which takes place before school starts in August.

Orientation engages students with their peers, builds traditions, introduces students to student life activities, and provides breakout sessions to learn about resources available to all students at Sul Ross State University.

Parent sessions are provided for parents regarding resources and student life.

The schedule for Lobo Days can be viewed on the Sul Ross web site.

Students are charged a fee of $125 to their tuition and fee bills.
For additional information about SOAR and Lobo Days, contact the Lobo Den Freshman Center at (432) 837-8982 or Box C-61, Alpine, Texas 79832.

ALUMNI AFFAIRS OFFICE & SUL ROSS ALUMNI ASSOCIATION

Alumni Affairs acts as a liaison between the University and former students and operates the Sul Ross State University Alumni Association. The Alumni Association keeps alumni informed and connected to the University by providing them with news, social and professional networking activities, and opportunities for service. For more information, visit the Alumni Association webpage at [www.sulross.edu/alumni](http://www.sulross.edu/alumni).

SCHOLARSHIPS

Sul Ross State University offers many outstanding academic scholarships for beginning freshmen as well as students currently enrolled who excel in areas of academic achievement and leadership.

Interested students should contact the Center for Enrollment Services at (432) 837-8050, by mail at Box C-2, Alpine, Texas 79832, or visit Lawrence Hall Room 100 on the SRSU Campus.

GENERAL ACADEMIC REGULATIONS

General Information and Student Responsibility

All students are responsible for familiarizing themselves with the academic regulations stated in this catalog; unfamiliarity does not constitute a valid reason for failure to fulfill them.

Students who change their permanent or local addresses or change their phone number must notify the Center for Enrollment Services. The permanent address is a mailing address at which the student can be contacted indefinitely. This address was collected from the application for admission and may be a parent’s address (although it does not have to be). This address can be viewed but not updated in Lobo OnLine. Students must submit a [Change of Information Form](#) to change the permanent address. The local address is the address at which the student receives mail. This may be a temporary Alpine address but could also be the same as the permanent address. This address can and should be updated in LoboOnLine as the mailing address changes. For instance, a student may elect to receive mail at a campus post office box during the fall and spring semester, but have mail go to a different address in the summer. The local address is used preferentially for all official communication regarding the student’s status at Sul Ross State University, including financial aid notifications and refunds, academic standing information, disciplinary actions, etc. If a local address is not provided, invalid, or inactivated, the permanent address will be used for official communication. Students are responsible for any communications from any university official sent to them at the addresses provided to the Center for Enrollment Services.

All students are provided a Sul Ross email address. The University sends much of its correspondence solely through email. This includes policy announcements, emergency notices, event notifications, financial assistance information, course syllabi and requirements, and correspondence between faculty and students. Such correspondence is mailed only to the university official email address.
ASSESSMENT OF STUDENT OUTCOMES

To meet the requirements of accreditation and to provide for continuing academic program development and evaluation, the university must assess academic programs on the basis of students’ outcomes. To assess such outcomes, students may be required to take additional examinations, participate in surveys, and/or provide samples of their work throughout their academic career.

ACADEMIC ADVISING

Academic advising is in many ways the most important service provided to students by the University. Careful, professional advisement can help entering students begin their college work properly, make systematic progress toward fulfilling requirements for a degree as they progress from semester to semester, ensure that they will be eligible for graduation upon satisfactory completion of the requirements, and assist students in making career choices.

Lobo Den

The Lobo Den has been established to help meet the needs of first- and second-year students at the University. The Lobo Den is the advising center for all new students from their first semester through their third semester.

Lobo Den professional advisors are responsible for advising all first time freshmen, transfer students under 30 hours, undeclared majors, and Texas Success Initiative (TSI) non-compliant students. The objective of the professional advisor is to get the student started on their way through the Core Curriculum. Students must complete 12-18 hours of core courses their first year at SRSU. The Lobo Den advisor will advise students through their third long semester at which time they will be transitioned to their major department faculty advisor. See Advising Chart below.

<table>
<thead>
<tr>
<th>Student Type</th>
<th>1st Semester</th>
<th>2nd Semester</th>
<th>3rd Semester</th>
<th>Transition to Faculty</th>
<th>4th Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>Incoming Freshmen</td>
<td>LOBO DEN</td>
<td>LOBO DEN</td>
<td>LOBO DEN</td>
<td>Registration for next semester</td>
<td>FACULTY ADVISOR</td>
</tr>
<tr>
<td>(Students will be encouraged to meet with their faculty advisor after they have registered in classes to begin the transition)</td>
<td></td>
<td></td>
<td></td>
<td>Registration for next semester</td>
<td></td>
</tr>
<tr>
<td>Transfer under 30 hours (not at risk)</td>
<td>LOBO DEN</td>
<td>30 hours or more faculty advisor</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TSI Non-Compliant</td>
<td>LOBO DEN</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(LOBO DEN until compliant and move to faculty advisor the semester after they become compliant)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Index 49 TOC
| Undeclared                          | LOBO DEN until they declare a major |  |  |  |  |
|------------------------------------|-------------------------------------|  |  |  |  |
| Probationally Admitted First Semester Freshmen (All students will be placed in an NCBO for tutoring or academic Success Workshops) | LOBO DEN | LOBO DEN | LOBO DEN | Registration for next semester | FACULTY ADVISOR |

**Advising Holds**
All undergraduate students are assigned a permanent Advising Hold that requires they meet with their academic advisor. If a student is assigned to a Lobo Den advisor, they will have a “Must See Lobo Den Advisor” hold. If a student is assigned to a major department faculty advisor, they will have a “Must Contact Major Advisor” hold. A student must meet with an academic advisor to have their hold waived and complete any registration process.

**PRE-PROFESSIONAL ADVISING**
Students who intend to pursue their education in the professional fields listed below after they complete a degree or a portion of the professional requirements at Sul Ross State University should seek the advice and counsel of the advisor indicated.
- Allied Health Areas: Medicine, Dentistry, Dental Hygiene, Pharmacy, Chiropracty, Medical Technology, Optometry by Christopher Ritzi, Professor of Biology
- Engineering by Angela M. Brown, Assistant Professor of Mathematics
- Law by David Watson, Associate Professor of Political Science
- Nursing by Kristen Wright, Instructor of Vocational Nursing
- Physical Therapy by Christopher Ritzi, Professor of Biology
- Veterinary Medicine by Jamie Boyd and Rebecca Splan, Assistant and Associate Professors of Animal Science

**FIRST YEAR SEMINAR**
All new incoming students to Sul Ross State University with fewer than thirty semester credit hours (sch) are required to take SRSU 1101, First Year Seminar, or an equivalent course. Students, invited to be part of the Freshmen Leadership Program, will meet the requirement with their FLP 1101 course completion. Students admitted into the College of Agricultural and Natural Resource Sciences fill the requirement by completion of ANSC 1101 or NRM 1101. SRSU 1101, a one semester-credit-hour course, is taught by faculty and staff representing
departments across campus and is designed to foster student success, development, and transition into, through and out of Sul Ross State University.

Students, who transfer into Sul Ross State University, may be exempt from meeting the first year seminar requirement.

A student is exempt if:

- they transfer 12 semester credit hours or more (excluding dual credit hours) and have a grade point average of 2.5 or higher;
- they are 24 years of age or older and never have attended college, are also exempt from meeting the first year seminar requirement.

If a student has taken an equivalent course at another university, e.g., College 101, University 101, the transferred course may be substituted for SRSU 1101.

**TEXAS SUCCESS INITIATIVE**

Texas law requires institutions of higher education to assess the academic skills of each entering undergraduate student to determine the student’s readiness to enroll in freshman-level academic course work. The assessment or the results of the assessment may not be used as a condition of admission to the institution.

Sul Ross State University utilizes the Texas Success Initiative Assessment (TSIA), an assessment instrument approved by the Texas Higher Education Coordinating Board that is diagnostic in nature and designed to assess a student's readiness to perform freshman-level academic course work.

Sul Ross State University has established a program to advise students regarding course work and other means by which students can develop the academic skills required to successfully complete college-level work.

If a student fails to meet the assessment standards, Sul Ross State University will work with the student to develop a plan to assist the student in becoming ready to perform freshman-level academic course work. Plans are designed on an individual basis to provide the best opportunity for each student to attain that readiness.

Sul Ross State University may refer a student to pre-college course work as considered necessary to address a student’s deficiencies in readiness to perform freshman-level academic course work. We will not require enrollment in developmental course work with respect to a student previously determined by any institution of higher education to have met college-readiness standards.

A student who has achieved certain minimum scores on the Scholastic Assessment Test (SAT), the American College Test (ACT), the Texas Assessment of Knowledge and Skills (TAKS), or the STARR end-of-course exams may be exempt from these requirements.

The Texas Success Initiative does not apply to:

A. a student who has graduated with an associate or baccalaureate degree from an institution of higher education;
B. a student who transfers to an institution of higher education from a private or independent institution of higher education or an accredited out-of-state institution of higher education and who has satisfactorily completed college-level coursework;
C. a student who is enrolled in a certificate program of one year or less (*Level-One certificates, 42 or fewer semester credit hours or the equivalent*) at a public junior college, a public technical institute, or a public state college;
D. a student who is serving on active duty as a member of:
   1. the armed forces of the United States; or
   2. the Texas National Guard
E. a student who is currently serving as and, for at least the three-year period preceding enrollment, has served as a member of a reserve component of the armed forces of the United States; or
   1. a student who on or after August 1, 1990, was honorably discharged, retired, or released from:
      a. active duty as a member of the armed forces of the United States or the Texas National Guard; or
      b. service as a member of a reserve component of the armed forces of the United States
F. a non-degree-seeking or non-certificate-seeking student.

The Lobo Den professional advisors determine placement for TSI development courses utilizing an Individual Education Plan.

Developmental courses (numbered 0100-0999; ED B100, ENG B100, EMATH B100) are courses intended for students who may lack the necessary skills for entering collegiate level courses. These courses are not considered in determining academic standing. Since these courses are pre-collegiate level, they shall not be used to satisfy any requirement for graduation. These courses are not used for computation of cumulative grade point average for graduation, determination of class standing, eligibility for the Dean's List, or for eligibility for graduation with honors. For additional information on who must participate in the Texas Success Initiative, prospective students should contact The Lobo Den, the Academic Center for Excellence, or the Career Services and Testing Office at Sul Ross State University.

**CLASS ATTENDANCE**

Regular class attendance is important to the attainment of the educational objectives of the University. Therefore, students should attend all classes.

Attendance includes being punctual for class and ready to engage with the professor and the day’s material. The instructor's policy on class attendance will be explained at the beginning of the semester or term. In accordance with the instructor’s policy, the instructor has the right to penalize students who are out of compliance with the class attendance policy.

**Authorized/Excused Absences Statement.** An absence because of participation in an official University activity is considered to be an authorized/excused absence. While every effort will be made by departments to minimize missed class time of students by careful scheduling of authorized University activities, when a student has to miss a class due to an authorized University activity, it will be the responsibility of the student to notify the instructor of the class in advance. The department responsible for the authorized University activity will also notify instructors through the Student Life Office by providing an excused absence list to the office. Instructors will give students participating in an authorized University activity the opportunity to make up class work, including tests, within a reasonable time and at the convenience of the instructor.

Should an instructor have an attendance policy that allows for the dropping of a student after a certain number of absences, authorized/excuses absences will not be counted towards that number of absences. Any student dropped for excessive absences will receive either an “F” or a “W” depending upon the faculty member’s discretion.

**Distance Education (Web-course) Non-Participation Statement.** Policies in effect for on-
campus, traditional classroom instruction courses also apply to students enrolled in distance education courses, including Web-based and ITV courses.

Non-participation and inactivity may include not logging on to the course, not submitting assignments or participating in other assigned activities as scheduled, not communicating with the instructor by phone or e-mail, and/or not following the instructor's participation guidelines stated in the syllabus.

**Religious Holy Days Absences Statement.** In accordance with Texas Education Code 51.911, SRSU shall excuse a student from attending classes or other required activities, including examinations for the observance of a religious holy day, including travel for that purpose. A student who must miss class due to a religious holy day is required to notify the instructor of the class in advance.

A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence as determined by the instructor.

“Religious holy day” means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code.

**SIX DROP RULE**

**Students Who Were Enrolled in an Undergraduate Program Before Fall 2007**

The grade of “W” is given for courses dropped after the official census date for the term through the last day to drop a course with a “W” as published in the University’s calendar. Students who wait until the published deadline must have complied with the class attendance policy of this catalog. An instructor is not obligated to recommend a “W” for a class if excessive absences have occurred. Students will not be permitted to drop a course or withdraw from the University after the published deadline.

**New Students Who Enroll in an Undergraduate Program at SRSU Beginning Fall 2007 and Thereafter**

Students who enroll at Sul Ross State University for the first time are not allowed to drop a total of more than six courses as long as they are enrolled in an undergraduate program. This includes courses transferred from another public institution of higher education in Texas begun in Fall 2007 or after. College credit taken while enrolled in high school and below college credit courses do not count toward the total of six courses.

Any student who drops a course after the official census date of the term will receive a grade of “WX”. A student who drops a course and who has reached a total of six “WX” grades will receive a grade of “F” in all future drops.

Any course taught on a shortened format or between regularly scheduled terms will have add/drop, “WX” grade and withdrawal dates proportionally the same as if the course were offered in a regular term. These dates will be determined by the Center for Enrollment Services.

Unusual circumstances may be considered if the student can show good cause for dropping more than the allowed limit of six courses, including but not limited to:

A. a severe illness or other debilitating condition that affects the student’s ability to satisfactorily complete the course;

B. the student's responsibility for the care of a sick, injured, or needy person if the provision of that care affects the student's ability to satisfactorily complete the course;

C. the death of a person who is considered to be a member of the student's family 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;

D. the active duty service as a member of the Texas National Guard or the armed forces of the United States of either the student or a person who is considered to be a member of the student's family or who is otherwise considered to have a sufficiently close relationship to the student that the person's active military service is considered to be a showing of good cause;

E. the change of the student's work schedule that is beyond the control of the student, and that affects the student's ability to satisfactorily complete the course;

F. the loss of transportation causing the student a hardship with the commute to the campus;

G. the loss of child care that necessitates student to remain at home with dependent children; or

H. the lack of financial resources to meet requirements of course (supplies, travel, etc.).

If an appeal for unusual circumstance is approved, the student will receive a grade of “W” for the course. The decision of the Registrar shall be final. Courses in which a grade of “W” is approved will not be counted in the six total limits.

THE ACADEMIC YEAR

The academic year of the University consists of a long session and a summer session. The long session is divided into the fall semester and the spring semester. Each semester consists of fifteen weeks of classes and one week of final examinations. Within each fall and spring semester are courses taught in the first eight weeks only and the second eight weeks only. The summer session is divided into two terms, each five to six weeks in length.

THE SEMESTER CREDIT HOUR

The semester credit hour is the basis on credit. Sul Ross State University adheres to the conceptualization of the semester credit as defined by the U.S. Department of Education and the Southern Association of Colleges and Schools-Commission on Colleges. One semester credit hour is awarded for each one-hour (50 minute) class session per week for the duration of the semester with a minimum of two hours outside preparation for each in-class session. Two to three contact hours of laboratory work are considered to be the equivalent of one hour of lecture.

Alternative Course Formats:
In addition to traditional in-class instruction, the following formats are used for instruction: laboratories, studio courses, web-based courses, shortened and weekend courses, individual studies, and internship courses. The policy of the University is for each format to require the following hours of course activity per week:

- One-hour laboratory courses shall require three hours of in-laboratory and preparation time per week during the course of the semester;
- Three-hour studio courses shall require nine hours of in-studio instruction per week during the course of the semester;
- Three-hour web-based courses shall require twelve hours of activity or study time per week during the course of the semester;
- Three-hour shortened-format or weekend-format courses shall require the equivalent of nine hours of instruction and preparation per week during the course of the semester;
- Three-hour individual studies’ courses shall require nine hours of instruction and preparation per week during the course of the semester;
Three-hour internship courses shall require nine hours of instruction and on-site experience per week during the course of the semester;

Four-hour courses shall require four hours of lecture contact hours per week during the course of the semester; and

Other alternative format courses shall require the equivalent of three hours of course activity per week of a traditional semester for each credit hour awarded for the course.

CLASSIFICATION OF STUDENTS

A student is classified according to the number of semester hours successfully completed:

- 0-29 .................................................................................................................. Freshman
- 30-59 ............................................................................................................... Sophomore
- 60-89 ............................................................................................................. Junior
- 90 or more .................................................................................................... Senior

Hours completed in developmental education courses are not included for purposes of determining classification.

RELIGIOUS HOLY DAYS ABSENCES

(HB 256 78th LEGISLATURE)

In accordance with Texas Education Code 51.911, SRSU shall excuse a student from attending classes or other required activities, including examinations for the observance of a religious holy day, including travel for that purpose. A student whose absence is excused under this subsection may not be penalized for that absence and shall be allowed to take an examination or complete an assignment from which the student is excused within a reasonable time after the absence. "Religious holy day" means a holy day observed by a religion whose places of worship are exempt from property taxation under Section 11.20, Tax Code.

COURSE NUMBERING SYSTEM

The four-digit numbering system is based on the following criteria: The level of the courses is identified by the first digit as follows: freshman, 1; sophomore, 2; junior, 3; senior, 4; and graduate, 5-7. The semester credit hour is identified by the second digit. University and/or departmental codes are identified by the last two digits.

Course titles in the academic programs section of this catalog are followed by two numbers in parentheses. The first number refers to the number of lecture contact hours per week; the second refers to the number of laboratory contact hours per week. For example, (3-2) indicates three contact hours of lecture and two contact hours of laboratory each week.

Lecture contact hours are the hours per week students are required to spend in contact with faculty in a lecture setting, e.g., class, conference, seminar, individual instruction, private lesson, thesis or dissertation discussion, or independent study. Laboratory contact hours are the number of hours per week that students are required to spend in contact with faculty in an experiential situation, e.g., laboratory clinical, practicum, internship, or student teaching.

TEXAS COMMON COURSE NUMBERING SYSTEM

The Texas Common Course Numbering System is a voluntary, co-operative effort among Texas community colleges and universities to facilitate transfer of freshman and sophomore level general academic coursework. TCCNS provides a shared, uniform set of course designations.
for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis. When students transfer between two participating TCCNS institutions, a course taken at the sending institution transfers as the course carrying the same TCCNS designation at the receiving institution.

Course numbers in the academic programs section of this catalog are followed by the Texas Common Course Number prefix and number in parentheses where appropriate.

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<td>Contemporary Mathematics</td>
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<td>1342</td>
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<td>MATH 1342 Elementary Statistical Methods</td>
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<td>Introduction to Physical Fitness &amp; Sport</td>
<td>PHED 1301 Foundations of Kinesiology</td>
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<td>PHED 1306 First Aid</td>
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<td>1301</td>
<td>Introduction to Philosophy</td>
<td>PHIL 1301 Introduction to Philosophy</td>
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<td>1302</td>
<td>Ethics</td>
<td>PHIL 2306 Introduction to Ethics</td>
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<td>1303</td>
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<td>PHIL 2303 Introduction to Formal Logic</td>
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<td>1115</td>
<td>Physical Science Lab</td>
<td>PHYS 1115 Physical Science Lab I</td>
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<td>1315</td>
<td>Physical Science</td>
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<td>PHYS 1101 College Physics I (lab)</td>
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<td>PHYS 1102</td>
<td>College Physics Lab II</td>
<td>PHYS 1102 College Physics II (lab)</td>
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</tr>
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<td>College Physics I</td>
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<td>College Physics II</td>
<td>PHYS 1302 College Physics II (lecture)</td>
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<td>PHYS 2326</td>
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<td>PSYC 2319 Social Psychology</td>
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<td>Introductory Statistic for the Behavioral Science</td>
<td>PSYC 2317 Statistical Methods in Psychology</td>
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<td>PSYC 2314 Lifespan Growth &amp; Development</td>
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<td>SOCI 1301 Introductory Sociology</td>
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<td>SOC 2305</td>
<td>The Family</td>
<td>SOCI 2301 Marriage &amp; the Family</td>
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<td>Beginning Spanish II</td>
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<td>Intermediate Spanish I</td>
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<td>Intermediate Spanish II</td>
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<td>THEA 1120</td>
<td>Theatre Practicum I</td>
<td>DRAM 1120 Theater Practicum I</td>
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<tr>
<td>THEA 1121</td>
<td>Theatre Practicum II</td>
<td>DRAM 1121 Theater Practicum II</td>
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<td>THEA 1305</td>
<td>World Dance I</td>
<td>DANC 1305 World Dance I</td>
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<td>THEA 1310</td>
<td>Introduction to Theatre</td>
<td>DRAM 1310 Introduction to Theater</td>
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<td>THEA</td>
<td>1322</td>
<td>Stage Movement</td>
<td>DRAM 1322 Stage Movement</td>
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<td>THEA</td>
<td>1351</td>
<td>Acting I</td>
<td>DRAM 1351 Acting I</td>
</tr>
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<td>THEA</td>
<td>2120</td>
<td>Theatre Practicum III</td>
<td>DRAM 2120 Theater Practicum III</td>
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<td>THEA</td>
<td>2121</td>
<td>Theatre Practicum IV</td>
<td>DRAM 2121 Theater Practicum IV</td>
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<td>THEA</td>
<td>2331</td>
<td>Stagecraft</td>
<td>DRAM 2331 Stagecraft II</td>
</tr>
<tr>
<td>THEA</td>
<td>2336</td>
<td>Voice for the Theatre</td>
<td>DRAM 2336 Voice for the Theater</td>
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</table>
SCHEDULE CHANGES

Courses may be added during the regular and late registration periods for the term. Courses may be dropped through the last day to drop a course. Courses dropped through the official census date for the term do not appear on the student's permanent record. Courses dropped after the official census date for the term through the last day to drop a course will be assigned a grade of "W" or "WX" (refer to the Six Drop Rule in this catalog for more information). No courses may be dropped after the published last day to drop or withdraw.

Dropping all classes on or after the first day of a term is considered a withdrawal. An official withdrawal form must be completed and submitted to the Center for Enrollment Services. Withdrawal prior to the official census date for the term will result in no academic record for the term. A withdrawal after the official census date for the term through the last day to withdraw will result in the creation of an academic record; all classes will be reported with a grade of “W”. Requests for withdrawal will not be processed after the published last day to withdraw.

Schedule change and withdrawal forms be found online at: www.sulross.edu/registrar.

Dates for registration periods, official census dates, and last day to drop or withdraw are published on the University’s calendar at www.sulross.edu.

The refund policy for dropped courses and withdrawals may be found in this catalog and online at www.sulross.edu.

AUDITING A COURSE

Students who desire to audit a course must complete the Permission to Audit form available from the Center for Enrollment Services or at www.sulross.edu/registrar. Students must obtain permission of the instructor, the chairperson of the department, and the Registrar. Students may not audit a laboratory-type or activity course or a graduate level course. Those who audit a course do not have the privilege of participating in class in any way; they audit for the purpose of seeing or hearing only. The audit fee is $50 for each course audited. No registration for audit can be completed until the first day of classes.

NO GRADE

Students who do not desire college credit for a course may elect to take the course under the designation "NG" (no grade). To take a course under the "NG" designation, a student complete the NG Grade Option form and submit to the Center for Enrollment Services during registration or prior to the 12th class day. The no grade option is intended primarily for non-degree students who wish to improve their personal knowledge of a subject without receiving college credit. Students choosing the “NG” designation pay the same tuition and fees as students taking the course for credit and consequently are entitled to participate in all class activities and to receive the same student services available to other students.

MAXIMUM COURSE LOAD

The maximum number of hours, which may be attempted, include all semester hours attempted at all institutions, including resident courses at Sul Ross and at other institutions. The University may refuse to accept for transfer credit any credit earned from other institutions while simultaneously enrolled at Sul Ross if the combined total semester hours exceeds the number allowed.
One Long Semester
The maximum student load for a fall or spring semester for undergraduate students who are not on probation is twenty-one semester hours, including one-hour courses. The maximum student load for undergraduate students who are on probation is determined by the terms of the probation.

Summer Session
The maximum course load for an undergraduate student is eight semester hours each summer term including one-hour courses.

Excessive hours in any term must be recommended by the student’s advisor and approved by the Department Chair and College Dean.

Maximum course loads for graduate students is found in the Graduate Information section of this catalog.

FULL-TIME STUDENT
Any undergraduate student who registers for twelve or more semester credit hours in the University during a long semester is considered a full-time student. Any undergraduate student who registers for six or more semester credit hours during a summer term (summer I or summer II) is considered a full-time student.

Full-time graduate student information is found in the Graduate Information section of this catalog.

GRADING SYSTEM
At the end of each semester and each summer term final grades are recorded on the student’s permanent record in the Center for Enrollment Services.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Meanings</th>
<th>Quality Points</th>
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<tbody>
<tr>
<td>A</td>
<td>Excellent</td>
<td>4</td>
</tr>
<tr>
<td>B</td>
<td>Good</td>
<td>3</td>
</tr>
<tr>
<td>C</td>
<td>Average</td>
<td>2</td>
</tr>
<tr>
<td>D</td>
<td>Poor</td>
<td>1</td>
</tr>
<tr>
<td>F</td>
<td>Failure</td>
<td>0</td>
</tr>
<tr>
<td>F0</td>
<td>Failure/Never Attended</td>
<td>0</td>
</tr>
<tr>
<td>FX</td>
<td>Failure/Stopped Attending</td>
<td>0</td>
</tr>
<tr>
<td>I</td>
<td>Incomplete</td>
<td>Not Computed</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>Not Computed</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td>Not Computed</td>
</tr>
<tr>
<td>NG</td>
<td>No Grade</td>
<td>Not Computed</td>
</tr>
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<td>Not Reported</td>
<td>Not Computed</td>
</tr>
<tr>
<td>P</td>
<td>Pass</td>
<td>Not Computed</td>
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<tr>
<td>PR</td>
<td>Progress</td>
<td>Not Computed</td>
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<tr>
<td>W/WX</td>
<td>Withdrew</td>
<td>Not Computed</td>
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<tr>
<td>WF</td>
<td>Withdrew/Failing</td>
<td>0</td>
</tr>
<tr>
<td>WP</td>
<td>Withdrew/Passing</td>
<td>Not Computed</td>
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</table>

Incomplete Grades
The grade of “I” is given by the instructor upon consultation with the student. The work to be completed and deadline for completion must be communicated to the Registrar in writing. A student may have a maximum of one academic year in which to remove an “I” during which
time the “I” will not be calculated in the student’s grade point average. If the work is not completed by the deadline set by the instructor, the “I” will be converted to an “F” and will be calculated in the student’s grade point average for the semester in which the “I” was given. Normally, an incomplete grade will be awarded only for situations such as illness, family emergencies, or unusual circumstances which prevent a student from completing a course in a semester or summer term. Incomplete grades must be removed prior to graduation.

**PR Grades**

There are two instances when “PR” grades are used in the grading process: Students who complete any developmental education courses, including ED 0300, ENG 0301, MATH 0300, or MATH 0301 or others, in good standing, but who have not earned a letter grade of “A”, “B” or “C” for the course may earn a grade of “PR”. The grade of “PR” indicates that even though the student has made progress throughout the semester the student is not yet ready to advance to the next course. Criteria for determining “good standing” are all of the following: the student must have attended class regularly, participated in class and class work, and demonstrated an increase in course knowledge. Students who are not in good standing at the end of the semester will earn either a grade of “D” or “F”.

The grade of “PR” (in progress) will be assigned for students in the second semester thesis course or practicum courses. Students working on a thesis or practicum should be continuously enrolled in the appropriate course. Credit will be given upon completion of the thesis or practicum. A grade of “PR” will not be calculated in the student’s grade point average.

**Withdrawn Grades**

The grade of “W” or “WX” is given for courses dropped after the 12th/4th class days through the last day to drop a course with a “W” as published in the University’s calendar. Students who wait until the published deadline must have complied with the class attendance policy of this catalog. An instructor is not obligated to recommend a “W” for a class if excessive absences have occurred. Students will not be permitted to drop a course or withdraw from the University after the published deadline.

**Failing Grades**

The grades “F”, “FX”, and “F0” are all failing grades. The “F” is awarded to students that continue to attend classes throughout the semester yet fail to pass the course. The “FX” is awarded to students that fail due to an unofficial withdrawal (student stops attending class without formally dropping or withdrawing). The “F0” is awarded to students that never attend class.

**Symbols Associated with Courses and Grades**

<table>
<thead>
<tr>
<th>Sym.</th>
<th>Purpose</th>
<th>Quality Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td>Repeated Course</td>
<td>Not Computed</td>
</tr>
<tr>
<td>I</td>
<td>Repeated Course – Most Recent Attempt</td>
<td>Computed</td>
</tr>
<tr>
<td>#</td>
<td>Developmental Grade</td>
<td>Not Computed</td>
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</table>

**Repeat Policy**

Except for courses specifically described, "may be repeated for credit", only the most recent grade received for a repeated course is calculated in the GPA. The original grade will remain on the record but will be excluded from the GPA calculations. Courses repeated at a transfer institution will be treated in the same manner.

**Grade Point Average**

Sul Ross State University utilizes the four-point grading system. The student’s grade point average is determined by dividing the total number of GPA hours into the total number of grade points received. The grade point value for a course is determined by multiplying the number of
credit hours by the quality point value for the grade earned. For example, grade points earned for “B” in a three semester credit hour course is 9 (3 credit hours x 3 quality points.) GPA hours are the hours for which a letter grade is earned (A, B, C, D, F), excluding repeated courses and developmental courses.

Grade Changes
An individual course grade may be changed when the involved faculty member certifies to the Registrar that an error was made in the original grade. The grade change must be approved by the department chair and appropriate academic dean. Grade changes must be submitted before the end of the next long semester after the grade was issued.

Grievances Regarding Grades
If a student disagrees with a grade received, the matter should be discussed first with the instructor of the course. If not satisfied with results of that discussion, the matter is then discussed with the Chair of the Department. If not resolved at that point, an appeal must be made to the Dean of the College who will make the final ruling. Any grievance regarding a grade must be filed within one year of receiving the grade.

UNDERGRADUATE ACADEMIC PROBATION AND SUSPENSION POLICY
The Scholastic policy on probation and suspension is designed to alert students to deficiencies in their academic progress, to encourage them to give serious attention to their study habits and goals, and to provide them an opportunity to improve their work. A cumulative grade point average of 2.0 (“C”) must be maintained for an undergraduate student to remain in good standing academically. Should a student drop to below a 2.0 grade point average or fail to make satisfactory progress, the student will be subject to suspension in accordance with the Grade Point Average Requirement Table.

Scholastic probation or suspension is determined at the end of each Fall and Spring semester by calculating the grade point average based on cumulative hours grade points earned on all courses taken for which a grade of “A”, “B”, “C”, “D”, “F/FX/F0” is recorded. For transfer students, hours attempted and/or completed at other schools are added to Sul Ross hours undertaken for the purpose of calculating the total collegiate grade point average. An overall grade point average of 2.0, including courses taken other than at Sul Ross, is required for graduation.

Developmental courses (numbered 0100-0999; ED B100, ENG B100, EMATH B100) are courses intended for students who may lack the necessary skills for entering collegiate level courses. These courses are not considered in determining academic standing. Since these courses are pre-collegiate level, they shall not be used to satisfy any requirement for graduation. These courses are not used for computation of cumulative grade point average for graduation, determination of class standing, eligibility for the Dean's List, or for eligibility for graduation with honors.

GRADE-POINT AVERAGE REQUIREMENT TABLE

<table>
<thead>
<tr>
<th>Classification</th>
<th>Cumulative GPA for Scholastic Probation less than</th>
<th>Cumulative GPA for Scholastic Dismissal (Applied only to those on Scholastic Probation) less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>2.00</td>
<td>1.25</td>
</tr>
</tbody>
</table>
No student will be suspended until after having been on academic probation for one semester. The first suspension for a student will be for one long semester; the second suspension will be for two long semesters; and the third suspension will be for three years. A fourth suspension will result in permanent dismissal from the university.

Students who have been placed on academic probation or suspension by Sul Ross State University will be permitted to enroll during the summer terms to repeat courses and/or to endeavor to raise their cumulative grade point average.

Students will be notified by email when they are placed on probation and by letter and email when suspended. The official Sul Ross e-mail will be used for electronic notification; the local address will be used preferentially for notification by letter. If no valid local address exists, the permanent address will be used.

**APPEAL PROCEDURE FOR SUSPENDED UNDERGRADUATES**

A student who has been placed on academic suspension may appeal in writing for reinstatement. The letter should be addressed to the Undergraduate Academic Appeals Committee in care of the Center for Enrollment Services and received one week prior to the first day of registration. The committee will consider documented extenuating circumstances affecting the student's previous academic performance, and whether, in their judgment, the student has a reasonable chance of achieving desired educational goals. If the student is reinstated, the Committee may impose certain conditions regarding courses, course load limits counseling, etc. If reinstatement is allowed, the suspension will appear on the student's permanent record.

If the committee denies reinstatement, the student may then appeal in writing to the Executive Vice President and Provost for Academic Affairs.

Students who are suspended and who register for enrollment at the University do so at their own risk. Monies paid for fees and tuition are subject to the refund regulations as stated in this catalog.

**ACADEMIC HONORS**

**The Dean's List**
At the end of each fall and spring semester, a list is published of all undergraduate students who have a grade point average of at least 3.3 on twelve or more semester hours of college level course work taken that semester. No graduate hours are included in determining the grade point average.

**Who's Who Among Students in American Colleges and Universities**
Each year, Sul Ross State University is invited to submit nominees for inclusion in Who's Who Among Students in American Colleges and Universities, a comprehensive directory of outstanding American college students. Selection is based on their accomplishments,
personality, ability for leadership, and participation in activities. Students are nominated by faculty, peers, or self and must have a cumulative grade point average of 3.0 for consideration. The selection is made by a faculty/student committee.

Woman of the Year and Man of the Year
Each spring semester the outstanding woman and the outstanding man among the seniors are announced at the Honors Convocation. To be eligible for this honor, the student must have a grade point average of 3.0, and must demonstrate qualities of good citizenship and leadership. The recipients of these awards are chosen by the faculty and administration.

NATIONAL HONOR SOCIETIES
Honor societies recognize and encourage high academic scholarship. Selection to an honor society is a prestigious distinction of outstanding accomplishment.

Students must qualify for and be accepted into honor societies. Membership is usually based on academic achievement, character, and leadership qualities.

ALPHA CHI - The purpose of this honor society is the stimulation, development, and recognition of scholarship. The members are chosen each year from the top ranking 10 percent of the junior and senior classes. A 3.3 GPA or above is required.

ALPHA PSI OMEGA - This organization is a chapter of the national dramatic fraternity Alpha Psi Omega. It is limited to those who have done outstanding work in dramatics.

BETA BETA BETA - Membership in the Epsilon Omega Chapter of Beta Beta Beta Biological Honor Society is limited to those students who have completed at least three semesters and have a grade point average of 3.0 in biological science courses. Tri Beta is an affiliate of the American Association for the Advancement of Science and the American Institute of Biological Sciences.

DELTA MU DELTA - is a national honor society in business administration for business majors who have completed at least half of degree requirements with a minimum 3.25 cumulative grade point average for undergraduates and a 3.6 cumulative grade point average for graduate students, are in the top 20% of their class, and in good standing.

DELTA TAU ALPHA - An affiliate of the national agriculture honor society, the Sul Ross chapter promotes and recognizes high standards of scholarship, leadership, and character among agricultural students. An overall standing within the top 35% of the class with completion of 45 hours is required.

KAPPA DELTA PI - An international honor society in education. Dedicated to promoting excellence in/and recognizing outstanding contributions to education. An overall GPA of 3.0 is required.

KAPPA PI - Membership in this international honorary art fraternity is limited to students who have completed a minimum of 12 semester hours in art courses and have a 3.0 minimum GPA in those classes. An overall GPA of 2.0 is also required. Scholarships are awarded annually from the international organization.

LAMBDA PI ETA – The official honor society of the National Communication Association, the Xi Epsilon chapter was established in Sul Ross in 2002. To be eligible for membership, a student must have completed 60 semester credit hours with at least twelve semester credit hours in communication and maintain a 3.0 grade point average with a 3.2 grade point average in communication.

PHI ALPHA THETA - An international honor society in history, first organized in 1921, Lambda...
Theta Chapter was installed at Sul Ross in 1966. To be eligible for membership, a student must maintain a high grade point average (3.0) in his or her studies, particularly in history, and a 3.1 GPA is required in the major field. Its purpose is to bring students of history together, both intellectually and socially, and to encourage and assist historical research and publication by its members in a variety of ways.

PHI ETA SIGMA - The Sachems Chapter of Phi Eta Sigma National Honor Society was established in 1991 at Sul Ross State University. The name Sachems was chosen to continue the rich traditions of this venerable local society which was founded at Sul Ross in 1921. This honor society is for outstanding freshman students.

PHI SIGMA IOTA - Phi Sigma Iota is an international foreign language honor society whose membership is open to those who have academically distinguished themselves in the study of one or more foreign languages.

PI SIGMA ALPHA - Membership in the Omicron Phi Chapter of the national political science honor society is limited to students in the top one-third of the university community who have completed a minimum of 12 semester hours in political science with a minimum GPA of 3.0. The purpose of Pi Sigma Alpha is to promote political science inquiry.

SIGMA DELTA PI - Membership in Sigma Delta Pi, an international honor society for students of Spanish, is by invitation, based upon the overall grade point average, and performance in Spanish courses.

SIGMA GAMMA EPSILON - A national honor society for the earth sciences, the local Delta Rho Chapter promotes the academic and scientific advancement of its members by sponsoring guest speakers, field trips, and other related activities. To be eligible, a student must have completed 12 semester credit hours in Earth Science work. A GPA of 3.0 must be maintained in all studies. Upon meeting the above requirements, membership is by invitation.

SIGMA TAU DELTA - A national English honorary society, Sigma Tau Delta encourages study and creative efforts in the field of English literature and language. Men and women students enrolled for advanced English courses are eligible for full membership provided they have earned a 3.0 average in English.

CREDIT BY EXAMINATION

Students enrolled at Sul Ross State University and prospective students may earn up to 30 semester hours college credit by examinations with acceptable scores made on the College Level Examination Program tests (CLEP), DANTES/DTTS, Advanced Placement, the Scholastic Aptitude Test, and the American College Test. Scores on the CLEP General Examinations and Advanced Placement examinations must be submitted prior to initial enrollment by students who have not attempted any previous college work. Enrolled students desiring CLEP/DANTES credit should take the Subject Examinations. A student may receive credit only in those courses in which he/she has not earned academic credit accepted by Sul Ross State University. Students may not attempt credit by examination for a course in which they have received failing grades or for a basic course in those areas in which they have acceptable college credit for more advanced courses.

Students who desire to earn credits by examination should confer with their major advisors or high school counselors if they have not entered college, for permission before applying to take an examination for credit and paying the required fees.

Students must make arrangements for testing with Career Services and Testing at 432-837-
COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)
Credit is awarded for the examinations listed below. Credit may be awarded for acceptable scores on tests not listed upon the approval of the awarding department and College:

<table>
<thead>
<tr>
<th>Subject Examinations</th>
<th>University Course and Number</th>
<th>Minimum Award</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>American Government</td>
<td>PS 2305</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>American History</td>
<td>HIST 1301</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>American History II</td>
<td>HIST 1302</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>American Literature</td>
<td>ENG 2327</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Analysis &amp; Interpretation Of Literature (includes essays)</td>
<td>ENG 2341</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>College Algebra</td>
<td>MATH 1314</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Calculus with Elementary Functions</td>
<td>MATH 2413</td>
<td>4</td>
<td>41</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>ED 3302</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>English Literature</td>
<td>ENG 2322</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>General Biology</td>
<td>BIOL 1311/1111, 1313/1113</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>General Psychology</td>
<td>PSY 1302</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td>ED 3304</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Introduction to Management</td>
<td>MGT 3360</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Introduction to Accounting</td>
<td>ACC 2301, 2302</td>
<td>6</td>
<td>50</td>
</tr>
<tr>
<td>Introductory Business Law</td>
<td>GBA 3351</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Introductory Microeconomics</td>
<td>ECO 2302</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Introductory Macroeconomics</td>
<td>ECO 2301</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Introductory Marketing</td>
<td>MKT 3370</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Introductory Sociology</td>
<td>SOC 2303</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>First-Year College - Spanish</td>
<td>SPAN 1411, 1412</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>First-Year College - French</td>
<td>FREN 1411, 1412</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>First-Year College - German</td>
<td>NEN</td>
<td>8</td>
<td>50</td>
</tr>
<tr>
<td>Trigonometry</td>
<td>MATH 1316</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Western Civilization</td>
<td>HIST 2301</td>
<td>3</td>
<td>50</td>
</tr>
<tr>
<td>Western Civilization II</td>
<td>HIST 2302</td>
<td>3</td>
<td>50</td>
</tr>
</tbody>
</table>

*English Composition tests are given only in January, April, June and October*
### DANTES SUBJECT STANDARDIZED TESTS (DSSTs)

Credit is awarded for the examinations listed below. Credit may be awarded for acceptable scores on tests not listed upon the approval of the awarding department and College:

<table>
<thead>
<tr>
<th>DANTES</th>
<th>University Course and Number</th>
<th>Semester Credit Hours Awarded</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introductory College Algebra/Fundamentals of College Algebra</td>
<td>MATH 1314</td>
<td>3</td>
<td>46/400</td>
</tr>
<tr>
<td>Principles of Statistics</td>
<td>MATH 1342</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Lifespan Developmental Psychology</td>
<td>PSY 2310</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>General Anthropology</td>
<td>ANTH 1301</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Introduction to Law Enforcement</td>
<td>CJ 1301</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Principles of Finance</td>
<td>FIN 3340</td>
<td>3</td>
<td>46/400</td>
</tr>
<tr>
<td>Principles of Financial Accounting</td>
<td>ACC 3332</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Human Resource Mgmt.</td>
<td>MGT 3363</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Organizational Behavior</td>
<td>MGT 4361</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Computing and Information Technology</td>
<td>CS 1309</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>GBA 1350</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Money and Banking</td>
<td>ECO 3300</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>FIN 1101</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Astronomy</td>
<td>ASTR 1303</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Physical Geology</td>
<td>GEOL 1303</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>ENG 2311</td>
<td>3</td>
<td>400</td>
</tr>
<tr>
<td>Ethics in America</td>
<td>PHIL 1302</td>
<td>3</td>
<td>400</td>
</tr>
</tbody>
</table>

### ADVANCED PLACEMENT (AP)

Credit is awarded for the examinations listed below. Credit may be awarded for acceptable scores on tests not listed upon the approval of the awarding department and College:

<table>
<thead>
<tr>
<th>AP Examinations:</th>
<th>Sul Ross State University Course and Number</th>
<th>Semester Credit Hours Awarded</th>
<th>Minimum Grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>History of Art</td>
<td>ART 1303, 1304</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL 1311/1111, BIOL 1313/1113</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 1311/1111, CHEM 1312/1112</td>
<td>8</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Code</td>
<td>Hours</td>
<td>SRSU Course</td>
</tr>
<tr>
<td>-----------------------------------------------</td>
<td>----------</td>
<td>-------</td>
<td>-------------------------------------------------</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>CS 1309</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Economics – Microeconomics</td>
<td>ECO 2302</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Economics – Macroeconomics</td>
<td>ECO 2301</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>English - Language and Composition</td>
<td>ENG 1301, 1302</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Government and Politics - US</td>
<td>PS 2305</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>History – World</td>
<td>HIST 2301, 2302</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>History - United States</td>
<td>HIST 1301, 1302</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Mathematics - Calculus AB</td>
<td>MATH 2413</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Mathematics - Calculus BC</td>
<td>MATH 2413, 2414</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Music Theory</td>
<td>MUS 1311, 1312</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Physics B</td>
<td>PHY 1301/1101, PHY 1302/1102</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>PHY 1301/1101</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physics C (Electricity and Magnetism)</td>
<td>PHY 1302/1102</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Psychology</td>
<td>PSY 1302</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Spanish – Language</td>
<td>SPAN 1411, 1412</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Spanish – Literature</td>
<td>SPAN 2305</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

**INTERNATIONAL BACCALAUREATE PROGRAM**

Sul Ross State University recognizes the value of the International Baccalaureate program and has approved the granting of credit for the IB Higher level exams when a score of 5 or higher is obtained. Credit will be granted for the following Higher level exams: Biology, Business, Chemistry, Economics, English, French, Geography, German, History, Music, philosophy, physics, Psychology, and Spanish. SRSU will grant limited credit for Standard level exams when a score of 4 or more is obtained. A maximum of 28 hours will be awarded from the IB Diploma. The hours will only be awarded from the International Baccalaureate transcript. An Official IB transcript must be sent to Sul Ross State University.

**Grades accepted: 7 & 6 = A, 5 = B for Higher Exams Only**

<table>
<thead>
<tr>
<th>Higher Exam</th>
<th>Credit Hours</th>
<th>Equivalent SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>8</td>
<td>BIOL 1311/1111, 1313/1113</td>
<td>BIOL 1311/1111, BIOL 1313/1113</td>
</tr>
<tr>
<td>Business &amp; Organization</td>
<td>6</td>
<td>FIN 3340, MGT 3360</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8</td>
<td>CHEM 1311/1111, 1312/1112</td>
<td>CHEM 1111, 1311, 1112, 1312</td>
</tr>
<tr>
<td>Economics</td>
<td>6</td>
<td>ECO 2301, 2302</td>
<td>ECON 2301, 2302</td>
</tr>
<tr>
<td>English</td>
<td>6</td>
<td>ENGL 1301, 1302</td>
<td>ENGL 1301, 1302</td>
</tr>
<tr>
<td>French</td>
<td>8</td>
<td>FREN 1411, 1412</td>
<td>FREN 1411, 1412</td>
</tr>
<tr>
<td>German</td>
<td>8</td>
<td>Language Requirement</td>
<td>GERM 1411, 1412</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
<td>GEOG 1302</td>
<td>GEOG 1303</td>
</tr>
<tr>
<td>History</td>
<td>6</td>
<td>HIST 1301, 1302</td>
<td>HIST 1301, 1302</td>
</tr>
<tr>
<td>Music</td>
<td>3</td>
<td>MUS 1308</td>
<td>MUSI 1308</td>
</tr>
<tr>
<td>Philosophy</td>
<td>3</td>
<td>PHIL 1301</td>
<td>PHIL 1301</td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>PHYS 1301/1101, 1302/1102</td>
<td>PHYS 1301/1101, 1302/1102</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>PSY 1302</td>
<td></td>
</tr>
<tr>
<td>Spanish</td>
<td>8</td>
<td>SPAN 1411, 1412</td>
<td>SPAN 1411, 1412</td>
</tr>
</tbody>
</table>

Grades accepted: 7 or 6 = A, 5 = B for the following:

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>Equivalent SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art</td>
<td>3</td>
<td>ART 1301</td>
<td>ART 1301</td>
</tr>
<tr>
<td>Economics</td>
<td>6</td>
<td>ECON 2301, 2302</td>
<td>ECON 2301, 2302</td>
</tr>
<tr>
<td>Music</td>
<td>3</td>
<td>MUS 1308</td>
<td>MUSI 1308</td>
</tr>
<tr>
<td>Theatre</td>
<td>3</td>
<td>THEA 1310</td>
<td>DRAM 1310</td>
</tr>
</tbody>
</table>

Grades accepted: 7 or 6 only for the following:

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>Equivalent SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology</td>
<td>8</td>
<td>BIOL 1311/1111, 1313/1113</td>
<td>BIOL 1311/1111, BIOL 1313/1113</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8</td>
<td>CHEM 1311/1111, 1312/1112</td>
<td>CHEM 1111, 1311, 1112, 1312</td>
</tr>
<tr>
<td>Computer Science</td>
<td>3</td>
<td>CS 1301</td>
<td>COSC 1301</td>
</tr>
<tr>
<td>Mathematical Studies</td>
<td>6</td>
<td>MATH 1314, 1316</td>
<td>MATH 1314, 1316</td>
</tr>
<tr>
<td>Mathematical Studies</td>
<td>7</td>
<td>MATH 1316, 2413</td>
<td>MATH 1316,2413</td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>PHYS 1301/1101, 1302/1102</td>
<td>PHYS 1301/1101, 1302/1102</td>
</tr>
</tbody>
</table>

Grades accepted: 7 & 6 = A, 5 = B for the following:

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>Equivalent SRSU Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy</td>
<td>3</td>
<td>PHIL 1301</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>PSY 1302</td>
</tr>
</tbody>
</table>

Grades accepted: 5 or 4 = credit for the following:

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>Equivalent SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>8</td>
<td>FREN 1411, 1412</td>
<td>FREN 1411, 1412</td>
</tr>
<tr>
<td>German</td>
<td>8</td>
<td>Language Requirement</td>
<td>GERM</td>
</tr>
<tr>
<td>Spanish</td>
<td>8</td>
<td>SPAN 1411, 1412</td>
<td>SPAN 1411, 1412</td>
</tr>
</tbody>
</table>

Grades accepted: 7 or 6 = credit for the following:
To Request the International Baccalaureate transcript, call (212) 696-4464 or write to:
International Baccalaureate North America
200 Madison Avenue, Suite 2007
New York, NY 10016

Transcripts should be sent to:
Sul Ross State University
Center for Enrollment Services
SRSU Box C-108
Alpine, TX 79832

AMERICAN COLLEGE TEST (ACT)
AND SCHOLASTIC APTITUDE TEST (SAT)

Credit for English and Mathematics courses is offered to entering freshmen whose scores are sufficient to meet the guidelines listed below:

1. **English**

<table>
<thead>
<tr>
<th>ACT English Score</th>
<th>SAT Critical Reading Score (SAT prior to March 2016)</th>
<th>SAT Reading Score (effective March 2016)</th>
<th>Credit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>30+</td>
<td>588+</td>
<td>32+</td>
<td>ENG 1301</td>
</tr>
</tbody>
</table>

2. **Mathematics**

<table>
<thead>
<tr>
<th>ACT Math Score</th>
<th>SAT Math Score (SAT prior to March 2016)</th>
<th>SAT Math Score (effective March 2016)</th>
<th>Credit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>30+</td>
<td>603+</td>
<td>620+</td>
<td>MATH 1314</td>
</tr>
</tbody>
</table>

Any credit awarded will be recorded on the student’s transcript after the successful completion of the first semester as a full-time beginning freshman student with a minimum grade point average of 2.0. The credit awarded may not replace any work which has been attempted or completed in the English or Mathematics courses shown.

The Enhanced American College Test and the Scholastic Aptitude Test are offered periodically on nationally established dates.

**COOPERATIVE MILITARY PROGRAMS**

**Service Members Opportunity Colleges.** Sul Ross State University has been designated as an institutional member of Service members Opportunity Colleges (SOC), a group of over 400 colleges and universities providing voluntary postsecondary education to members of the military throughout the world. As a SOC member, Sul Ross State University recognizes the unique nature of the military lifestyle and has committed itself to easing the transfer of relevant course credits, providing flexible academic residency requirements, and crediting learning from...
appropriate military training and experiences when such actions are consistent with general University requirements stated elsewhere in this Catalog. Recognition will be given to educational experiences obtained in the Armed Service which are consistent with general University policies regarding admission procedures, transfer credit from other colleges and universities, and courses completed through the United States Armed Forces Institute (USAFI), The College Level Examination Program (CLEP), and Defense Activity for Traditional Educational Support (DANTES), which are equivalent to CLEP credit awarded. SOC has been developed jointly by educational representatives of each of the Armed Services, the Office of the Secretary of Defense, and a consortium of thirteen leading national higher education associations. It is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community and Junior Colleges (AACJC).

CREDIT FOR MILITARY SERVICE AND SERVICE SCHOOL COURSES

Sul Ross State University utilizes the American Council on Education's Guide to the Evaluation of Education Experiences in the Armed Services in evaluating and awarding credit for military service and service school courses. Veterans and service personnel may submit requests for credit as follows:

1. Veterans should submit to the Center for Enrollment Services DD Form 214, "Armed Forces of the United States Report of Transfer or Discharge" for consideration of credit. To be eligible for consideration, the veteran must have served on active duty at least 181 days exclusive of training.

2. Service personnel currently on active duty should submit to the Center for Enrollment Services DD Form 295, "Application for the Evaluation of Educational Experiences During Military Service," certified by a military education officer, in order to have service school courses evaluated.

3. Air Force personnel desiring credit for vocational certificates earned through the Community College of the Air Force (CCAF) should request the CCAF to send an official transcript to the Center for Enrollment Services.

The total amount of undergraduate credit which may be awarded for all categories of military service, service school courses, CLEP/DANTES, and collegiate organization courses is thirty semester hours.

CREDIT FOR NONCOLLEGIATE ORGANIZATION COURSES

Sul Ross State University may grant limited credit for the successful completion of courses conducted by a non-collegiate organization. For this purpose, the University will follow the general recommendations of the American Council on Education as outlined in a Guide to Educational Credit by Examination. The maximum amount of college credit awarded will vary according to individual circumstances, but the total undergraduate credit for such courses, for military service, and for CLEP or DANTES may not exceed thirty semester hours. Questions concerning graduate credit should be directed to the Center for Enrollment Services. In order for the non-collegiate organizations' courses to be considered, these procedures must be followed:

1. The student must request the sponsoring organization to submit to the Center for Enrollment Services a transcript, certificate, or statement verifying that the courses have been successfully completed.

2. The student must enroll in Sul Ross State University and successfully complete one long semester or one summer session of at least twelve semester hours work before credit
for the non-collegiate organization’s courses will be awarded.

3. Where possible, credit will be given for Sul Ross State University courses, which are equivalent to those completed. The Center for Enrollment Services will determine the equivalencies. In all cases, credit will be awarded on the basis of one semester hour for each fifteen hours of classroom lecture contact, or one semester hour for each thirty hours of laboratory work, or one semester hour for not less than forty-five hours of vocational shop instruction.

4. Credit awarded for non-collegiate organization course work may or may not be utilized to satisfy requirements in the major or minor fields, depending on the evaluation of individual needs by the academic administration of the University. Such decisions will be made in consultation with the student.

VETERAN EDUCATION BENEFITS RECIPIENTS

The Center for Enrollment Services in Lawrence Hall serves those students who are eligible to receive educational benefits from the Veterans Administration. Records are maintained and reports made to the Veterans Administration on behalf of veterans, dependents, active-duty servicemen, and eligible reservists enrolled in the University.

Students eligible to receive educational benefits from the Veteran’s Administration must inform the Veteran’s Certifying Official at each registration to insure prompt certification of enrollment. In addition to receiving the academic advisor’s approval of the course schedule, these students should also confer with the Veteran’s Certifying Official prior to registration concerning certification of the courses.

The Veteran’s Certifying Official should also be notified of any changes in the Schedule at any time during the registration period.

Students eligible to receive educational benefits from the Veterans Administration must also have on file in the Center for Enrollment Services a degree plan by the end of the first semester of enrollment at the University.

Veterans who were legal Texas residents prior to their enlistment and who have resided in Texas at least twelve months after their discharge from the service may be eligible to enroll under the Hazlewood Act which exempts them from paying tuition. Under this act, the veteran is required to pay local specified fees.

For more information, contact the Veteran’s Certifying Official at (432) 837-8050.

GRADUATION UNDER A PARTICULAR CATALOG

To receive a degree from Sul Ross State University, a student must complete all requirements for the degree as stated in a particular University catalog. The student has the choice of (1) graduating under the current catalog, (2) graduating under the catalog in force at the time of first registering at Sul Ross State University, or (3) graduating under the catalog in force for any subsequent year of registration at Sul Ross State University.

Students that transfer to Sul Ross State University from another Texas public institution of higher education have the choice of (1) graduating under the current Sul Ross catalog, (2) graduating under the Sul Ross catalog in force at the time of first registering at the transferring Texas public institution, or (3) graduating under the Sul Ross catalog in force for any subsequent year of registration at the transferring Texas public institution or at Sul Ross State University.

Each of these possibilities is subject to the condition that all requirements for a degree must be
completed within six years from the date of the catalog selected. For example, a student who chooses to graduate under the requirements of the 2010-2012 catalog must complete all requirements for the degree under that catalog prior to August graduation in 2016 or 2018, depending on initial year of registration, or a later catalog must be selected.

**REQUIREMENTS FOR A SECOND BACCALAUREATE DEGREE**

A student who holds one baccalaureate degree from Sul Ross State University or from any college or university that is a member of a regional accrediting association may receive a second baccalaureate degree by completing the following requirements:

1. A minimum of thirty-three semester hours, including twenty-four semester hours of advanced work in residence.
2. Completion of requirements in the major subject field, including a minimum of eighteen semester hours of advanced work.
3. Completion of all requirements of the degree sought as determined by the appropriate academic department.
4. Completion of the core curriculum if not completed with the first degree.

**REQUIREMENTS FOR A DUAL BACHELOR’S DEGREE**

If two bachelor’s degrees are conferred simultaneously, the student must meet the requirements for both degrees and complete a minimum of 33 hours beyond the requirements of a single degree. An example of a dual degree is a Bachelor of Arts degree in Psychology and a Bachelor of Science degree in Biology. If the two majors are authorized under the same degree (the Bachelor of Arts, Bachelor of Science, Bachelor of Fine Arts, Bachelor of Business Administration), the student would seek a double major – not a dual degree.

Applications to graduate must be submitted to each College conferring a degree and degree audits must be performed by each. Graduation will occur only when the student has completed requirements for both degrees. Students completing two bachelor’s degrees will receive two diplomas. The student must complete a dual degree application form available from the Center for Enrollment Services.

**REQUIREMENTS FOR A DOUBLE MAJOR**

A student who fulfills the specified requirements for two different major fields authorized under a single degree has completed a double major and will receive a single diploma. An example of a single degree with a double major is the Bachelor of Science degree with a double major in Kinesiology and Biology. If both majors are not authorized under the same degree, the student would seek a dual bachelor’s degree – not a double major.

The student must elect the second major by completing the change of information form available from the Center for Enrollment Services.

**APPLICATION FOR GRADUATION**

Applications to graduate must be submitted to the Registrar. Forms are available online at [www.sulross.edu/registrar](http://www.sulross.edu/registrar). A student is expected to submit an application for graduation by the deadline or before the final semester of enrollment, and pay the applicable fees. Students who are not able to complete degree requirements as planned will resubmit the application during
the semester or summer term in which they expect to graduate. The University Calendar at the
front of this catalog should be consulted for the graduation application deadlines.

COMMENCEMENT

Commencement ceremonies for the awarding of degrees to candidates are held at the end of
the spring semester and at the end of the fall semester on the dates listed in the University
Calendar. Students graduating in August may participate in either the May or December
to commencement exercises. All other circumstances must be approved by the College.

Graduates are expected to participate in commencement. Information and instructions
concerning commencement will be e-mailed to each candidate prior to graduation. Please see
the Graduation and Commencement page for additional details.

GRADUATION WITH HONORS

Those seeking a baccalaureate degree and who compile outstanding academic records receive
special recognition at graduation. Each student receiving a degree conferred Cum Laude,
Magna Cum Laude, or Summa Cum Laude will receive a gold cord, which symbolizes academic
excellence. In addition, this recognition will be recorded on the transcript. The distinction and
corresponding grade point averages are Cum Laude - 3.50 to 3.69; Magna Cum Laude - 3.70 to
3.89; Summa Cum Laude - 3.90 to 4.00.

Graduation with honors is based on the student's cumulative grade point average for work
completed at SRSU and all other institutions the student attended.

TRANSCRIPT SERVICES

Requests for transcripts may be made online, in person, or by submitting an official request form
to the Center for Enrollment Services at Lawrence Hall. Instructions and forms may be found
online at www.sulross.edu/transcripts.

There is no charge for official transcripts printed at Sul Ross State University. There is a limit of
5 transcripts per request. If mailed to a home address or picked up by the student, we will stamp
the transcript "Issued Directly to Student."

1. Allow a minimum of 72 hours for processing of a transcript request. Requests will be
processed as quickly as possible in the order of receipt. During peak periods (final
exams and grade posting, registration, and commencement) there will be a delay of
several days. Therefore, you should request transcript at least two weeks ahead of these
periods.

2. All requests must be made online or with the official request form signed by the student.
Request by persons other than the student will not be honored without the student's
written authorization.

3. Transcripts may not be picked up by anyone other than the student unless that person
has written authorization from the student. We will verify the signature against signatures
in the student's records.

4. The Center for Enrollment Services will issue only Sul Ross transcripts. Sul Ross cannot
release copies of another school's transcripts. Transcripts from other schools must be
ordered from the original source.

Helpful Hints

1. Don't wait until the last minute to get a copy of your transcript. Keep a recent copy of
your transcript for photocopying when you need to attach a transcript to a resume or job
application. Usually, a transcript does not have to be official when used for an interview or attachment to applications.

2. Provide the complete delivery address for the transcript. Does your transcript need to go to an Admissions Office, Transfer Office, Graduate School Admissions Office, Personnel Director, Department, or Advisor? All may have different mailing addresses. Unless instructed differently, the Center for Enrollment Services mails all transcripts to the Office of Admissions at other institutions.

3. Make sure your contact information in Lobo OnLine is up to date in the event the transcript clerk needs to reach you about your transcript request.

4. If conducting a job search, contact Career Services for assistance. The office is located in UC 211 and the telephone number is (432) 837-8178.

ACADEMIC ORGANIZATION AND DEGREE PROGRAMS

COLLEGE OF AGRICULTURAL AND NATURAL RESOURCE SCIENCES

Department of Animal Science
Animal Science ......................................................... B.S., M.Ag., M.S.
   Concentrations in Agricultural Education, Pre-Veterinary Medicine,
   Production, and Science

Department of Natural Resource Management
Natural Resource Management ........................................... B.S., M.S.
   Concentrations in Ag Business, Conservation Biology, Range Management,
   Sustainable Ranch Management, and Wildlife Management

COLLEGE OF ARTS AND SCIENCES

Academic Center for Excellence

Department of Behavioral and Social Sciences
History ................................................................. B.A., M.A.
Political Science .................................................... B.A., M.A.
Public Administration .............................................. B.A., M.A.
Psychology ............................................................ B.A.
Social Science ...................................................... B.A.

Department of Biology Geology and Physical Sciences
Biology ................................................................. B.S., M.S.
Chemistry ............................................................. B.S.
Geology ............................................................... B.S., M.S.

Department of Computer Science and Mathematics
Mathematics .......................................................... B.S.
   Concentration in Teacher Certification
Computer Science .................................................... B.S.
   Concentrations in Computer Science, Cyber Security, and Gaming Technology

Department of Fine Arts and Communication
Art .............................................................. B.F.A., M.A.
   Concentration in Art History and Studio Art
Communication .................................................... B.A.
Concentration in Broadcast Media, Interpersonal, Secondary Certification, Strategic Communication
Music ................................................................. B.M.
Concentration in Instrumental and Vocal
Theatre ................................................................. B.F.A.
Concentration in Acting & Directing and Technical Design

Interdisciplinary Programs
General Studies .................................................... B.A.
Liberal Arts .......................................................... M.A.

Department of Languages and Literature
English ........................................................................ B.A., M.A.
Spanish ........................................................................ B.A.

COLLEGE OF EDUCATION AND PROFESSIONAL STUDIES

Department of Business Administration
Business Administration ........................................... B.B.A., M.B.A.
Concentration in Accounting

Department of Education
Education, General ................................................ M.Ed.
Educational Diagnostician ........................................ M.Ed.
Counselor Education ................................................ M.Ed.
Educational Leadership ............................................. M.Ed.
Reading Specialist .................................................... M.Ed.
Interdisciplinary Studies .......................................... B.S.

Department of Homeland Security and Criminal Justice
Criminal Justice ....................................................... B.S., M.S.
Homeland Security ................................................ B.S., M.S.
Public Administration .............................................. M.S.

Department of Industrial Technology
Industrial Technology .............................................. B.S.

Department of Kinesiology and Human Performance
Health and Human Performance .............................. B.S., M.S.
Kinesiology and Human Performance ...................... M.S.
Concentration in Clinical, Kinesiology, and Teacher Certification

RIO GRANDE COLLEGE

Department of Business Administration
Business Administration-General Business ................ B.B.A., M.B.A.

Department of Education
Education, General ................................................ M.Ed.
Education, Counseling ......................................... M.Ed.
School Administration .......................................... M.Ed.
Reading Specialist ............................................... M.Ed.
Interdisciplinary Studies ...................................... B.A.
Department of Humanities
Child Development .......................................................... B.A.S
English ........................................................................... B.A.
History ............................................................................ B.A.
Organizational Leadership ................................................. B.A.S.
Social Science .................................................................. B.A.
Spanish ............................................................................. B.A.

Department of Natural and Behavioral Sciences
Animal Science ................................................................ B.S.
Biology .............................................................................. B.S., M.S.
Criminal Justice ................................................................. B.S., M.S.
Geology ............................................................................. B.S., M.S.
Mathematics ..................................................................... B.S.
Nursing ............................................................................. B.S.N.
Psychology ......................................................................... B.A.

DEGREE AND GRADUATION REQUIREMENTS
Requirements for the Core Curriculum

If you first enrolled at a Texas public university or college in Fall 1999 or more recently, your
degree requirements include a Texas Core Curriculum (TCC.) Each institution establishes a set
of courses for students to take in fulfillment of the TCC. The Sul Ross State University TCC
courses are listed below.

A course approved as TCC at one institution must be applied to the student’s set of core
courses at any other institution. If you are transferring to Sul Ross from a Texas public institution
and are “core complete,” you are not required to complete any of these courses in fulfillment of
TCC. If transferring to Sul Ross from a Texas public institution and are not “core complete,” all
TCC courses taken at the transfer institution will be applied to the appropriate area of the TCC
at Sul Ross. Any areas not complete must be completed here at Sul Ross.

You may choose a major which has some more rigorous or more specific requirements than the
Core. Most science majors, for instance have more intensive math and science requirements. In
these cases, the major requirements have priority. Therefore, switching institutions has become
easier, but changing majors may still involve taking some extra courses.

For those and other reasons, no one should enroll in courses, core curriculum or otherwise,
without consulting with a trained academic advisor.

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Each of the degree requirements listings includes the core curriculum requirements.

**Deadlines for Completion of Core Requirements**

The communication, mathematics, and component area option requirement of the core curriculum must be completed within the first 45 semester hours of enrollment. If the requirement is not completed by the time a student has accumulated 45 semester credit hours, the student must register for the required course(s) until the required components have been completed. This applies to transfer students as well as continuing students.

**REQUIREMENTS FOR THE BACHELOR OF ARTS DEGREE**

Requirements Regarding Grade Point Average, Total Degree Hours, and Courses Take in Residence

**CORE CURRICULUM:** See page **80**
(42 semester credit hours)

**DEGREE REQUIREMENTS – Bachelor of Arts**
(11-13 semester credit hours)

**Foreign Language Requirement**
6-8 semester credit hours

**Literature**
3 semester credit hours

**Science labs corresponding/linked to core science courses**
2 semester credit hours

**UNIVERSITY REQUIREMENT**
(1 semester credit hour)

SRSU 1101 or equivalent (for details, see First Year Seminar)
1 semester credit hour

**MAJOR FIELD REQUIREMENTS**
(Minimum 30 semester credit hours)

- Students must complete a major of at least thirty semester hours but no more than forty-eight of required courses, including a minimum of eighteen hours at advanced level and twelve hours in residence at Sul Ross State University. An exception is the broad field program in Social Science which requires a minimum of at least forty-eight semester hours but not more than sixty.
- All credit courses completed in a discipline required or not, count toward the maximum semester hours allowed in the major.
- Majors may be selected from the following disciplines:
  - Communication
  - Political Science
  - English
  - Psychology
  - General Studies
  - Social Science
  - History
  - Spanish
  - Music

**MINOR FIELD REQUIREMENTS**

- Students must complete a minor of at least eighteen semester hours except for General Studies and Social Science, including a minimum of six hours at the advanced level and three advanced hours in residence at Sul Ross State University.
- Minors may be selected from any of the disciplines which qualify for a major, except General Studies, Interdisciplinary Studies and Social Science. You may choose from the following:
  - Anthropology
  - English
  - Mexican American Studies
  - Art
  - Environmental Studies
  - Photography
  - Biology
  - Geography
  - Political Science
  - Business Administration
  - Geology
  - Psychology
  - Chemistry
  - History
  - Sociology
  - Communication
  - Journalism
  - Spanish
  - Computer Science
  - Kinesiology
  - Theatre
  - Criminal Justice
  - Mathematics
  - Women’s Studies
  - Education

**Additional Requirements**

1. The student must complete additional hours to total 120 semester credit hours.
2. A cumulative grade point average of 2.0, including a minimum of 2.0 in both the major and the minor, is required for graduation. A minimum of 2.5 is required in each of the teaching fields in teacher certification degree programs.
3. A minimum of thirty-six advanced semester hours must be completed, including at least fifteen in residence at Sul Ross State University.

4. A minimum of thirty semester hours must be completed in residence. If the degree requirements exceed 120 semester credit hours, a minimum of 25% of the semester credit hours required in the degree must be granted by Sul Ross State University.

5. At least twenty-four semester hours of the last thirty hours presented for a degree must be in residence.

6. Under no circumstances may more than 65 of the total semester hours required for a degree be presented in one discipline.

7. No more than six semester hours of physical education activity courses may be presented as elective credit toward a degree.

Secondary Teacher and All-Level Certification Programs

Students who pursue the Bachelor of Arts degree with teacher certification at the secondary level must complete all degree requirements described above. In addition, students who desire certification must see the Education section of this Catalog for additional information concerning certification requirements.

**REQUIREMENTS FOR THE BACHELOR OF BUSINESS ADMINISTRATION DEGREE**

**CORE CURRICULUM:** See page 80
(42 semester credit hours)

**UNIVERSITY REQUIREMENT**
(1 semester credit hour)

SRSU 1101 or equivalent (for details, see First Year Seminar)
1 semester credit hour

**MAJOR FIELD REQUIREMENT**

- Students must complete fifty-four to sixty semester hours in the broad field Business Administration major, including a minimum of thirty hours at the advanced level and twelve advanced hours in residence at Sul Ross State University. **Students must complete 42 semester hours of core curriculum courses.** Students must complete at least thirty-nine semester hours of core courses in Business Administration and at least fifteen (15) semester hours advanced business electives.

- Students must complete 14 semester hours of free elective courses.

**MINOR FIELD REQUIREMENTS**

- A minor is not required, but with the approval of the Chair of the Department of Business Administration, students may elect to present a minor of eighteen semester hours with at least six hours at the advanced level and at least three advanced hours in residence at Sul Ross State University.

**Additional Requirements**

1. The student must complete additional hours to total 120 semester credit hours.

2. The student must complete all course requirements with a cumulative grade point average of 2.0, including a minimum of 2.0 in the major and the minor (if selected). A minimum of 2.5 is required in the Business Administration teaching field in teacher education.
3. A minimum of thirty-six advanced semester hours must be completed, including at least fifteen in residence at Sul Ross State University.
4. A minimum of thirty semester hours must be completed in residence.
5. At least twenty-four semester hours of the last thirty hours presented for a degree must be in residence.
6. Under no circumstances may more than 65 of the total semester hours required for a degree be presented in one discipline.
7. No more than six semester hours of physical education activity courses may be presented as elective credit toward a degree.

Teacher Certification Programs

Students who pursue the Bachelor of Business Administration degree with teacher certification at the secondary level must complete all degree requirements described above. In addition, students who desire certification must see the Education section of this Catalog, and your advisor, for additional information concerning certification requirements.

REQUIREMENTS FOR THE BACHELOR OF FINE ARTS DEGREE - ART OR THEATRE MAJOR

CORE CURRICULUM: See page 80
(42 semester credit hours)

DEGREE REQUIREMENTS – Bachelor of Fine Arts
(3 semester credit hours)

Fine Arts
FA 3303 (3 semester credit hours)

UNIVERSITY REQUIREMENT
(1 semester credit hour)

SRSU 1101 or equivalent (for details, see First Year Seminar)
1 semester credit hour

MAJOR FIELD REQUIREMENTS

➢ Students must complete a major of 60 semester hours in Art or 74 semester hours in Theatre including a minimum of 36 at the advanced level with 15 of the advanced hours in residence at Sul Ross State University.

➢ All credit courses completed in Art or Theatre, required or not, count toward the maximum semester hours allowed in the major.

Additional Requirements

1. The student must complete additional hours to total 120 semester credit hours.
2. A cumulative grade point average of 2.0, including a minimum of 2.0 in both the major and the minor, is required for graduation. A minimum of 2.5 is required in each of the teaching fields in teacher certification degree programs.
3. A minimum of thirty-six advanced semester hours must be completed including at least fifteen in residence at Sul Ross State University.
4. A minimum of thirty semester hours must be completed in residence.
5. At least twenty-four semester hours of the last thirty hours presented for a degree must be in residence.
6. Under no circumstances may more than 65 of the total semester hours required for a degree be presented in one discipline.
7. No more than six semester hours of physical education activity courses may be presented as elective credit toward a degree.

All-Level Teacher Certification in Art
Students who pursue the Bachelor of Fine Arts degree with All-Level Teacher Certification must complete a teaching field of at least sixty semester hours in Art, including at least six semester hours specifically for the elementary level and six semester hours specifically for the secondary level. A minimum of twenty-four advanced hours is required. A second teaching field is not required. (See the Education section of this Catalog for additional information concerning certification requirements.)

REQUIREMENTS FOR THE BACHELOR OF MUSIC DEGREE
MUSIC MAJOR
CORE CURRICULUM: See page 80
(42 semester credit hours)

UNIVERSITY REQUIREMENT
(1 semester credit hour)
SRSU 1101 or equivalent (for details, see First Year Seminar)
1 semester credit hour

MAJOR FIELD REQUIREMENTS
➢ Students must complete a major of 49 semester hours in Music including a minimum of 36 at the advanced level with 15 of the advanced hours in residence at Sul Ross State University.
 o Vocal Performance: 63 sch
 o Vocal Education (all-level): 53 sch
 o Instrumental Performance: 60 sch
 o Instrumental Education (all-level): 54 sch
 o Music Business: 49 sch

➢ All credit courses completed in Music, required or not, count toward the maximum semester hours allowed in the major.

Additional Requirements
1. The student must complete additional hours to total 120 semester credit hours.
2. A cumulative grade point average of 2.0, including a minimum of 2.0 in both the major and the minor, is required for graduation. A minimum of 2.5 is required in each of the teaching fields in teacher certification degree programs.
3. A minimum of thirty-six advanced semester hours must be completed including at least fifteen in residence at Sul Ross State University.
4. A minimum of thirty semester hours must be completed in residence.
5. At least twenty-four semester hours of the last thirty hours presented for a degree must be in residence.
6. Under no circumstances may more than 65 of the total semester hours required for a degree be presented in one discipline.
7. No more than six semester hours of physical education activity courses may be presented as elective credit toward a degree.

**REQUIREMENTS FOR THE BACHELOR OF SCIENCE DEGREE**

**CORE CURRICULUM:** See page 80
(42 semester credit hours)

**DEGREE REQUIREMENTS** – Bachelor of Science
(9 semester credit hours)

- **Mathematics not taken in the Core Curriculum**
  3 semester credit hours

- **Science labs corresponding/linked to core science courses**
  2 semester credit hours

- **Additional Lab Science course**
  3 semester credit hours

- **Science lab corresponding/linked to additional science course**
  1 semester credit hour

**UNIVERSITY REQUIREMENT**
(1 semester credit hour)

- **SRSU 1101 or equivalent** (for details, see First Year Seminar)
  1 semester credit hour

**MAJOR FIELD REQUIREMENTS**
- Students must complete a major of at least thirty semester hours but no more than forty-eight semester hours of required courses, including a minimum of eighteen hours at the advanced level, with twelve of those advanced hours in residence at Sul Ross State University. (Exceptions are the broad field programs in Industrial Technology, Animal Science, and Natural Resource Management.)

- All credit courses completed in a discipline required or not, count toward the maximum semester hours allowed in the major.

- Majors may be selected from the following disciplines:
  - Animal Science
  - Biology
  - Chemistry
  - Computer Science
  - Criminal Justice
  - Geology
  - Homeland Security
  - Industrial Technology
  - Interdisciplinary Studies
  - Kinesiology & Human Performance
  - Mathematics
  - Natural Resource Management

**MINOR FIELD REQUIREMENTS**
- Students must complete a minor of at least eighteen semester hours, (unless they have a broad field major) including a minimum of six hours at the advanced level and three advanced hours in residence at Sul Ross State University.

- Minors may be selected from any of the disciplines which qualifies for a major, except for General Studies, Interdisciplinary Studies, and Social Sciences. You may choose from the following:
Anthropology  English  Mexican American Studies  
Art  Environmental Studies  Photography  
Biology  Geography  Political Science  
Business Administration  Geology  Psychology  
Chemistry  History  Sociology  
Communication  Journalism  Spanish  
Computer Science  Kinesiology  Theatre  
Criminal Justice  Mathematics  Women’s Studies  
Education  

Additional Requirements
1. The student must complete additional hours to total 120 semester credit hours.
2. A cumulative grade point average of 2.0, including a minimum of 2.0 in both the major and the minor, is required for graduation. A minimum of 2.5 is required in each of the teaching fields in teacher certification degree programs.
3. A minimum of thirty-six advanced semester hours must be completed, including at least fifteen in residence at Sul Ross State University.
4. A minimum of thirty semester hours must be completed in residence.
5. At least twenty-four semester hours of the last thirty hours presented for a degree must be in residence.
6. Under no circumstances may more than 65 of the total semester hours required for a degree be presented in one discipline.
7. No more than six semester hours of physical education activity courses may be presented as elective credit toward a degree.

Teacher Certification Programs
Students who pursue the Bachelor of Science degree with teacher certification at the secondary level must complete all degree requirements described above. In addition, students who desire certification must see the Education section of this Catalog for additional information concerning certification requirements.
ACADEMIC REGULATIONS FOR MASTER'S DEGREE PROGRAMS

Sul Ross State University provides graduate programs which will enable the student to enrich his or her study in a specialized field. The aim of the graduate program is to build greater breadth and depth of knowledge in the field of study. Advisors will provide direct counseling to students in their major field of study. Students desiring to pursue work in a teacher certification program at the graduate level are also advised by the Director of Teacher Education. Each graduate student will be assigned a committee of faculty members prior to taking the comprehensive examination. The student shall complete all assigned work and receive recommendations of the committee and the Dean of the College before a degree will be awarded.

THE GRADUATE RECORD EXAMINATION

The Graduate Record Examinations are a group of standardized tests with national norms. Sul Ross State University does not require applicants to graduate programs to submit GRE or GMAT test scores for full admission providing the applicant meets the admissions requirements listed below with the exception of the

The GRE may be taken at any of the testing centers in the United States or abroad. The student may contact the Coordinator of Career Services and Testing for an information bulletin and application for the examination. Regardless of where the test is taken, the student should be certain to indicate that scores are to be sent to the Center for Enrollment Services, Box C-2, Sul Ross State University, Alpine, Texas 79832. If a student's performance on the examinations is unsatisfactory, the advisor may require remedial or leveling work, the advanced test of the Graduate Record Examinations in the major field, a comprehensive written examination, or such other steps as the advisor recommends. The advisor's recommendations are subject to approval by the Dean of the College.

GRADUATE ADMISSIONS

Admission to Graduate Studies is required of all post-baccalaureate students when enrolling in graduate-level courses at Sul Ross State University. Applications for admission should be addressed to the Center for Enrollment Services, Box C-2, Sul Ross State University, Alpine, Texas 79832. Each applicant will be notified in writing of acceptance or rejection for admission. Students may seek admission to Graduate Studies by applying for admission to a master's degree program or by applying for admission as a non-degree student.

I. ADMISSION TO THE MASTER'S DEGREE PROGRAM

A student seeking admission for the purpose of pursuing a master's degree must hold a baccalaureate degree from an institution approved by a nationally recognized accrediting agency. Official transcripts reflecting all college work attempted and degree(s) conferred should be on file in the Center for Enrollment Services at least ten days prior to initial registration as a graduate student.

Also, the student must demonstrate by prior academic records or scores on the verbal and quantitative portions of aptitude test of the Graduate Record Examination (GRE), or for students in Business Administration, the Graduate Management Admissions Test (GMAT), a competence to pursue advanced study and research. The Graduate Record Examination or the Graduate Management Admissions Test should be taken early enough to ensure that scores are on file in the Center for Enrollment Services at the time of initial registration.
If required, the test must be taken prior to the end of the second, long semester (fall or spring) after initial enrollment and arrangements made for the scores to be sent to the Center for Enrollment Services. Otherwise, the student may be denied further registration in the graduate program. Information concerning registration and testing dates for the GRE and GMAT may be obtained from the Coordinator of Career Services and Testing, Sul Ross State University, Alpine, Texas 79832.

There are two levels of admission to a master's program, full and probationary. Approval of the major department is required for admission at either level. The following criteria will be used in determining the eligibility for admission to the appropriate level.

Applicants must have official transcripts and test scores sent to the Center for Enrollment Services, Sul Ross State University. The Center for Enrollment Services will compile and tabulate the documentation submitted and submit a file on each applicant to the major academic department. Following the departmental review of the file, the Center for Enrollment Services will communicate to the applicant the admission status to be granted.

FULL ADMISSION*
1. Have a 2.5 GPA on a 4.0 scale on the last 60 hours prior to the issuance of the bachelor’s degree and GRE score of at least 850 (verbal and quantitative) or minimum GMAT score of 400, OR
2. Graduate with a bachelor’s degree with a minimum of 3.0 overall GPA OR
3. Hold a master’s degree from an accredited college or university and has the approval from the department in which the applicant proposes to do work.

*Full admission status does not imply an absence of additional departmental requirements (leveling work, higher GRE scores, etc.). Reference should be made to the various departmental graduate programs in the Catalog for more information.

PROBATIONARY ADMISSION*
1. Probationary status may be granted with the approval of the major academic department with the submission of all transcripts; GRE or GMAT scores; and satisfies at least one of the requirements listed above for full admission OR
2. Probationary status may be granted to any student who has not taken the GRE prior to the start of the semester; the GRE must be taken before the end of the semester.

*The responsibility for monitoring the probationary student’s compliance with all conditions of admission rests within the department and college. During the entire probationary period, the student is responsible for maintaining close communications with the major department and, as called upon, with the dean/director of the college or division.

II. ADMISSION AS A NON-DEGREE STUDENT (citizens of the United States)
Students who are not pursuing a degree, but who are interested in graduate work for professional or personal reasons may be admitted as non-degree student provided they present the following:
1. Application for admission.
2. An official transcript with a baccalaureate degree posted from an accredited institution.
3. Approval of the department chair in the department where course work will be undertaken.

Students who decide to apply for a change of status to pursue master's degree work must meet the requirements for admission to a degree program as stated in Section I of this policy. The change of status must be approved by the chair of the major department and the dean/director of the College or division. Students should be aware that, in transferring
from non-degree to degree seeking status, no more than 12 semester hours earned prior to admission to degree seeking status can be used to meet the degree requirements of the program.

The Graduate Record Examination is not required of non-degree students if they have maintained a 3.0 in the first 12 semester hours when they decide to apply for a change of status to that of a master's degree student.

III. INTERNATIONAL STUDENTS

International students must meet the requirements for admission as stated in Section I of this policy. In addition, they must file the following items in the Center for Enrollment Services:

A. Evidence of Financial Responsibility. This may be satisfied by an Affidavit of Support (Immigration Service Form 1-134) or a signed statement from a U.S. citizen or foreign national committing the necessary resources in U.S. dollars for student's expenses.

B. Evidence of English language proficiency as demonstrated by any one of the following:
   1. A TOEFL score of 520; or
   2. Twenty-four hours of undergraduate work with a 2.0 average at an accredited U.S. college or university, or 12 graduate hours with a 3.0 average at an accredited U.S. college or university; or
   3. A bachelor's or master's degree from an accredited U.S. college or university; or
   4. Prospective students may petition the Director of Records and Registration in writing requesting an individual oral assessment of English proficiency. Applicants granted an interview will be notified of the date, time, and location of the interview. The interview panel must deem the applicant's oral English proficiency adequate to successfully complete the program. The interview panel will file the results of the assessment in the Center for Enrollment Services. The Director of Records and Registration will notify the student of the decision in writing.

In addition to the above requirements, students must submit the following:

1. An application fee of $50.00 in U.S. Currency (non-refundable).
2. A housing deposit of $100.00 in U.S. Currency.
3. Proof of Health Insurance and Immunization.

ALL ITEMS MUST BE ON FILE IN THE CENTER FOR ENROLLMENT SERVICES AT LEAST ONE MONTH PRIOR TO THE ANTICIPATED DATE OF REGISTRATION.

IV. TRANSFER STUDENTS

THERE IS NO AUTOMATIC TRANSFER FROM OTHER INSTITUTIONS OF CREDITS APPLICABLE TO A GRADUATE DEGREE. A request for transfer of hours must be made to the major advisor before the end of the first term. No requests for transfer of hours will be accepted after the end of the first term without written approval of the major advisor and the Dean of the College prior to enrollment in the course at another institution. Graduate students will not be permitted to apply toward the master's degree more than twelve semester credit hours of transferred credits, military service credits, non-collegiate educational experiences, undergraduate courses taken for graduate credit, graduate-level independent study courses, or any combination of these. Such courses must be pertinent to the candidate's program of study.

A student may request transfer of a maximum of twelve semester credit hours in a 36-hour non-thesis program, or six semester hours in a 30-hour thesis program from an accredited college or university provided the course work has been approved by the student's major advisor and the Dean of the College. Before courses will be approved for transfer, they must meet the following standards:
1. The grade for each course must be at least a “B”.
2. The course must be unmistakably designated as graduate credit on the official transcript, which must be on file in the Center for Enrollment Services.
3. The time limit of six years must not have expired at the projected time of graduation.
4. The total number of hours taken at Sul Ross State University and any other institution may not exceed 15 semester credit hours in any one semester in the long term or six semester credit hours in either summer term, and
5. No more than twelve semester credit hours in any combination of transfer work, undergraduate courses taken for graduate credit, and graduate-level independent study courses may be credited toward the master’s degree.

Exceptions to these provisions may be granted by the dean of the academic college in which the degree program is housed upon request of the academic advisor and department chair.

v. READMISSION OF GRADUATE STUDENTS
Former Sul Ross State University students not enrolled during the previous long semester must apply for readmission. If intervening college work has been taken, official transcripts from EACH university attended must be submitted.

THE GRADUATE COUNCIL
The Graduate Council consists of department chairs or representatives of departments with graduate programs. The Council serves as an advisory group to the Dean of Graduate Studies, who chairs the Council and implements its policy recommendations or submits those recommendations to the Provost for approval by the Executive Committee. The principal responsibilities of the Council are as follows:

- To serve in an advisory capacity for recommending new degree and certification programs, admissions and graduation policies, and policies to ensure high quality graduate programs throughout the University.
- To establish and review criteria for membership on the graduate faculty.
- To make recommendations on matters of institutional effectiveness relating to graduate studies, including adherence to standards of the university as printed in the catalog and to the accreditation criteria of the Southern Association of Colleges and Schools.
- To recommend policies on professional development of the graduate faculty.

THE GRADUATE FACULTY
All graduate courses taught at Sul Ross State University are taught by members of the graduate faculty. The graduate faculty will impart the skills and methodology of scholarship and the art of critical inquiry to the student. This is accomplished in seminars, through graduate research, by means of internships and practicums and in thesis or major project undertakings.

Members of the graduate faculty will have a terminal degree or equivalent in their discipline and exhibit scholarly excellence through research, artistic creativity, or other appropriate functions related to the goals of graduate programs.

UNDERGRADUATE STUDENTS IN GRADUATE COURSES
Undergraduate students with good academic standing may enroll for graduate credit if:
1. They are within 12 hours of graduation,
2. Their total course load does not exceed fifteen semester hours in the regular session, or
six semester hours in each summer term,
3. They have the written permission of (a) their major advisor, (b) the instructor of each course involved and (c) the Dean of the College at the time of registration.

Students should be aware that:
1. Under no circumstances may graduate courses be taken to fulfill requirements for a baccalaureate degree.
2. No course taken without the requisite permission may be counted for graduate credit toward a degree.
3. There is no guarantee that work approved and completed will be accepted for fulfillment of degree requirements.
4. The maximum number of graduate semester hours that an undergraduate may accrue is twelve.

**MAXIMUM COURSE LOAD**

**Regular session:**
The graduate load shall not exceed fifteen (15) semester credit hours per semester.

**Summer session:**
The graduate load shall not exceed seven (7) semester credit hours per term of the summer session.

**Graduate assistants:**
A graduate student employed as a graduate assistant may carry a combined course/work load of no more than 32 clock hours per week.

**Full-time student:**
Any graduate student who registers for nine or more semester credit hours in the University during a long semester is considered a full-time student. Any graduate student who registers for four or more semester credit hours during a summer term is considered a full-time student. In addition, any student working full time on a thesis and registered for the appropriate thesis course is classified as a full-time student.

**UNDERGRADUATE COURSES FOR GRADUATE CREDIT**

Certain upper-level undergraduate courses, which are taught by members of the Graduate Faculty, may be taken for graduate credit upon (a) consent of the instructor of the course and (b) approval of the graduate major advisor. The department will enroll the student in a graduate level independent study course titled the same as the undergraduate class.

Graduate students allowed to take undergraduate courses for graduate credit must do additional work beyond that required of undergraduates in the course. This work may consist of a documented paper or equivalent and/or other assignments deemed appropriate by the instructor.

A graduate course syllabus identifying the additional work to be done for the course and the means by which a grade will be determined must be developed by the faculty member offering the undergraduate course for graduate credit.

Once a student has begun an undergraduate course for graduate credit, the course must be completed as a graduate course.
QUALITY OF GRADUATE WORK

Graduate Grade Point Average
A grade point average of 3.0 (B) must be maintained in all courses attempted for graduate credit. In addition, a 3.0 (B) grade point average must be maintained in the major and minor fields considered separately (if there is a minor). A grade of less than “C” will not be recognized for graduate credit.

Leveling Work
"Leveling" work, undergraduate courses taken to remove deficiencies in the student's field of study, will NOT be counted in the graduate-level grade point average, but the student is expected to exhibit the same proficiency in this area as in the graduate-level courses.

Probation and Suspension
A fully admitted graduate student whose grade point average falls below 3.0 will be placed on probation for one semester or until six hours of coursework have been completed. Failure to remove any grade point deficiencies during this period will result in suspension from graduate study.

A probationally admitted graduate student whose grade point average falls below 3.0 will be suspended from further graduate study.

Reinstatement
Suspension for grade point deficiency can be appealed by a fully admitted or probationally admitted student, who-petitions for reinstatement. Reinstatement, if granted, results in the student’s being placed on probationary status and carries the conditions that grade point deficiencies must be removed and all grades earned in subsequent graduate courses be at least a "B." To be reinstated the student must obtain written approval from (1) the Department Chair, (2) the Dean of the appropriate College, and (3) the Dean of Graduate Studies.

Forgiveness Policy
Graduate students who have changed programs and wish to have grades from their initial program removed from the calculation of their current program’s grade point average can apply for forgiveness of those grades. Once students have completed 12 sch in the new program with a 3.0 grade point average, they can petition for forgiveness of the grades in the initial program. Those grades remain on the student’s transcript, but they will not be used in the calculation of the student’s GPA. To petition for forgiveness of grades from a former program, the student must obtain written approval from (1) the Dean of the appropriate College and (2) The Dean of Graduate Studies. If the courses in the initial program were taken ten years prior to the current program, they are out-of-date and will not be used in calculating the GPA, so no petition is necessary.

THE GRADUATE DEGREE PLAN

Official degree plans are maintained in Degree Works, a degree audit system that allows students and advisors to maintain an electronic degree plan that is automatically updated as requirements are met. Any change in the official plan (substitutions, waivers) will be permitted only on the basis of reasonable cause. All changes must be approved by the advisor, department chair, and the Dean of the College. Any transfer work to be applied to degree requirements must comply with requirements specified under TRANSFER WORK. If professional certification is desired, the student must also have the approval of the Director of Teacher Education.
GRADUATION UNDER A PARTICULAR CATALOG

A program leading to the master’s degree must be completed within six years from the date of the student's initial enrollment for graduate courses. Half credit may be given for courses seven to ten years old upon recommendation by the major advisor. No graduate credit will be given for courses over ten years old.

Although courses over ten years old at the time of graduation may not be counted toward the master’s degree, certain of these courses may be used to fulfill requirements for teaching certificates and endorsements with the approval of the Director of Teacher Education.

Exceptions to these provisions may be granted by the dean of the academic college in which the degree program is housed upon request of the academic advisor and department chair.

ADMISSION TO CANDIDACY

Application forms for Admission to Candidacy are available in the office of the College dean or Office of Graduate Studies. The request for Admission to Candidacy must be initiated as soon as the student has completed twelve semester credit hours of graduate work at Sul Ross State University.

To meet the requirements for Admission to Candidacy, the student must have done the following:

1. Completed twelve semester credit hours of graduate work at Sul Ross State University,
2. Maintained a grade point average of 3.0 in the major and minor independently, and
3. Removed any conditions imposed at the time of admission to the Graduate Program, including satisfactory test scores and leveling work.

The student must submit the application for Admission to Candidacy to the department, which will review it and forward a recommendation to the Dean of the College. The Dean will notify the applicant of the decision.

THE GRADUATE COMMITTEE

The student and the major advisor should establish a graduate committee following these criteria:

1. The committee should be composed of no fewer than three members, at least two representing the major department. One member may be from another department or a professional from outside the University in an appropriate discipline.
2. Faculty members must be members of the Graduate Faculty.
3. External members must meet the established requirements for membership to the Graduate Faculty or the professional equivalents.

THE THESIS

Students who are required to write a thesis in a Master of Arts, Master of Science, or Master of Business Administration program are required to follow the indicated procedures.

1. The committee shall be composed of no fewer than three members, at least two representing the major department.
2. A graduate student following a degree plan, which requires a thesis, must be registered during any semester or summer term in which assistance is provided by the committee members or when the library or other research facilities of Sul Ross State University are used. All graduate students must be enrolled for thesis when the thesis is submitted to
3. The thesis must be submitted to the committee chair and the thesis committee early in the semester that the student plans to graduate. Once the student has made any revisions specified by the chair and the committee, the final copy of the thesis should be prepared and the thesis defense scheduled. The Office of Graduate Studies will provide a timeline each semester indicating the dates by which the thesis must be submitted to all parties.

4. A public oral defense of the thesis is required of all candidates prior to the submission of the final thesis to the Office of Graduate Studies. Announcement of the defense must be posted in the major department, the appropriate College office, the Office of Graduate Studies, and the office of the Provost and Vice President for Academic and Student Affairs at least one week prior to the defense. Following a successful defense, committee members will sign the approval page of the thesis.

5. The final copy of the thesis and the signed approval page must be submitted to the Office of Graduate Studies, where the editing of the thesis will occur. Once the student has made any required edits and the thesis has been approved by the Dean of Graduate Studies, the thesis can be uploaded to ProQuest.

6. The Office of Graduate Studies will assist the student in formatting an electronic copy of the thesis for ProQuest, following the guidelines using the ProQuest website. The student will pay a standard fee or $100 (or ProQuest's current charges), which pays for binding four copies of the thesis (two for the University library, one for the major department, and one for the student). A portion of this fee ensures the inclusion of the full text of the thesis in ProQuest’s subscription database, ProQuest Dissertations & Theses Database (PQDT). Any additional copies are at the student’s discretion.

COMPREHENSIVE EXAMINATION

All candidates for the master's degree must pass a comprehensive examination, either oral or written or both as specified by the major department. This examination may be scheduled through the major advisor after the student has been admitted to candidacy and has completed at least twenty-four (24) semester hours of graduate credit.

Students failing the comprehensive examination will be given an opportunity to retake the examination and meet other stipulations established by the committee or department. A third and final attempt will be allowed with the approval of the Dean of the College. The results of each attempted examination must be filed in the Dean of the College’s Office.

Before a candidate can be cleared for graduation, a passing grade on the examination must be filed in the Dean of the College’s Office at least ten days before the commencement at which the degree is to be conferred.

REQUIREMENTS FOR A SECOND MASTER'S DEGREE

Subject to the approval of the dean of the college, and the department head, a student holding a valid master's degree from an accredited graduate institution within the past ten years may apply certain courses, which were a part of the first master's degree toward a second master's degree. Generally, these previously applied semester hours will be applied toward a minor or related field of study. The number of semester hours so permitted will be:

a. For thirty-six semester hour programs, no more than twelve semester hours of approved courses with no grade of less than “B” in each, including all extension and transfer work; or
b. For thirty semester-hour programs, no more than nine semester hours of approved courses with no grade less than a “B” in each, including all extension and transfer work.

c. All remaining courses necessary to complete the second master’s degree must be credit courses at Sul Ross State University as this provision is subject to the rules governing the maximum amount of transfer and extension work which may be applied toward any master’s degree. A grade point average of 3.0 must be maintained in these courses, exclusive of the work accepted in a and b above.

The second master’s degree will be subject to the general rules governing master’s degrees except as stated above.

DUAL MASTER’S DEGREES

There are currently two approved dual master’s degrees at SRSU: The MS/MA in Criminal Justice/Public Administration and the MS/MA in Homeland Security/Public Administration. No other combination of degrees will be awarded simultaneously: the student must complete one degree and then the other. From nine to twelve hours taken prior to the awarding of the first degree may be used to satisfy requirements of the second, according to these specifications:

a. If the second degree is in a thirty semester-hour program, up to nine semester hours of courses with no grade less than “B” in each may be applied from the first degree.

b. If the second degree is in a thirty-six semester-hour program, up to twelve semester hours of courses with no grade less than “B” in each may be applied from the first degree.
The College of Agricultural and Natural Resource Sciences is located in the Everett E. Turner Range Animal Science Center, on East Highway 90, approximately one mile east of the main campus. We serve students interested in pursuing careers associated with the production, processing and distribution of food and fiber (animal science), the management of natural resources (range, wildlife, and conservation biology), the sound application of agricultural business practices, and agricultural education. Our faculty stresses a hands-on teaching approach, with emphasis given to building a solid background in the fundamental principles of your area of study. We pride ourselves in offering excellent facilities and learning opportunities in a student-oriented, learning-centered environment. You can earn Bachelor of Science, Master of Agriculture, and Master of Science degrees in two departments:

**ANIMAL SCIENCE AND NATURAL RESOURCE MANAGEMENT**

Degree Programs in Agricultural and Natural Resource Sciences: Bachelor of Science with majors in Animal Science (with concentrations in Agricultural Education, Pre-Veterinary Medicine, Production, and Science), and Natural Resource Management (with concentrations in Agricultural Business, Conservation Biology, Range Management, Sustainable Ranch Management, and Wildlife Management).

Master of Agriculture with majors in Animal Science, and Range and Wildlife Management.

Master of Science with majors in Animal Science, and Range and Wildlife Management.

**RODEO**

Sul Ross State University is well known for its rodeo program and was the 1949 birthplace of the National Intercollegiate Rodeo Association. Sul Ross rodeo teams have earned nine national championships (seven men's and two women's) with well-known former members including Tuff Hedeman, Cody Lambert, and Tami Noble.

The rodeo program consists of state-of-the-art facilities including lighted, covered and outdoor arenas for practices and events. Practice stock is provided for student use during scheduled practice sessions at the University. There are usually three scheduled practices each week and additional practice can be arranged with the coach.

A number of scholarships are available for students who are interested in rodeo. Along with the scholarships, team members are provided budgeted travel monies to help with expenses while traveling to collegiate rodeo competition.

The rodeo club at Sul Ross State University sponsors many events throughout the year. Some of these annual events include jackpot team roping, the annual N.I.R.A. rodeo, and manning the
Chili Appreciation Society International Booth at the annual Terlingua Chili Cook-off. Club monies support team activities and scholarships, and other activities determined by the club. Club members are not required to be rodeo team members.

For more information contact: Jacob Gernentz, Rodeo Coach, Sul Ross State University, P.O. Box C-110, Alpine, Texas 79832, Phone: (432) 837-8240, or http://www.sulross.edu/sul-ross-state-university-rodeo.

FASKIN RANCH

The Faskin Ranch, a Sul Ross State University Research and Teaching Field Site, is located in Hudspeth County between Van Horn and Sierra Blanca along Interstate 10. This 14,700 acre working ranch provides hands-on teaching and research opportunities for students in Animal Science, Biology, Earth and Physical Science, and Natural Resource Management departments.

DEPARTMENT OF ANIMAL SCIENCE
(Including Concentrations in Agricultural Education, Animal Production, Pre-Veterinary Medicine, Animal Science)

College of Agricultural and Natural Resource Sciences
Office: Turner Range Animal Science Center, 103
Phone: (432) 837-8200
Fax: (432) 837-8409
Website: http://www.sulross.edu/animal-science
E-mail: cestepp@sulross.edu

Associate Professor and Chair: Christopher M. Estepp, Ph.D.
Professor: Scott A. Ericsson, Ph.D.
Associate Professor: Rebecca K. Splan, Ph.D.
Assistant Professor: Jamie A Boyd, Ph.D.

Program Description
The Department of Animal Science offers Bachelor of Science, Master of Science (thesis and non-thesis) and Master of Agriculture degrees. Students pursuing a Bachelor of Science in Animal Science can choose a concentration in Agricultural Education with secondary teaching certification, Pre-Veterinary Medicine, Production, and Science.

The Department of Animal Science educates students in the art and science of applied animal knowledge and business practices to manage animals. Our goal in the Department of Animal Science is to provide the best education and preparation available for professional careers in the animal agriculture industry. We meet this goal with a curriculum solidly grounded in scientific principles emphasizing hands-on experience. Our degrees offer great flexibility to customize your educational needs by providing a number of concentrations.

Career Opportunities in Animal Science
- Artificial insemination and breeding organizations
- Companion animals (boarding, breeding, training, Humane Society)
- County extension agents
- Department of Agriculture (research and information)
- Department of Defense (food supply and food service)
Feedlot positions
Finance (Production Credit Associations, banks, etc.)
Government protection and regulatory agencies
Graduate School for Master's in Business Administration
Graduate School for Master of Science and Doctor of Philosophy degrees
High school agricultural educator
International opportunities
Laboratory technicians
Livestock and meat market reporting (government)
Livestock buyers for feeders and packers
Livestock production operations (beef, dairy, swine, sheep, goats, and horses)
Livestock publications
Meat Grading
Meat inspection, grading, handling, distribution, and marketing (auctions, Cattle Fax, livestock sales management, etc.)
Positions in food processing, manufacturing, and ingredient plants
Ranch positions
Research (university or industry) in meat quality nutrition, reproduction, breeding and genetics, products, and production management
Riding instructor, sales, advertising, management, and public relations positions with feed companies, packing companies, drug & pharmacy companies, equipment companies, etc.
University or college teaching
University extension and area extension
Veterinary School for Doctor of Veterinary Medicine (private practice, consulting, university teaching and research)

Features
The Department of Animal Science is located in the Everett E. Turner Range Animal Science Center. This 500-acre complex consists of classrooms, laboratories, offices and animal holding areas. There are special facilities for veterinary technology, farrier technology, reproductive physiology, and equine science, as well as swine facilities, a feedlot and special horse pens. The university also maintains animals for teaching and research including: a herd of registered Hereford cattle, horses, goats, sheep, and swine. The 14,700-acre university ranch is also available for animal science classes and research. A variety of student clubs and activities are available for you to participate in, and include Collegiate FFA, Delta Tau Alpha (agricultural honorary society), Pre-Vet Club, Rodeo Club, Ranch Horse Team, Range and Wildlife Club, and Graduate Student Association.

Scholarships
A variety of Scholarships are available to qualified applicants through the College of Agricultural and Natural Resource Sciences. Scholarships include San Antonio Livestock Exposition, Houston Livestock Show and Rodeo, and many others. Scholarships vary from $100-$2,500 per academic year.

BACHELOR OF SCIENCE
(Animal Science-120-125 Hours)

Suggested Four Year Course Sequence for Bachelor of Science in Animal Science
For further assistance, see your advisor.
Science Requirement – Zoology ........................................................................................................4
Math Requirement – Math 1314, 1342................................................................................................6
English 1301, 1302 ...........................................................................................................................6
History 1301, 1302 ............................................................................................................................6
Animal Science 1101, 1419 ...............................................................................................................5
Natural Resource Management ......................................................................................................3

Total 30

Sophomore Year
Animal Science Core 3406, 3315 ....................................................................................................3
and 7 sch from concentration .........................................................................................................7
Chemistry 1311, 1111, 1312, 1112 ...............................................................................................8
English 2311 ...................................................................................................................................3
Communication Requirement ........................................................................................................3
Literature Requirement ....................................................................................................................3
Social and Behavioral Science Requirement ..................................................................................3

Total 30

Junior Year
Animal Science Core 3317, 3308, 4306 .......................................................................................9
and 6 sch from concentration .........................................................................................................6
Political Science Requirement 2305, 2306 ...................................................................................6
Creative Arts Requirement ..............................................................................................................3
Biology – BIOL 2421 (Microbiology) ...........................................................................................4
Language, Philosophy, and Culture Requirement ..........................................................................3

Total 31

Senior Year
Animal Science Core 4304, 4305, 4317 .......................................................................................9
Animal Science Concentration .......................................................................................................15
Electives ..........................................................................................................................................5

Total 29

Grand Total 120

The Agricultural Education Concentration is designed to prepare students to enter the profession of secondary agricultural education. The Animal Science Department, Education Department, and the Industrial Technology Department have combined their programs into a curriculum to develop leadership qualities and knowledge needed to succeed in the field of agricultural education. Each student participates in course work and extensive hands-on experience. This concentration offers career opportunities including, but not limited to, instructional positions, as well as extension services, farm service agencies, farm and ranch management, and international agriculture. See Teacher Certification Requirements in this catalog for further information.

Bachelor of Science
Animal Science - Agricultural Education Concentration Degree Plan

Please go to the following links to view the Animal Science - Agricultural Education Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Animal Science - Agricultural Education Concentration
- List of University Courses

Suggested Four Year Course Sequence for Bachelor of Science in Animal Science – Agricultural Education
For further assistance, see your advisor.

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Requirement – Horticulture or Soils</td>
<td>3</td>
</tr>
<tr>
<td>Math Requirement – College Algebra</td>
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<td>Social Science Requirement</td>
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<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Communication Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1101, 1419</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total 29</strong></td>
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**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Education Courses</td>
<td>6-9</td>
</tr>
<tr>
<td>Science Requirement – Horticulture or Soils</td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Creative Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Literature Requirement</td>
<td>3</td>
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<td>Political Science</td>
<td>6</td>
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<tr>
<td>Animal Science courses</td>
<td>6-9</td>
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<td><strong>Total 30-36</strong></td>
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**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Education Courses</td>
<td>6-9</td>
</tr>
<tr>
<td>Science Requirement – General Botany</td>
<td>3</td>
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<tr>
<td>Literature Requirement</td>
<td>6</td>
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<tr>
<td>Industrial Technology</td>
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<td>Natural Resource Management</td>
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<td>Agricultural Economics</td>
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<td>Animal Science courses</td>
<td>3-6</td>
</tr>
<tr>
<td><strong>Total 33-39</strong></td>
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**Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Education Block I</td>
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<tr>
<td>ED 4306</td>
<td>3</td>
</tr>
<tr>
<td>Industrial Technology</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science</td>
<td>3-6</td>
</tr>
<tr>
<td>Student Teaching</td>
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<tr>
<td><strong>Total 27-30</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Grand Total 125</strong></td>
<td></td>
</tr>
</tbody>
</table>

The **Production Concentration** trains students for employment in traditional broad-based animal agriculture such as livestock production, business, and services related to livestock. Ranching, extension, livestock consultants, market livestock analysis, meat grading, and animal recreationists are additional examples of some of the professional opportunities available.

**Bachelor of Science**

**Animal Science - Production Concentration Degree Plan**

Please go to the following links to view the Animal Science - Animal Production Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Animal Science - Production Concentration](#)
- [List of University Courses](#)
The Science Concentration is for students interested pursuing advanced degrees in Animal Science, such as Master of Science.

### Bachelor of Science

**Animal Science - Science Concentration Degree Plan**

Please go to the following links to view the Animal Science - Science Concentration degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- [Animal Science - Science Concentration](#)
- [List of University Courses](#)

The Pre-Veterinary Medicine Concentration curriculum is designed to meet or exceed the requirements for entrance into the Texas A&M University College of Veterinary Medicine.

### Pre-Veterinary Medicine Degree Plan

Please go to the following links to view the Pre-Veterinary Medicine degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- [Pre-Veterinary Medicine](#)
- [List of University Courses](#)

### Suggested Four Year Course Sequence for Bachelor of Science in Animal Science – Pre-Veterinary Medicine

For further assistance, see your advisor.

#### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Science Requirement – Biology 1313, 1113</td>
<td>4</td>
</tr>
<tr>
<td>Math Requirement – Math 1314, 1342</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Animal Science 1101, 1419</td>
<td>5</td>
</tr>
<tr>
<td>Natural Resource Management 1301, 2301, 2302, 2305</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 30**

#### Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Animal Science Core 3406, 3315</td>
<td>7</td>
</tr>
<tr>
<td>Science Requirement – Biology 1311, 1111</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry 1311, 1111, 1312, 1112</td>
<td>8</td>
</tr>
<tr>
<td>English 2311</td>
<td>3</td>
</tr>
<tr>
<td>Communication Requirement COMM 1311</td>
<td>3</td>
</tr>
<tr>
<td>Literature Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Psychology 1302</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 31**

#### Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science Core 3317, 3308, 4306</td>
<td>9</td>
</tr>
<tr>
<td>Chemistry 3407, 3408</td>
<td>8</td>
</tr>
<tr>
<td>Political Science Requirement 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Creative Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Biology – BIOL 2421 (Microbiology)</td>
<td>4</td>
</tr>
<tr>
<td>Language, Philosophy, and Culture Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>
GRADUATE PROGRAMS IN ANIMAL SCIENCE

The Department of Animal Science offers programs of study leading to the Master of Science (thesis and non-thesis), and Master of Agriculture (non-thesis) degrees, depending on an individual's educational objectives. Programs in Animal Science emphasize, through the mastery of advanced technology, methods of improving and/or better utilizing agricultural resources. The graduate program is designed to prepare students for advanced education (Ph.D.) and for careers in teaching, extension service, research, management, and other occupations requiring the higher-level capabilities of a resource manager/scientists. GRE scores of 290 (verbal and quantitative) are required for full admission to the M.S. thesis program. GRE scores of 280 (verbal and quantitative) are required for full admission to the M.S. non-thesis program. Additional requirements for all Master of Science options include a letter of intent, a resume, and two letters of recommendation from outside the department. Departmental GPA requirements are the same as general admission requirements outlined for the university. Offerings in collateral fields enable the student to develop a program tailored to their particular needs and interests.

**Master of Science (Thesis) Animal Science**

The Master of Science program of study for Animal Science must include the following courses:

- ANSC 5311 Scientific Writing
- ANSC 5312 Biostatistical Analysis I
- ANSC 5313 Biostatistical Analysis II
- ANSC 6301 Thesis Proposal
- ANSC 6302 Thesis Defense

Plus 15 additional semester hours of ANSC graduate work. These may include upper-level undergraduate courses in ANSC for graduate credit, or graduate-level courses from other departments.

**Master of Science (Non-thesis) Animal Science**

The Master of Science (non-thesis) program of study for Animal Science consists of 36 hours of coursework along with a project of record to be determined by the student and major advisor. The sequence of courses for the MS (non-thesis) degree includes the following course (additional course in other fields may be substituted with approval from major advisor or ANSC department chair):

**FALL**
- ANSC 5320 Animal Industries
- ANSC 5325 Agricultural Genetics & Biotechnology
- ANSC 5324 Animal Physiology
- ANSC 5308 Principles of Teaching Adult Learners

**SPRING**
ANSC 5322  Statistics for the Animal Sciences
ANSC 5327  Animal Nutrition
ANSC 5326  Animal Reproduction
ANSC 5321  Animal Science Business Planning

SUMMER I
ANSC 5323  Research Literature
ANSC 5329  Animal Breeding

SUMMER II
ANSC 5328  Meat Production
ANSC 5317  Implementing Change

Master of Agriculture (Non-thesis) Animal Science-36 hours Alpine Campus or Online

The Master of Agriculture (non-thesis) program of study for Animal Science will include the following courses sequence (additional courses in other fields may be substituted with approval from major advisor or ANSC department chair):

FALL
ANSC 5320  Animal Industries
ANSC 5325  Agricultural Genetics & Biotechnology
ANSC 5324  Animal Physiology
ANSC 5308  Principles of Teaching Adult Learners

SPRING
ANSC 5322  Statistics for the Animal Sciences
ANSC 5327  Animal Nutrition
ANSC 5326  Animal Reproduction
ANSC 5321  Animal Science Business Planning

SUMMER I
ANSC 5323  Research Literature
ANSC 5329  Animal Breeding

SUMMER II
ANSC 5328  Meat Production
ANSC 5317  Implementing Change
DEPARTMENT OF NATURAL RESOURCE MANAGEMENT
(Including Agricultural Business, Conservation Biology, Range Management, Wildlife Management, and Sustainable Ranch Management)

College of Agricultural and Natural Resource Sciences
Office: Everett. E. Turner Range Animal Science 111
Phone: (432)837-8488
Fax: (432)837-8822
E-mail: nrm@sulross.edu
Website: http://www.sulross.edu/natural-resource-management

Professor and Chair: Bonnie J. Warnock, Ph.D.
Professors: Louis A. Harveson, Ph.D., Patricia Moody Harveson, Ph.D. and Robert J. Kinucan, Ph.D.
Assistant Professors: Ryan S. Luna, Ph.D., Ryan O’Shaughnessy, Ph.D.

The Department of Natural Resource Management offers a Bachelor of Science degree in Natural Resource Management; a Master of Agriculture degree (non-thesis) in Range and Wildlife Management; a Master of Science degree (thesis and non-thesis) in Range and Wildlife Management, and a cooperative program to earn a Ph.D. in Wildlife Science or Rangeland Ecology through Texas A&M University. Students majoring in Natural Resource Management can pursue a concentration in agricultural business, conservation biology, range management, sustainable ranch management, or wildlife management.

The Department of Natural Resource Management educates students in the art and science of applying ecological knowledge and business practices to manage natural resources. Our goal in the Department of Natural Resource Management is to provide the best education and training available for future natural resource managers. We meet this goal with a curriculum solidly grounded in scientific principles that stresses hands-on experience.

The department advises the nationally award-winning Sul Ross Chapter of the Wildlife Society, the Sul Ross Chapter of the Society for Range Management which meet as the Range and Wildlife Club, and the Sul Ross Chapter of the Society for Conservation Biology. Our clubs are very active on campus, within the community, and with state and national professional organizations and have frequently been recognized over the years for their accomplishments and involvement. Student organizations are an important part of your collegiate experience and contribute significantly to personal and professional development.

Features
The Department of Natural Resource Management is located in the Everett E. Turner Range Animal Science Center. Facilities located at the RAS Center include a soils dry lab, soils and nutrition wet lab, game bird specimen collection, plant collections, greenhouse, Natural Resource Management Spatial Technologies Computer Lab, Range and Wildlife Field Unit at Elephant Mountain Wildlife Management Area, the 14,700-acre Faskin Ranch, the donated lease of approximately 60,000 acres on the O2 Ranch from Lykes Bros. Inc., Bill and Margo Adams Big Game Trophy Collection, and a small ranch located adjacent to the Center.

The department actively participates in memorandums of understanding with the Texas Parks and Wildlife Department, Texas Agricultural Extension Service, Texas General Land Office, Natural Resources Conservation Service, National Park Service, Bureau of Land Management, U.S. Forest Service and USDA Soil Survey. We interact with many private, state and federal organizations that provide numerous educational and employment opportunities. In addition, Sul Ross State University is in the heart of one of the greatest outdoor laboratories in the world.
including Big Bend National Park, Davis Mountains State Park, Big Bend Ranch State Park, Elephant Mountain Wildlife Management Area, Ocotillo Wildlife Management Area, Sierra Diablo Wildlife Management Area and Black Gap Wildlife Management Area, and many privately owned ranches that participate with the department. We help you take advantage of this natural laboratory through field trips, class projects and undergraduate and graduate research opportunities. Together, this background provides the opportunity to gain a thorough, well-rounded education. Our undergraduate students often have the opportunity to assist and participate in graduate and faculty research projects, which provides first-hand experience in the science of natural resource management.

Scholarships
A variety of scholarships are available to qualified applicants through the College of Agricultural and Natural Resource Sciences. Scholarships include the San Antonio Livestock Exposition, Houston Livestock Show and Rodeo, and many others. Scholarships vary from $100-$2,500 per academic year.

Natural Resource Management Program Description
The Natural Resource Management Range, Wildlife and Conservation Biology concentrations are designed to meet civil service requirements for resource management specialists with federal agencies, and prepare students to work in federal, state, or private sector natural resource and wildlife occupations. The Wildlife Management concentration is also designed to meet The Wildlife Society’s criteria for certification as a Certified Associate Wildlife Biologist. The Agricultural Business concentration emphasizes the economic and managerial aspects of farms, ranches, and natural resources. A degree in Agricultural Business provides employment opportunities in farm and ranch management, banking, farm credit, sales and marketing, and many other areas. The Sustainable Ranch Management concentration is a multidisciplinary degree that prepares students for on the ground ranch management, with courses in ranch management, range management, wildlife management, agricultural business, animal husbandry, and industrial technology.

Our degrees offer great flexibility to customize your education to meet your interests and needs by providing a wide selection of electives from which to choose. Some of the more popular electives for our students majoring in Natural Resource Management include Biology, Chemistry, Criminal Justice, Business, Animal Science or Industrial Technology. A degree in Natural Resource Management opens the door for students who have the desire to work towards the future health of our many natural resources.

Career Opportunities in Natural Resource Management
- Agricultural Accounting and Financial Marketing
- Agricultural Credit Associations
- Agricultural Extension Service
- Agricultural Product Distribution and Sales
- Agricultural Stabilization and Conservation Service
- Banks
- Bureau of Land Management
- Conservation Organizations
- Consulting Firms
- Environmental Consulting Firms
- Insurance Companies
- National Park Service
- Natural Resource Conservation Service
- Personnel Management
The Natural Resource Management (NRM) curriculum is designed to educate students in the art and science of applied ecological knowledge to manage natural resources, and the practical and agribusiness applications of ranch management. Students may select a concentration in agricultural business, conservation biology, range management, sustainable ranch management, or wildlife management, which allows you to meet professional requirements as a wildlife biologist, resource conservationist, or agribusiness professional. Students receive a broad education in agribusiness principles, natural resources, plant and animal ecology and management, and obtain specific expertise in their chosen concentration.

The Agricultural Business Concentration is designed for students interested in working in the area of agricultural-related businesses. Students selecting this specialization meet all the basic requirements for a degree in Agricultural Business which will prepare them for a career in the rapidly expanding fields of various combinations of agriculture and business related industries.

Bachelor of Science
Natural Resource Management - Agricultural Business Concentration Degree Plan
Please go to the following links to view the Natural Resource Management - Agricultural Business Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Natural Resource Management - Agricultural Business Concentration
- List of University Courses

The Conservation Biology Concentration is designed to educate students in the art and science of applied ecological knowledge to manage natural resources, focusing on conservation and sustainable use of natural resources and management of nongame and rare species.

Bachelor of Science
Natural Resource Management - Conservation Biology Concentration Degree Plan
Please go to the following links to view the Natural Resource Management - Conservation Biology Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Natural Resource Management - Conservation Biology Concentration
- List of University Courses
The **Range Management Concentration** is designed to educate students in the art and science of applied ecological knowledge to manage natural resources focusing on management of rangeland resources such as soil, water, vegetation, and grazing animals.

**Bachelor of Science**  
**Natural Resource Management - Range Management Concentration Degree Plan**

Please go to the following links to view the Natural Resource Management - Range Management Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Natural Resource Management - Range Management Concentration](#)  
- [List of University Courses](#)

The **Sustainable Ranch Management Concentration** is designed to educate students using a practical, experiential approach to manage a ranch from the soil up. Students learn how soil, water, energy, nutrients, vegetation, wildlife, livestock, business and people all contribute to a prosperous ranching enterprise.

**Bachelor of Science**  
**Natural Resource Management - Sustainable Ranch Management Concentration Degree Plan**

Please go to the following links to view the Natural Resource Management - Sustainable Ranch Management Concentration degree plan and to see the full course list and descriptions. All of the university courses are also included at the end of the catalog.

- [Natural Resource Management - Sustainable Ranch Management Concentration](#)  
- [List of University Courses](#)

The **Wildlife Management Concentration** is designed to educate students in the art and science of applied ecological knowledge to manage natural resources focusing on the management of game wildlife species and their habitats.

**Bachelor of Science**  
**Natural Resource Management - Wildlife Management Concentration Degree Plan**

Please go to the following links to view the Natural Resource Management - Wildlife Management Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Natural Resource Management - Wildlife Management Concentration](#)  
- [List of University Courses](#)

**Natural Resource Management Bachelor of Science - 4-year rotation**  
Suggested Course Sequence for Bachelor of Science degree with a major in Natural Resource Management with concentrations in Wildlife, Range, or Conservation Biology.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Natural Resource Management 1101, 2301, 2302, 2330</em></td>
<td>10</td>
</tr>
<tr>
<td>Core Curriculum</td>
<td>18</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>28</strong></td>
</tr>
</tbody>
</table>

*Note: *Course numbers and descriptions may change periodically. Check with your advisor for the most current information.
Sophomore Year
Natural Resource Management 3201, 3202, 3308 ................................................................. 7
Core Curriculum .................................................................................................................. 24
BIOL 1111 and 1113 (labs) ............................................................................................. 2
Total 33

Junior Year
Natural Resource Management courses ................................................................. 15
MATH (in addition to core) ............................................................................................ 3
General Chemistry 1311 and 1111 .................................................................................. 4
ENG 2311 (Technical Writing) ........................................................................................ 3
Electives ............................................................................................................................ 3
Total 32

Senior Year
Natural Resource Management courses ................................................................. 18
NRM 4303 and 4305 ......................................................................................................... 6
GEOL 3401 (GIS) ............................................................................................................ 4
Electives ............................................................................................................................ 3
Total 31
Grand Total 120

Natural Resource Management Bachelor of Science - 4-year rotation
Suggested Course Sequence for Bachelor of Science degree with a major in Natural Resource Management with a concentration in Agricultural Business.

Freshman Year
*Natural Resource Management 1101, select two courses from 2301, 2302, 2330, AGB 2302. 10
Core Curriculum ................................................................................................................ 21
Total 31

Sophomore Year
Natural Resource Management 3202, 3308, ANSC 1419 ....................................................... 9
Core Curriculum ................................................................................................................ 21
BIOL 1111 and 1113 (labs) ............................................................................................. 2
Total 32

Junior Year
Agricultural Business, Animal Science or Natural Resource Management courses ............... 16
MATH (in addition to core) ............................................................................................ 3
General Chemistry or Physical Geology 1311 and 1111 ................................................. 4
ENG 2311 (Technical Writing) ......................................................................................... 3
Electives ............................................................................................................................ 3
Total 29

Senior Year
Agricultural Business, Animal Science or Natural Resource Management courses ............... 21
NRM 4303 ...................................................................................................................... 3
GEOL 3401 (GIS) ............................................................................................................ 4
Electives ............................................................................................................................ 1
Total 29
Grand Total 120

Natural Resource Management Bachelor of Science - 4-year rotation
Suggested Course Sequence for Bachelor of Science degree with a major in Natural Resource Management with a concentration in Sustainable Ranch Management
Freshman Year
*Natural Resource Management 1101, 2330, AGB 2302 RCH 2101, RCH 1301 .....................11
Core Curriculum................................................................................................................18
Total 29

Sophomore Year
Natural Resource Management 2301, 3202, RCH 2101, 1302.................................................9
Core Curriculum................................................................................................................21
Total 30

Junior Year
Ag Business, Animal Science, Natural Resource Mgt., Industrial Technology or Ranch Mgt.
courses ............................................................................................................................27
Ag Statistics .......................................................................................................................3
Total 30

Senior Year
Ag Business, Animal Science, Natural Resource Mgt., Industrial Technology or Ranch Mgt.
courses ............................................................................................................................25
RCH 4601 .........................................................................................................................6
Total 31

GRADUATE PROGRAMS IN NATURAL RESOURCE MANAGEMENT

The Department of Natural Resource Management offers programs of study leading to the Master of Science (thesis and non-thesis) and Master of Agriculture (non-thesis) degrees in Range and Wildlife Management, depending on an individual's educational objectives. Programs in Natural Resource Management emphasize, through the mastery of advanced technology, methods of improving and/or better utilizing natural resources. The graduate program is designed to prepare students for advanced educations (Ph.D.) and for careers in teaching, extension, research, management, and other occupations requiring the higher level capabilities of a resource manager/scientist. Offerings in collateral fields enable the student to develop a program tailored to their particular needs and interests. GRE scores of 290 (verbal and quantitative) are required for full admission to the M.S. thesis program. GRE scores of 280 (verbal and quantitative) are required for full admission to the M.S. non-thesis program. Additional requirements for all graduate options include a letter of intent, a resume, and two letters of recommendation from outside the department. Departmental GPA requirements are the same as general admission requirements outlined for the university.

The Department of Natural Resource Management has a formalized cooperative agreement with Texas A&M University (TAMU) to offer a Ph.D. in Wildlife Science (through the Department of Wildlife and Fisheries Science at TAMU) and Rangeland Ecology (through the Department of Ecosystem Science and Management at TAMU). Details on the Cooperative Ph.D. Program can be requested from the NRM Chair.

Master of Science (Thesis) Range and Wildlife Management - 30 hours

The Master of Science program of study for the Range and Wildlife concentration must include the following courses:
NRM 5302 - Seminar in Range and Wildlife Management (must take two sections with unique course titles)
NRM 5305 - Range and Wildlife Research Methods
NRM 5306 or GEOL 5403 GIS, GPS and Remote Sensing for Resource Managers
NRM 5312 – Bio-statistical Analysis I
NRM 5313 – Bio-statistical Analysis II
NRM 6301 - Thesis Proposal
NRM 6302 - Thesis Defense
GEOL 5402 - Interdisciplinary GIS
Plus 2-3 additional graduate credit hours.

Students will enroll each semester or summer term in which assistance is provided by graduate committee members or when use of the library or other research facilities of Sul Ross State University is made. Students must enroll full time in any session that they are receiving an assistantship, either for teaching or research.

**Master of Sciences (Non-thesis) Range and Wildlife Management-30 hours**

The Master of Science (non-thesis) program of study for the Range and Wildlife concentration must include the following courses:

- NRM 5302 - Seminar in Range and Wildlife Management (must take two sections with unique course titles)
- NRM 5304 – Research (summer session only)
- NRM 5305 - Range and Wildlife Research Methods
- NRM 5306 - GIS, GPS and Remote Sensing for Resource Managers
- GEOL 5402 - Interdisciplinary GIS
- NRM 5312 – Bio-statistical Analysis I
- NRM 5313 – Bio-statistical Analysis II

Plus 5 additional graduate credit hours selected with the help of your advisory committee. In addition, each M.S. (Non-thesis) candidate must complete a Record of Study based upon their experiences in NRM 5304.

Students will enroll each semester or summer term in which assistance is provided by graduate committee members or when use of the library or other research facilities or Sul Ross State University is made.

**Master of Agriculture (Non-thesis) Range and Wildlife Management-30 hours**

The Master of Agriculture program of study for Range and Wildlife can be completed as a totally web based option, a totally in person option or as a mix of web based and in person courses. Courses designated with a W are web based and those with an IP are in person. The M.Ag. must include the following courses:

- NRM 5329 or 5304 Internship (W) or Research (IP)

Students will then select 27 additional hours from the following with the help of their advisory committee.

- NRM 5302 Seminar in Range and Wildlife Management (IP), may be repeated under different course titles
- NRM 5303 Special Topics (IP), may be repeated under different course titles
- NRM 5306 GIS, GPS and Remote Sensing for Resource Managers (IP)
- NRM 5320 Environmental Law and Policy (W)
- NRM 5321 Wildlife and Society (W)
- NRM 5322 Sustainability (W)
- NRM 5323 Social Media and Outreach (W)
- NRM 5324 Conservation Biology (W)
- NRM 5325 Natural Resource Conservation (W)
- NRM 5326 Silviculture (W)
- NRM 5327 Soils (W)
NRM 5328 Principles of Game Management (W)
ANSC 5322 or NRM 5312 Statistics (W) or Biostatistical Analysis I (IP)
ANSC 5308 Principles of Teaching Adult Learners (W)
NRM 5403 Special Topics (IP), may be repeated under different course titles
NRM 5409 Wildlife Population Dynamics (IP)

Students will enroll each semester or summer term in which assistance is provided by graduate committee members or when use of the library or other research facilities of Sul Ross State University is made.
The College of Arts and Sciences, in its present configuration, was formed in 1986 following the merger of three distinct divisions. This College exists to meet the needs of the university, to complement the other academic units, and to help students realize personal, professional, and vocational objectives. The departments and programs in the College offer courses for the core curriculum in general education, provide course support for other programs, and develop innovative elective units in addition to required undergraduate and graduate courses for majors and minors. Faculty and staff in Arts and Sciences pride themselves in being student centered, in being service oriented, in being able to answer questions or solve problems, and in maintaining a friendly and open environment conducive to learning.

The College of Arts and Sciences consists of the following six departments:

- **Academic Center for Excellence**
- **Behavioral and Social Sciences**
- **Biology, Geology and Physical Sciences**
- **Computer Science and Mathematics**
- **Fine Arts and Communication**
- **Languages and Literature**

The College of Arts and Sciences also includes the Rio Grande Research Center, a research center promoting and engaged in scientific research.

The College of Arts and Sciences promotes and coordinates international educational travel opportunities among the various departments.

**Degree Programs in the Arts and Sciences:**

1. Bachelor of Arts with majors in Communication, English, General Studies, History, Political Science, Psychology, Social Science, and Spanish;
2. Bachelor of Fine Arts with majors in Art and in Theatre;
3. Bachelor of Science with majors in Biology, Chemistry, Computer Science, Geology, and Mathematics;
4. Master of Arts with majors in English, History, Liberal Arts, Political Science, Public Administration;
5. Master of Science with majors in Biology and Geology.
Program Description
The Academic Center for Excellence (ACE) provides a myriad of multifaceted services intended to support all students and academic programs at Sul Ross State University. To this endeavor, ACE provides an Academic Learning Center (ALC) the which aids in helping students learn methods and techniques of studying as well as critical thinking. ACE also offers course work for students in need of satisfying the Texas Success Initiative (TSI) and for those preparing to enter the Teacher Certification Program. ACE also provides facilities, organization, and coordination for the SRSU Honors Program. The SRSU Honors Program challenges students to conceptualize, analyze, and learn subject material in a different way. By incorporating and bringing together these disparate student bodies, an environment of understanding, camaraderie, and cooperation is created. ACE works closely to help students adjust and adapt to college life and to succeed in their life-long learning experience.

Academic Learning Center
The Academic Learning Center (ALC) is located in Ferguson Hall 213. The ALC provides students with access to one-on-one and small group tutoring for reading, writing, and mathematics. The Learning Center also makes computers and software available to students. Students can access the online program PLATO through the ALC. Reference materials available in the ALC include study materials for the Texas Success Initiative Assessment (TSIA), the Graduate Record Examination (GRE), and class specific texts and study guides.

The Learning Center also makes Academic Enhancement Seminars available to students. Each semester, a series of seminars is conducted to give students the opportunity to gain and hone their academic skills and address such topics as developing and recognizing effective academic practices.

Developmental Education
The developmental education courses are designed to target deficiencies as identified by the criteria established in the Texas Success Initiative (TSI). Students initially enrolling into Sul Ross State University who do not meet the College Readiness Standards must take a state approved assessment meant to identify needs in reading, writing, and mathematics. Students must pass all developmental courses for which they have shown a need prior to attempting any college level courses related to one of the three areas.

College Readiness Exemptions
ACT - Composite score of 23 with a minimum of 19 on the English test shall be exempt for both the reading and writing sections of the TSIA, and/or 19 on the mathematics test shall be exempt for the mathematics section of the TSIA.
**SAT** - A combined verbal and mathematics score of 1070 with a minimum of 500 on the verbal test shall be exempt for both reading and writing sections of the TSIA, and/or 500 on the mathematics test shall be exempt for the mathematics section of the TSIA.

**TAKS** - A minimum score of 2200 on the math section and/or a minimum score of 2200 on the English Language Arts section with a writing score of at least 3 shall be exempt from the TSIA.

**SRSU Honors Program**
The Sul Ross State University Honors Program is a challenging and an integrative program of academic experiences with a high degree of student and faculty interchange designed to stimulate the more motivated student. This program offers the outstanding student an opportunity to take intellectually motivating seminars. It is not an accelerated program but an in-depth approach to the understanding of ideas and relationships. The program offers students a chance to go beyond the norms of the traditional classroom experience and explore with a greater intensity more challenging concepts and issues while applying critical thinking to the learning experience.

A student who completes a minimum of 24 credit hours in honors classes with a GPA of 3.50 or higher and a cumulative GPA of 3.30 or higher will earn the designation *Graduate in Honors Studies*. This designation will be imprinted on each student’s transcript. Students are encouraged to apply to the SRSU Honors Program by completing an application. Contact the Academic Center for Excellence for more information on applying to the SRSU Honors Program.

**DEPARTMENT OF BEHAVIORAL AND SOCIAL SCIENCES**
(Including Anthropology, Geography, History, Mexican American Studies, Philosophy, Political Science, Psychology, Public Administration, Social Sciences and Sociology)

**College of Arts and Sciences**
Office: Lawrence Hall 208
Phone: (432)837-8157
Fax: (432)837-8146
E-mail: tiffany.vincent@sulross.edu

Assistant Professor and Chair: Tiffiny Vincent, Ph.D.
Professors: Jim D. Case, Ph.D., James W. Downing, Ph.D. and Mark Saka, Ph.D.
Assistant Professors: Kendra DeHart, M.A., Bibiana Maria Gutierrez, Ph.D., Jennifer McCormack, Ph.D., Alicia Trotman, Ph.D., and Savannah Williamson, Ph.D.
Associate Professor: David Watson, Ph.D.

**Program Description**
The Department of Behavioral and Social Sciences offers course work leading to the Bachelor of Arts degrees in History, Political Science, Psychology, and Social Science. Anthropology, Geography, Mexican American Studies, and Sociology are offered as minor fields of study only. In addition, limited course work is offered in Philosophy. Teacher certification is available in History and Social Science, (Economics, Geography, Political Science, Psychology, and Sociology). At the graduate level, the department offers the Master of Arts degrees in History, Political Science, and Public Administration. The department has a limited number of graduate Teaching Assistantships for graduate students in History, Political Science, and Public Administration. For additional information about the assistantships, contact the department chair.

The Behavioral and Social Sciences faculty is engaged in a wide-range of research with international, national, and regional focus. There has been a tradition of research addressing Trans-Pecos/Big Bend issues as well as cross-cultural research in Mexico. The Center for Big
Bend Studies and the Museum of the Big Bend are closely associated with the department and provide students opportunities for archeological and historical research. The Department of Behavioral and Social Sciences also provides educational opportunities through international travel in Europe and Mexico.

The Texas state legal requirements for course work in United States history and federal and Texas government are met by courses taught in this department. These requirements may be met in a variety of ways indicated in the course descriptions for the appropriate discipline.

The Department sponsors a number of honorary societies and clubs, including: Phi Alpha Theta, the national history honorary society. Pi Sigma Alpha, the national political science honorary society, and Psi Chi, the international psychology honor society, and the Psychology Association, a student organization for psychology majors.

As with all Sul Ross students, students majoring in an academic area within the Department of Behavioral and Social Sciences are required to take a major field assessment examination during the semester in which they graduate. Students should contact their major field advisors concerning specifics of the examinations.

**Career Opportunities:**
Each program in the department is designed to provide an educational experience which will lead to career and graduate opportunities for the students.

**History**
- Education
- Government/Public Administration
- Journalism
- Museum and Archival careers
- Writing and Editing
- Businesses which seek employees with liberal arts backgrounds
- Preparatory for:
  - Law School
  - Paralegal careers
  - Graduate Museum and Archive Programs
  - Graduate History Programs

**Political Science**
- Education
- Government/Public Administration
- Business which seeks employees with liberal arts backgrounds
- Public Relations
- Minority Affairs
- Political Science Education Research
- Government Related Business
- Federal, State, and Local Agencies/Public Administration
- Private Non-Profit Agencies
- Journalism
- Businesses which seek employees with liberal arts backgrounds
- Preparatory for:
  - Law School
  - Paralegal careers
  - Graduate Political Science Programs

**Psychology**
- Education
- Research
Residential treatment center counselors
Social workers and child protective service workers
Personnel Analyst
Interviewer
Management positions
Mental Health/Mental Retardation Case Managers
Law Enforcement, Correction, and Probation Officers
Other government and private industry positions requiring a liberal arts background
Preparatory for:
  Law School
  Paralegal careers
  Social Work Programs
  Graduate Psychology Programs

Social Science Education
Businesses which seek employees with liberal arts backgrounds
Preparatory for:
  Law School
  Paralegal careers

Features
The department is located in Lawrence Hall and works in cooperation with, the Museum of the Big Bend. Two psychology labs are maintained to provide undergraduate and graduate psychology students with modern facilities to conduct on-site research. In addition to faculty offices, office space for history and political science graduate teaching assistants is available.

Scholarships
Clifford B. Casey History Scholarships. The applicant must be a graduate history major or an undergraduate history major or minor. Social Sciences majors are eligible. Students must have an overall GPA of 3.0 or better, as well as a history GPA of 3.0 or better. Graduate students must have a satisfactory score on the GRE, a GPA of 3.0 in the last 60 hours of course work in their undergraduate degree program, and a GPA of 3.0 in prior history course work.

Ernest C. Shearer Memorial Scholarships. The recipient must be a history major with at least one semester of course work remaining at Sul Ross State University, be in good standing with the university, have a strong academic record in history, and show promise as a history student.

George J. Merriman III Memorial Scholarship. Applicants must be majors in the College of Arts and Sciences with preference given to English and History majors. Freshman applicants must be unconditionally admitted and must have graduated in the upper quarter of their high school graduating class. Applicants who are continuing students must be full time students in good academic and disciplinary standing with a GPA of 3.0 or higher.

Benedict-Dowell Memorial Scholarship. The applicant must be a full time graduate or undergraduate student in good academic and disciplinary standing, be an active participant in class work especially targeted for pre-law students, must have and maintain at least a 3.0 GPA or, if an entering freshman applicant, must have an ACT composite score of at least 24 (or equivalent SAT score), and should demonstrate public interest activity external to the University.

Henry Bertrand, Jr. Memorial Scholarship. The applicant must be a full-time sophomore, junior, and/or senior majoring in Political Science with an overall grade point average of 3.0 or better.

M. Abelardo Baeza Merit Scholarship. The applicant must be a graduate of Alpine High School.
If the applicant is a returning student, the student must have a 3.0 GPA. Preference will be given to Mexican American Studies minors.

**ANTHROPOLOGY**

*Anthropology as a Minor*

The minor in Anthropology requires eighteen semester credit hours of Anthropology course work with six of the semester credit hours being advanced.

**GEOGRAPHY**

*Geography as a Minor*

A minor in Geography may be obtained by taking a minimum of nineteen semester credit hours. Students are required to take Geography 1302, Geography 2303, and Geography 3401/Geology 3401. An academic concentration in the Geography minor may be developed by taking, in addition to the required core, nine additional semester credit hours with consultation of advisor. A technical concentration may be developed by taking, in addition to the core, nine additional semester credit hours to include Geology 2407, Geology 3412/Geography 3412, and an additional three semester credit hours of Geography or Geology as recommended by advisor.

**HISTORY**

Texas State Legal Requirements in History: History 1301 and 1302 are the courses normally taken to satisfy the six semester hour requirement in United States History as specified in the state law. All courses marked with an asterisk (*) may be used to meet the Texas State Legal Requirement, but students must have Junior status or the permission of the instructor to take advanced courses (3000-4000 level) to fulfill the requirement. Students may also satisfy the Texas State Legal Requirement in History with History credit received through the CLEP program.

Phi Alpha Theta: The History faculty sponsors a chapter of Phi Alpha Theta, the national history honorary society.

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**Bachelor of Arts - History Degree Plan**

Please go to the following links to view the History degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [History](#)
- [List of University Courses](#)

**Suggested Course Sequence for Bachelor of Arts in History**

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>United States History</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Math Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education Requirement</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences requirement</td>
<td>3</td>
</tr>
</tbody>
</table>
History as a Minor
18 SCH of History to include 6 SCH advanced.

Teacher Certification through the Post Baccalaureate Initial Certification Program
Students who want to teach History should follow this degree plan and consult with their major advisor and the Education Department to take the Education courses required for teacher certification. Some of these courses may be taken as Electives, or may be taken through the Education Department’s Post Baccalaureate Initial Certification Program.

History Major with Secondary Teacher Certification
Students wanting to be certified to teach History in grades 8-12 must take the following History courses:

- History 2301
- History 2302
- History 3309
- History 3310
- History 3311
- Plus, nine semester credit hours advanced History

GRADUATE PROGRAM IN HISTORY
(Master of Arts with a Major in History)

Graduate students in History may earn a Master of Arts degree with a minimum of 36 hours of study. The options are: the thesis option or the non-thesis option. The thesis option requires a minimum of 24 semester credit hours of course work in History and 6 sch of course work of thesis credit. The non-thesis option contains the following two options:

- 36 semester credit hours History program (36 sch History courses)
- Major/minor plan 24-30 sch in History (6-12 sch in minor field)

The student will be required to assemble a committee of three advisors of which two must be in the field of history. At the completion of the coursework, the student will be required to take and
pass written comprehensive exams. The comprehensive exams are to be taken at least fourteen days before date of graduation.

**MEXICAN AMERICAN STUDIES**

The minor in Mexican American Studies is designed to meet the needs of students preparing for careers serving Mexican American constituencies, such as public and business administration, marketing, public relations, education, politics, government, minority affairs, as well as careers in which one would work in an international or multicultural environment. The minor is also designed to prepare students for graduate and advanced professional study in programs in which a minority affairs focus would be an asset.

**Mexican American Studies as a Minor**

To complete a Mexican American Studies minor, students must earn at least 18 semester credit hours in courses approved for Mexican American Studies credit including MAS 2301 (Introduction to Mexican American Studies), MAS 3310 (Special Topics), and MAS 4309 (Senior Research Project). At least nine (9) semester hours must be at the upper division level.

Students must select their additional classes from a variety of other courses appropriate for the Mexican American Studies minor which are taught regularly or as special topics in a number of departments of Sul Ross. These include, but are not limited to:

- Spanish 2301, 2302; Anthropology 1301, 2301; Education 3308, BSL 3328, 3329; English 4301, 4302, 4304; History 3307, 3308, 3313; Mexican American Studies 3310, 4309; Political Science 3314, 4303; Psychology 3314, Sociology 3308; Spanish 3308, 3316.

**POLITICAL SCIENCE**

Texas State Legal Requirement in Federal and State Government: A student may complete the six-semester-hour requirement in federal and state government for a baccalaureate degree in any one of the following ways:

- Successfully completing Political Science 2305 and 2306
- Securing credit for Political Science 2305 by presenting a satisfactory score on the CLEP test in American Government and successfully completing Political Science 2306

**Bachelor of Arts - Political Science Degree Plan**

Please go to the following links to view the Political Science degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Political Science
- List of University Courses

**Suggested Course Sequence for Bachelor of Arts in Political Science**

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>U.S. History</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Social Science Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Math Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science Requirement</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education Requirement</td>
<td>2</td>
</tr>
</tbody>
</table>
Sophomore Year
Political Science 2305, 2306 .................................................................6
English Literature course and one English 2000 or higher .........................6
Fine Arts Requirement ...........................................................................3
Foreign Language Requirement ..............................................................8
Minor ........................................................................................................3
Science ....................................................................................................4

Total 30

Junior Year
Psychology 2307 ....................................................................................3
Sociology 3301 ........................................................................................3
Political Science ......................................................................................12
Minor .........................................................................................................9
Electives ....................................................................................................3

Total 30

Senior Year
Political Science ......................................................................................12
Minor .........................................................................................................3
Electives ....................................................................................................15

Total 28-30
Grand Total 120

Political Science as a Minor
A minor in Political Science requires eighteen (18) semester credit hours in Political Science, including six semester credit hours advanced.

GRADUATE PROGRAMS IN POLITICAL SCIENCE AND
PUBLIC ADMINISTRATION

The Master of Arts degree in Political Science is designed to serve the needs of students who are interested in teaching and research at the college level, who are preparing for political or administrative careers in public or governmental service, who are preparing for careers in secondary education, who are preparing for continued graduate studies, and who, as citizens, simply want to know more about public affairs.

The Master of Arts degree in Public Administration is designed to serve the needs of students who are preparing for political or administrative careers in public or governmental service, or continued graduate studies

The Criminal Justice and Political Science faculties also offer the student two dual graduate degrees: (1) the Master of Arts in Public Administration and Master of Science in Criminal Justice and (2) the Master of Arts in Public Administration and Master of Science in Homeland Security. Upon completion of a fifty-four-hour curriculum, the student will be awarded both a M.A. degree in Public Administration and a M.S. degree in Criminal Justice or a M.S. degree in Homeland Security.

Except for the thesis option, course work in Political Science must be supported by a minimum of nine to twelve semester credit hours of graduate course work in a related discipline.

Requirements for a degree may be satisfied as follows:

1. Complete a minimum of 36 semester credit hours of graduate credit coursework
including PS 5307, OR
2. Complete a minimum of 24 semester credit hours of graduate credit coursework including PS 5307 plus 6 semester credit hours of PS 6301 -6302, Thesis, AND
3. Successful completion of the comprehensive examination required of all graduates.

Courses taken at the 3000- and 4000-level for graduate credit, arranged courses, individual instruction courses, and transfer courses may not total more than 12 semester credit hours.

Admission

The applicant must possess an undergraduate degree and twelve semester credit hours of undergraduate political science and/or history.

Students pursuing a second master's degree may have up to twelve semester credit hours of graduate work from the completed degree program credited to the Master of Arts degree in political science. This will occur only after full admission to the political science program has been granted by the Registrar and the chairman of the department.

For information on graduate assistantships or other matters, contact:

Dr. Mark Saka
Department of Behavioral and Social Sciences
Sul Ross State University
Alpine, Texas 79832
(432) 837-8157

Master of Arts with a Major in Political Science

A. Thesis students must complete 30 semester credit hours of graduate course work consisting of the following:

1. Select eighteen semester credit hours of graduate course work in Political Science, including PS 5307.
2. Complete the thesis courses, PS 6301 -6302.
3. Select an additional six semester credit hours of course work from the following:
   HIST 5308 Seminar in European History
   HIST 5310 Seminar in American History
   GBA 5308 Problems in Business Administration
   or other non-Political Science courses from related disciplines as advised by major advisor.

B. Non-thesis students must complete 36 semester credit hours of graduate course work consisting of the following:

1. Minimum eighteen semester credit hours of graduate course work in Political Science, including PS 5307.
2. Nine to eighteen semester credit hours of course work from outside of Political Science as advised by major advisor.
3. If less than 18 semester credit hours of course work is used in the supporting area from related disciplines, up to nine additional semester credit hours of graduate Political Science course work can be used to bring the total to 36 semester credit hours.

Master of Arts with a Major in Public Administration

A. Required Political Science: 15 semester credit hours as follows:
   5303 Public Administration Survey
   5307 Scope and Methods in Social Science
5310 Public Budgeting and Finance  
5311 Intergovernmental Relations  
5313 Public Policy Analysis

Minimum 6 semester credit hours from the following Political Science: 
5315 Local Government Administration  
5316 Special Topics in Public Administration  
PS 5317 Seminar in US Government

B. Nine to twelve semester credit hours of course work in a related discipline as advised by 
   major advisor.

C. Three to six semester credit hours of additional Political Science course work to bring the 
   total to 36 semester credit hours.

   **Dual Masters in Public Administration and Criminal Justice**
   **Master of Arts with a Major in Public Administration**
   **and Master of Science in Criminal Justice**

   A. Required Political Science and Criminal Justice:
      a. CJ 5301 Overview and Administration of the Criminal Justice System
      b. PS 5307 Scope and Methods of Social Science or CJ 5334, Methods of Social 
         Research
      c. CJ 5318 Seminar in Criminal Justice Theory
      d. CJ 5323 Homeland Security
      e. CJ 5325 Graduate Seminar
      f. PS 5303 Public Administration Survey
      g. PS 5310 Public Budgeting and Finance
      h. PS 5311 Intergovernmental Relations
      i. PS 5313 Public Policy Analysis

   B. Six semester credit hours from:
      a. PS 5315 Local Government Administration
      b. PS 5316 Special Topics in Public Administration
      c. PS 5317 Seminar in US Government

   C. Students will also take 21 additional hours of electives from Criminal Justice and Public 
      Administration. These electives should be determined through consultation with an advisor. 
      Nine of the hours may be from a related or support field with approval from advisor.

   **Dual Masters in Public Administration and Criminal Justice**
   **Master of Arts with a Major in Public Administration**
   **and Master of Science in Homeland Security**

   A. Required Political Science and Criminal Justice:
      a. CJ 5301 Overview and Administration of the Criminal Justice System
      b. PS 5307 Scope and Methods of Social Science or CJ 5334, Methods of Social 
         Research
      c. CJ 5323 Homeland Security
      d. CJ 5325 Graduate Seminar
      e. PS 5302 International Relations and Public Policy
      f. PS 5303 Public Administration Survey
      g. PS 5310 Public Budgeting and Finance
      h. PS 5311 Intergovernmental Relations
      i. PS 5313 Public Policy Analysis
B. Six semester credit hours from:
   a. PS 5315 Local Government Administration
   b. PS 5316 Special Topics in Public Administration
   c. PS 5317 Seminar in US Government

C. Students will also take at least three of the following from the Homeland Security Courses:
   a. CJ 5322 Immigration Issues
   b. CJ 5328 Seminar on Transnational Crimes
   c. CJ 5329 Seminar in Emergency Management and Disaster Preparedness
   d. CJ 5330 Emerging Issues in Homeland Security
   e. CJ 5336 Seminar on Domestic Terrorism
   f. CJ 5337 Seminar on International Terrorism

D. Students will also take 12 additional hours of electives from Criminal Justice and Public Administration. These electives should be determined through consultation with an advisor. Nine of the hours may be from a related or support field with approval from advisor.

PSYCHOLOGY

The psychology major is designed to meet the needs of individuals desiring a Liberal Arts major, a career in a human services profession, or graduate study in psychology or social work.

### Bachelor of Arts - Psychology Degree Plan

Please go to the following links to view the Psychology degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Psychology](#)
- [List of University Courses](#)

### Suggested Course Sequence for Bachelor of Arts in Psychology.

One of the history or elective courses may be taken to meet the multicultural social science requirement.

#### Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology 1302 and any one from 2304, 2309, or 2310</td>
<td>6</td>
</tr>
<tr>
<td>United States History</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Math Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Oral Communication Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Requirement</td>
<td>2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

#### Sophomore Year

- Psychology 2307 (only after completing math requirement), and any two additional Psychology courses,
  - one at the 3000 level or higher                        | 9     |
- Political Science 2305, 2306                            | 6     |
- English Literature course and one English 2000 or higher | 6     |
- Science Requirement                                     | 4     |
- Foreign Language Requirement                             | 8     |
- Computer Requirement                                     | 3     |
| **Total**                                                | **36**|

#### Junior Year

Psychology. Complete Psychology 3308 and two additional Psychology courses numbered
3000 or higher, preferably completing your group requirements (Groups 1, 2, and 3) ....................................................... 9
Multicultural Social Science Core Requirement .................................................................................................................. 3
Science Requirement ............................................................................................................................................................. 4
Minor .................................................................................................................................................................................. 9
Electives ............................................................................................................................................................................ 3

**Total 28**

**Senior Year**
Psychology, 3000 level or higher ........................................................................................................................................ 6
Minor (6 SCH 3000 level or higher) .................................................................................................................................. 9
Elective (up to 15 SCH of course work at 3000 level or higher may be needed to meet the 39 SCH advanced requirement) ................................................................................................................................. 9

**Total 24**
**Grand Total 120**

**Psychology as a Minor**
A minor in Psychology requires eighteen (18) semester credit hours in Psychology including six semester credit hours advanced.

**SOCIOMETRY**

**Sociology as a Minor**
A minor in Sociology requires eighteen (18) semester credit hours in Sociology, including six semester credit hours advanced. Students are required to take SOC 2303, SOC 3301, SOC 3309 and a combination of nine additional semester credit hours in an area concentration with consultation of advisor.

**SOCIAL SCIENCES**
Students who desire a broad field major in the social sciences should follow one of the plans for a major in social science listed below. Inquiries should be directed to the Chairman of the Department of Behavioral and Social Sciences.

**Bachelor of Arts - Social Science Degree Plan**
Please go to the following links to view the Social Science degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Social Science
- List of University Courses

**Teacher Certification through the Post Baccalaureate Initial Certification Program**
Students who wish to teach the Social Sciences (Economics, Geography, Government, and History) should follow this degree plan and make plans with their Major Advisor and the Education Department to take the Education courses required for certification. Some of these courses may be taken as Electives, or you may seek certification through the Education Department’s Post Baccalaureate Initial Certification Program.

**Suggested Course Sequence for Bachelor of Arts in Social Science.** One of the political science, history, or elective courses may be taken to meet the multicultural social science requirement.
### Freshman Year

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Requirement</td>
<td>3</td>
</tr>
<tr>
<td>United States History Requirement</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Oral Communication Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education Requirement</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total 31**

### Sophomore Year

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural Requirement</td>
<td>3</td>
</tr>
<tr>
<td>History 2301, 2302</td>
<td>6</td>
</tr>
<tr>
<td>English Literature 2000 or higher</td>
<td>6-8</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 30-32**

### Junior Year

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Advanced</td>
<td>3</td>
</tr>
<tr>
<td>Political Science</td>
<td>6</td>
</tr>
<tr>
<td>Economics 2300, 2305</td>
<td>6</td>
</tr>
<tr>
<td>Geography</td>
<td>6</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 27**

### Senior Year

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>12</td>
</tr>
<tr>
<td>Political Science</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>9-11</td>
</tr>
</tbody>
</table>

**Total 30-32**

**Grand Total 120**

### DEPARTMENT OF BIOLOGY, GEOLOGY, AND PHYSICAL SCIENCES

**College of Arts and Sciences**  
Office: Warnock Science Building 216  
Phone: (432) 837-8112  
E-mail: biology@sulross.edu

Professor and Chair: Christopher M. Ritzi, Ph.D.
Professors: Elizabeth Measures, Ph.D., Martin K. Terry, Ph.D., D.V.M., Kevin Urbanczyk, Ph.D. and James C. Zech, Ph.D.
Assistant Professors: Anirban Bhattacharjee, Ph.D., Crystal Graham, Ph.D., Sean P. Graham, Ph.D., David J. Leaver, Ph.D., Yanfeng Yue, Ph.D.
Lecturer: Jessica Kelsch, M.S.

**Program Description**  
The Department of Biology, Geology, and Physical Sciences offers course work leading toward
the Bachelor of Science degrees in Biology, Chemistry, and Geology, as well as Masters of Science degrees in Biology and Geology. The department also offers courses in Astronomy, Geographic Information Systems, and Physics as supporting fields of study. Teacher certification is available in the sciences thru the Composite Science Teaching Certification, as well as sub disciplines in Life or Physical Sciences. The department has a limited number of Graduate Teaching and Research Assistantships for students enrolled in the MS Biology and Geology programs. For additional information about these assistantships, please contact the department chair.

The department sponsors a number of honorary societies and clubs, including: Beta Beta Beta, the National Biological Honor Society, and Sigma Gamma Epsilon, the National Honor Society for the Earth Sciences. The department also houses active student clubs, such as the Geology Club and Biology Club, in addition to being affiliated with other social and service clubs, such as the Hill Club.

The countryside around Alpine is characterized by rugged mountains interspersed with high plateau grasslands and lowland deserts. The area is generally referred to as the Big Bend Country and represents the northern part of the great Chihuahuan Desert. The tremendous diversity of landscape, habitat and rocks makes the entire area a huge natural outdoor laboratory unmatched elsewhere for the study of the natural sciences.

**Career Opportunities:**
Each program in the department is designed to help prepare students for employment or furthering their education toward their goals. Examples of some of the disciplines that each program can aid in achieving follow.

### Biology

<table>
<thead>
<tr>
<th>Health/Medical</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiologist</td>
<td>Industrial Hygiene</td>
<td>Physician</td>
</tr>
<tr>
<td>Athletic Trainers</td>
<td>Kinesiology</td>
<td>Physician’s Assistant</td>
</tr>
<tr>
<td>Audiology</td>
<td>Medical Illustration</td>
<td>Podiatry</td>
</tr>
<tr>
<td>Bacteriologist</td>
<td>Medical Technologist</td>
<td>Public Health</td>
</tr>
<tr>
<td>Biomediation Technician</td>
<td>Nursing</td>
<td>Public Health Officer</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td>Occupational Safety and Health</td>
<td>Water Quality Inspector</td>
</tr>
<tr>
<td>Chiropractic</td>
<td>Occupational Therapy</td>
<td>Sales: Health Care</td>
</tr>
<tr>
<td>City Recycling Manager</td>
<td>Osteopathic Medicine</td>
<td>Speech Pathology</td>
</tr>
<tr>
<td>Dentistry</td>
<td>Parasitologist</td>
<td>Sports Medicine</td>
</tr>
<tr>
<td>Dermatology</td>
<td>Pathology</td>
<td>Toxicologist</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>Pharmaceutical Sales</td>
<td>Veterinary Medicine</td>
</tr>
<tr>
<td>Food and Drug Inspector</td>
<td>Pharmacology</td>
<td>Vision Science</td>
</tr>
<tr>
<td>Gerontology, Geriatrics</td>
<td>Physical Therapy</td>
<td>Water Quality Inspector</td>
</tr>
<tr>
<td>Hunger Policy Analyst</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Business/Industry

<table>
<thead>
<tr>
<th>Aquarist</th>
<th>Food Technician/Technologist</th>
<th>Limnologist</th>
</tr>
</thead>
</table>

Index 129 TOC
<table>
<thead>
<tr>
<th>Biochemist</th>
<th>Fundraiser, Environmental Organization</th>
<th>Mammalogist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioengineer</td>
<td>Herpetologist</td>
<td>Molecular Biologist</td>
</tr>
<tr>
<td>Bioethicist</td>
<td>Horticulturist</td>
<td>Ornithologist</td>
</tr>
<tr>
<td>Botanical or Zoological Gardens Curator</td>
<td>Ichthyologist</td>
<td>Park Naturalist</td>
</tr>
<tr>
<td>Botanist</td>
<td>Industrial Hygienist</td>
<td>Park Ranger</td>
</tr>
<tr>
<td>Conservationist</td>
<td>Journalist: Science Magazine</td>
<td>Pest Control Consultant</td>
</tr>
<tr>
<td>Ecologist</td>
<td>Journalist: Wildlife Photographer</td>
<td>Teacher/Professor</td>
</tr>
<tr>
<td>Editor</td>
<td>Landscape Architect</td>
<td>Technical Writer</td>
</tr>
<tr>
<td>Entomologist</td>
<td>Landscape Ecology</td>
<td>Zoologist</td>
</tr>
<tr>
<td>Environmental Protection Specialist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Chemistry**

**Health/Medical/Academia**

<table>
<thead>
<tr>
<th>Analytical Chemist</th>
<th>Medical Technologist</th>
<th>Physician</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiologist</td>
<td>Mineral Analyst</td>
<td>Professor</td>
</tr>
<tr>
<td>Chemical Engineer</td>
<td>Occupational Safety Specialist</td>
<td>Radiologist</td>
</tr>
<tr>
<td>Environmental Health Specialist</td>
<td>Pharmaceutical Sales Representative</td>
<td>Toxicologist</td>
</tr>
<tr>
<td>Food Scientist</td>
<td>Pharmacist</td>
<td>Veterinarian</td>
</tr>
<tr>
<td>Materials Scientist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Business/Industry/Research**

<table>
<thead>
<tr>
<th>Agricultural Scientist</th>
<th>Forensic Chemist</th>
<th>Soil Scientist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biochemist</td>
<td>Patent Agent</td>
<td>Teacher/Professor</td>
</tr>
<tr>
<td>Chemist</td>
<td>Quality Control Manager</td>
<td>Technical Writer</td>
</tr>
<tr>
<td>Crime Lab Analyst</td>
<td>Science Laboratory Technician</td>
<td>Water/Wastewater Plant Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Geology**

**Industry/Research/Academia/Government**

<table>
<thead>
<tr>
<th>Agricultural Sciences</th>
<th>Geoscience Technician</th>
<th>Petroleum Engineering</th>
</tr>
</thead>
<tbody>
<tr>
<td>Archaeologist</td>
<td>GIS Technician</td>
<td>Petroleum Geologist</td>
</tr>
<tr>
<td>Atmospheric Scientist</td>
<td>Health and Safety</td>
<td>Planetary Geologist</td>
</tr>
<tr>
<td>Biogeochemistry</td>
<td>Hydrogeologist</td>
<td>Remediation</td>
</tr>
<tr>
<td>Cartographer</td>
<td>Hydrologist</td>
<td>Remote Sensing Technician</td>
</tr>
<tr>
<td>Climatologist</td>
<td>Land Surveyor</td>
<td>Renewable Energy</td>
</tr>
<tr>
<td>Coal Geologist</td>
<td>Landscape Architecture</td>
<td>Sedimentologist</td>
</tr>
<tr>
<td>Computer Specialization Geologist</td>
<td>Marine Geologist</td>
<td>Seismologist</td>
</tr>
<tr>
<td>----------------------------------</td>
<td>-----------------</td>
<td>--------------</td>
</tr>
<tr>
<td>Ecologist</td>
<td>Meteorology</td>
<td>Soil Conservationist</td>
</tr>
<tr>
<td>Economic Geologist</td>
<td>Mineral Exploration</td>
<td>Soil Scientist</td>
</tr>
<tr>
<td>Engineering Geologist</td>
<td>Mineralogist</td>
<td>Space Science</td>
</tr>
<tr>
<td>Environmental Geologist</td>
<td>Mining Geologist</td>
<td>Stratigrapher</td>
</tr>
<tr>
<td>Environmental Lawyer</td>
<td>Museum Curator</td>
<td>Structural Geologist</td>
</tr>
<tr>
<td>Fluvial Geologist</td>
<td>Natural Resources Manager</td>
<td>Surficial Geologist</td>
</tr>
<tr>
<td>Forester</td>
<td>Oceanographer</td>
<td>Teacher/Professor</td>
</tr>
<tr>
<td>Geochemist</td>
<td>Oil and Gas Sales/Marketing</td>
<td>Volcanologist</td>
</tr>
<tr>
<td>Geochronologist</td>
<td>Oil Field Services</td>
<td>Water Quality Control Manager</td>
</tr>
<tr>
<td>Geography</td>
<td>Paleoclimatologist</td>
<td>Water Resources Specialist</td>
</tr>
<tr>
<td>Geomorphologist</td>
<td>Paleontologist</td>
<td>Well Engineering</td>
</tr>
<tr>
<td>Geophysicist</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**FEATURES**

The department is located in the Warnock Science Building. Within the science building, we maintain 2 modern lecture halls, 10 laboratories outfitted for the various sciences, a planetarium, a chemical analytical lab, a molecular biology lab, a rock processing lab, a Geographical Information System (GIS) lab, an interdisciplinary analytical lab, and teaching and research collections of vertebrates, invertebrates, rocks, minerals, fossils, and a herbarium. A more detailed explanation of these resources is provided below.

The chemistry laboratories and the chemical analytic lab possess such teaching tools as DR-3000 Hach Spectrophotometer, Beckman Ultraviolet & Visible Spectrophotometer, Perkin-Elmer Atomic Absorption (AA) Spectrometer, Thermo Scientific Nicolet IS 10 FT-IR Spectrometer, Nuclear Magnetic Resonance (NMR) Spectrometer, BUCK Scientific Gas Chromatographs, high performance liquid chromatography (HPLC), Vacuum Oven, Micromaster microscope model CK, and pH meters to study semi-liquids in trace quantities, digital thermometers, analytical balances to weigh trace quantities of samples, and Parr Bomb Calorimeter.

The A. Michael Powell Herbarium occupies 1 wing of the building with 119 cases holding approximately 100,000 specimens. The major collections include plants of Trans-Pecos Texas in the northern Chihuahuan Desert Region. The Herbarium is a prominent regional research collection available to botanists around the world, and is also a valuable teaching facility for both undergraduate and graduate students interested in various botanical disciplines or in wildlife biology.

The James F. Scudday Vertebrate Collection contains 1,300 amphibians, 6,257 reptiles, 1,243 birds and 2,871 mammals for a total of 11,671 specimens. Each specimen is appropriately preserved for permanent storage and use. Records for each specimen include family, scientific name, locality and other collection data. The vertebrate collection serves as a valuable resource for research and teaching. Specimens are available for study by researchers at other institutions. The collection is largely regional, including excellent representation of the vertebrates occurring in the southwestern USA and Mexico. Also included are a substantial number of specimens from other regions of North America and some from other continents.
The Jim V. Richerson Invertebrate Collection is a major scientific resource for the department and the university. It is available to students and visiting scientists. About 80,000 adult pinned specimens and about the same number of immature stages are housed in 30 museum cases. The collection emphasizes insects of the northern Chihuahuan Desert Region in Trans-Pecos Texas and includes especially fine assemblages of insects that live on or in range plants and insects that vector animal (including human) diseases. The orders Lepidoptera, Odonata, Orthoptera and Coleoptera have been curated and identified more extensively than other insect orders represented in the collection, although a substantial collection of pollinators in the order Hymenoptera have been curated in recent years. Additionally, a robust collection of ectoparasitic arthropods of over 50,000 slide-mounted specimens is housed within the collection, helping to document the arthropod-vertebrate associations found both in the area and around the world.

The Biology Field Plot is a site for experimentation with various plant species including oaks, pines and cacti. The experimental vineyard has as its main objective the development of disease resistant rootstocks for wine grapes. In addition, the vineyard is a test site for numerous established varieties of wine and eating grapes. Additionally, Sul Ross owns 10 different plots of land varying from 5 to 40 acres in size in the Terlingua Ranch Properties. These areas cover a variety of different ecological and floral habitats.

The Sul Ross State University Analytical Laboratory houses an array of equipment accessible to students and faculty for a number of analytical purposes. Equipment in the lab includes a JOEL JSM-6010LA Scanning Electron Microscope (SEM), which is used to obtain microscopic images of samples and to collect information regarding the chemistry of the samples using the attached Energy Dispersive X-Ray spectrometer. The lab also houses a DIONEX ion chromatograph which is used to analyze anions in water samples; the lab also includes a Denton Vacuum sputter coater (Au, Au-Pd, and C) for SEM sample preparation and a Branson ultrasonic cleaner. The laboratory also has an ARL Perform’X X-Ray Fluorescence Spectrometer (XRF). This is a wavelength dispersive instrument that is ideally suited for the chemical analysis of rocks and minerals. The lab uses a low dilution fusion glass bead sample preparation technique. The lab also has a Bruker D2 Phaser X-Ray Diffractometer (XRD) that adds the additional capability to analyze the crystalline structure of minerals.

The lab is located adjacent to the Geology sample preparation lab which includes two 16-inch slab saws, one 8 inch trim saw, two lap wheels, Ingram thin sectioning cut-off and grinding equipment, a Spex tungsten carbide and steel shatter box grinder, ceramic jaw crushers, high temperature oven, a Spex pellet press, a Frantz isodynamic magnetic separator, various sieves and a Rotap sieve shaker, and non-toxic heavy liquids for mineral and microfossil separation.

The Microbiology and Molecular lab contains many pieces of equipment used for various processes and various purposes. It houses the SmartSpec Plus Spectrophotometer, DR 3800 Benchtop Spectrophotometer, NanoVue Spectrophotometer, and the BioRad SmartSPE Spectrophotometer, which are all used, in different ways, to measure the amount and wavelengths of light that pass through a sample. Another item used by the Microbiology lab is the HPLC (High Performance Liquid Chromatography) Analyzer. This instrument is used to separate compounds in a sample in order to purify and/or quantify them. Also in this lab are several different types of centrifuges such as a 26 KM FS Centrifuge, a Mistral 3000 E Centrifuge, a Micro HERMLE Z180M Centrifuge, and several Clinical Microfuges. Also in the lab is a REVCO 85 17.2 cu. ft. freezer for sample storage. Also included are several different formats of incubators ranging from water jacketed, CO2 jacketed, coliform bathed, to convection incubators. All of which are used to provide a proper environment for the growth of samples and cultures used in the lab. Also several microscopes can be found in this lab. The Moticom 2500 Camera Microscope, the Inverted Research Microscope, and the Carl Zeiss Photo IIIP
Microscope are all used in the study and analysis of samples.

The GIS laboratory is a modern GIS lab with new dual monitor computers, a plotter and a site license for the latest version of ArcGIS for Desktop. For Remote Sensing applications, the lab has access to multiple copies of ERDAS Imagine. A list of other available technical software includes: Visual MODFLOW, Rockworks, Golden Software’s Surfer and Didger, Sigmaplot, Geochemist’s Workbench and general word processing/spreadsheet/database software. The laboratory benefits from cooperative agreements with the Texas Parks and Wildlife Department, the National Park Service and Texas View. Through these and other sources, the laboratory has compiled and extensive spatial library for the Trans-Pecos and northern Mexico region, including Landsat scenes, complete coverage in standard GIS datasets (DRG, DOQ, NED, Transportation), and additional geologic, hydrologic and biologic datasets. The lab utilizes a robust network attached storage (NAS) system so that users can access the data from anywhere on campus or from anywhere with a network connection and VPN. The NAS system ensures redundant data backup.

The department also has access to a variety of field equipment. The list of hydrologic equipment includes Teledyne RiverRay and StreamPro Acoustic Doppler Current profilers, and a Sontek Flow Tracker Hand-held Acoustic Doppler velocimeter. These instruments are used to measure stream discharge and can also be used for bathymetry. Portable flumes are available for measuring discharge in smaller streams and springs. A Trimble RTK GPS unit and a fully robotic Focus 35 total station are available for field survey projects. These instruments are used for a variety of field applications and can be used with the available DJI Inspire quadcopter for photogrammetry projects. The department also has access to a RIEGL VZ-400i 3D Laser scanner which is used in combination with the other survey equipment for geomorphic change detection analysis and other 3D characterization projects. A portable particle size analyzer, field water titration and filtration equipment, and a variety of pressure transducers for measuring water levels are also available.

The list of available field equipment also includes a 4 rafts, 15 canoes, trailers and other necessary equipment to conduct multiple day river field trips. These river trips and departmental field courses benefit from an extensive set of back country camping gear.

Scholarships

James G. Houston Chemistry Scholarship eligible for junior and senior chemistry majors with a 3.0 GPA or higher

Raymond B. Seymour Award for $300 to Chemistry majors.

Kundan Lall and Rampyari Rangra Chemistry Endowment for $500

Joseph B. Dishron Geology Scholarship
$250 per year to a Sophomore, Junior or Senior, Geology major or minor who has completed 11 hours or more of geology coursework and has an overall 3.0 GPA or better and a GPA of 3.0 or better in geology. $250 per year to a geology graduate student who has completed at least 9 hours and has chosen thesis option. Cumulative GPA of 3.0 or higher as an undergraduate and GPA of 3.5 or higher as a graduate student.

W. N. McAnulty Geology Academic Scholarship
About $400 to $900 per year to undergraduate and graduate students who have completed 8 hours of geology and have a 3.0 average.

David M. Rohr Scholarship
$300 to geology undergraduate and graduate students who have completed 12 hours of geology.

Petro Amigos Scholarship
About $500 to an undergraduate majoring in academic discipline which supports the petroleum.
industry.

**Bill and Elizabeth Winter Geology Scholarship**
$500 to $1000 to a geology undergraduate or graduate student. Preference to geology undergraduates. Must have an overall GPA of 3.0 or better and geology GPA of 3.0 or better.

**Robert P. Amacker Memorial Scholarship**
$500 per year to a Junior or Senior, Geology or Chemistry major, with a GPA of 3.0 or better.

**Betty and John Dow Harris Humanitarian Scholarship**
$1,000 per year. Geology Undergraduates, American Citizen, Agriculture or Geology major preferred.

**Barton H. Warnock Memorial Scholarship**
$1,000 per year. Biology Undergraduates and Graduates with a GPA of a 3.0 or better.

**Dow Roberta Puckett Scholarship**
$300-$1000 per year to Biology Undergraduates with a GPS of 3.5 or greater.

**Dr. A. Michael Powell Scholarship**
$500-$1000 per year to a Biology graduate student pursuing the study of botany, focusing on plants of the Trans-Pecos region.

**BIOLOGY**

The major orientation of the Biology program is toward an organismal approach to the life sciences, emphasizing integrated ecological and co-evolutionary studies of plants and animals through field work in the Chihuahuan Desert region. The curriculum is designed to provide broad training in most aspects of modern biology, and will also prepare students for almost any advanced specialty discipline including pre-medical and allied health areas. Additionally, the composite science education track is designed to provide future teachers and educators abroad background in science, with a concentration in the biological sciences. The program also offers courses emphasizing non-game and small game organisms which meet the requirements for certification as a wildlife biologist as set forth by the Wildlife Society and lead to the professional B.S. degree in Biology. The department maintains one of the largest herbaria in Texas, highly regarded vertebrate animal and insect collections, modern greenhouses, and laboratories for microbiology and molecular biology.

**Why Major in Biology?**

Why should you want to major in Biology? Well, few of us could claim to actually be uninterested in Biology. From the beginning of our learning years, we are fascinated by other living things in the world. We want to and need to know about living things for the simple reason that our scientific understanding of living things is what helps us improve agriculture, medicine, and biotechnology. Biology gives us the knowledge and insight about how we function, our origins, and where we are headed. Life's history is our history and one of the best guides we have for facing the future. So, given that Biology is important and interesting, what careers are possible after training in Biology? The best news is that, with training in science, a degree in Biology offers virtually unlimited opportunities. There are hundreds of diverse careers possible. Some of the major categories are health care, education, research, agriculture, aquaculture, conservation and resource management, and industry and biotechnology. The list above illustrated just some of the possible careers and jobs that a Biology major might consider. It is important that you start thinking about your opportunities as early as possible and take an active role in planning and preparing for your future career.
Bachelor of Science - Biology Degree Plan

Please go to the following links to view the Biology degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Biology
- List of University Courses

Suggested Course Sequence for Bachelor of Science in Biology

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 1311, 1111, 1313, 1113</td>
<td>8</td>
</tr>
<tr>
<td>ENG 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>MATH 1314, 1316 or higher</td>
<td>3</td>
</tr>
<tr>
<td>CHEM 1311,1311,1312,1112</td>
<td>8</td>
</tr>
<tr>
<td>HIST 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>First Year Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

**Sophomore Year**

Choose 8 hours from any 2000 level Biology course except 2404

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced BIOL Elective</td>
<td>4</td>
</tr>
<tr>
<td>ENG 2341, 2331, 2312, 2315, 2322, 2323, 2327, 2328, MAS 2301, PHIL 1301, or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td>ANTH 1301, ECO 2301, 2302, GEOG 1302, 2302, PSY 1302, SOC 2303</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>ART 1301, FA 1315, IT 2304, MUS 1303, 1308, THEA 1310</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1307, 1310, ENG 2341, 2331, 2312, 2315, 2322, 2323, THEA 2304, or 2336</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIO 3306</td>
<td>3</td>
</tr>
<tr>
<td>Choose 12 hours from any 3000 or 4000 level Biology course</td>
<td>12</td>
</tr>
<tr>
<td>MATH 1342</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td>Minor</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>BIOL 4101, 4301</td>
<td>4</td>
</tr>
<tr>
<td>Choose 10 hours from any 3000 or 4000 level Biology course</td>
<td>10</td>
</tr>
<tr>
<td>Minor</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>26</strong></td>
</tr>
<tr>
<td><strong>Grand Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>

No course with a grade less the “C” can be used to fulfill biology course requirements.

Bachelor of Science - Biology Teacher Certification Degree Plan

Please go to the following links to view the Biology – Teacher Certification degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Biology Teacher Certification
- List of University Courses
Biology as a Minor
Biology 1311, 1111, 1313, and 1113...........................................................................................................8
Upper level 3306, 4301, plus 4 SCH advanced................................................................................................10
No course with a grade less the “C” can be used to fulfill biology course requirements.

Minor in Wildlife Biology
A minor for Criminal Justice majors only is offered for those C.J. majors seeking employment or certification as game wardens or park rangers. This program is aimed at preparing the individual to be able to identify plants and animals in the field with emphasis placed on species protected by federal or state laws.

PRE-HEALTH PROFESSIONS AND PRE-NURSING
Sul Ross State University offers courses which satisfy requirements for the first two years of most four-year professional nursing programs outlined by the various schools of nursing. However, the requirements of the different schools of nursing vary so widely it is imperative that students follow closely the requirements of the school to which they will seek admission. To that purpose, students should seek counsel from the Pre-Nursing Advisor in the Department of Biology, Geology, and Physical Science before enrolling. Students interested in other pre-health professions should also consult the Pre-Health Professions Advisor in the Department of Biology, Geology, and Physical Science. Some of these programs involve other disciplines and students will also be advised by these departments.

PRE-MEDICINE AND PRE-DENTISTRY
Students interested in applying for admission to medical or dental school may major in any undergraduate field they wish. Professional school admission committees do not state a preference about an undergraduate major field, and students may select a degree program suited to their interests. They must work closely with the Pre-Professional Advisor to develop a program which will satisfy the requirements of both their chosen major field and the professional schools of their interest. Information concerning admission requirements of professional schools is available in the office of the Pre-Professional Advisor of the Department of Biology, Geology, and Physical Science. Periodic student conferences with the Pre-Professional Advisor are strongly recommended. For those students that are eligible, Sul Ross also participates in the JAMP, or Joint Early Admission Program, for medical school admission and assistance for economical disadvantaged Texans. For more information, please contact the JAMP Faculty Director in the department.

PRE-PHARMACY
Sul Ross State University offers courses which satisfy requirements for the first two years of most five-year professional pharmacy programs as outlined by the various schools of pharmacy. However, the requirements of the different schools of pharmacy vary so widely it is imperative that students follow closely the requirements of the school to which they will seek admission. To that purpose, students should seek counsel from the Pre-Professional Advisor before enrolling.

Bachelor of Science
Biology Major in association with the DEAP-Dental Early Admission Program
This modified degree track is designed for a student to complete their first three years at Sul Ross, and enter UTHSA-SA Dental School for their last year of the MS degree and first year of the DDS
degree. Other requirements, including application, admission, and DAT scores, are independent of this degree track.

Biology DEAP Degree Plan
Please go to the following links to view the Biology DEAP degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Biology DEAP
- List of University Courses

MASTER OF SCIENCE WITH A MAJOR IN BIOLOGY
An individual with a bachelor's degree may enter, if qualified, into the graduate program in Biology for the Master of Science degree. The degree may be obtained by completing 30 semester credit hours in biology, including the writing of a thesis (Plan I), by completing 36 semester credit hours and a "mini thesis" (Plan II), or by completing 36 semester credit hours in biology (Plan III). Culminating requirements for both Plan I and Plan II are a thesis defense presentation and comprehensive oral exam. For Plan III both oral and written comprehensive exam are required. Plan III must be approved by the Biology faculty. A "mini thesis" is usually a one semester project. The department will, at the discretion of the student and committee, accept toward the master's degree 6 semester credit hours of coursework in a department other than the major. As with all Master's degrees at Sul Ross State University, all graduate course work is to be completed within six years of beginning the program. If the degree is not completed by that time, courses up to 10 years old can be counted for ½ credit pending an approved request by the major advisor to the department chair and the academic dean.

CHEMISTRY
Bachelor of Science Chemistry Major-120 hours
This degree program is designed to prepare the student for professional service as a chemist or for future graduate study. The standard courses for a professional degree in chemistry are: Chemistry 1311, 1111, 1312, 1112, 2401, 3407, 3408, 4300, 4301, 4302, 4401, 4406, 4407, and two additional advanced courses in chemistry. A minor is required in another academic discipline; Biology, Geology, Mathematics, Business Administration, or Computer Science is recommended. The general requirements for the Bachelor of Science listed elsewhere in this catalog must be satisfied.

Bachelor of Science - Chemistry Degree Plan
Please go to the following links to view the Chemistry degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Chemistry
- List of University Courses

Suggested Course Sequence for Bachelor of Science in Chemistry

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 1311, 1111, 1312, 1112</td>
<td>8</td>
</tr>
<tr>
<td>ENG 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>MATH 1314</td>
<td>3</td>
</tr>
<tr>
<td>COMM 1307, 1310, ENG 2341, 2331, 2312, 2315, 2322, 2323, THEA 2304, or 2336</td>
<td>6</td>
</tr>
<tr>
<td>HIST 1301, 1302</td>
<td>6</td>
</tr>
</tbody>
</table>
First Year Seminar ..................................................................................................................................................1

Total 30

Sophomore Year
CHEM 2401, 4401 or 2402 .........................................................................................................................................8
PHYS 2325, 2125, 2326, 2126.....................................................................................................................................8
ENG 2341, 2331, 2312, 2315, 2322, 2323, 2327, 2328, MAS 2301, PHIL 1301, or WS 2301..............3
ANTH 1301, ECO 2301, 2302, GEOG 1302, 2302, PSY 1302, SOC 2303 .........................................3
Political Science 2305, 2306 ...............................................................................................................................6
ART 1301, FA 1315, IT 2304, MUS 1303, 1308, THEA 1310 .................................................................3

Total 31

Junior Year
CHEM 3407, 3408 or 3409
MATH 2413 and 2414 .........................................................................................................................................8
Electives .................................................................................................................................................................4
Minor .....................................................................................................................................................................9

Total 28

Senior Year
CHEM 4300, 4301, 4302, 4304, 4406 and 8 advanced hours .................................................................21
Minor .....................................................................................................................................................................9

Total 30

Grand Total 120

No course with a grade less than “C” can be used to fulfill Chemistry course requirements. Students must have a 2.0 or better grade point in each of the math and science requirements.

Bachelor of Science in Chemistry with Composite Science Certification
We also offer Texas teacher certification with our Bachelor of Science in Chemistry with Composite Science Certification (secondary certification) degree. See your major advisor for details.

Chemistry as a Minor
18 sch of Chemistry to include 6 sch advanced. Recommended courses are 1311, 1111, 1312, 1112, plus 10 sch with 6 sch being 3000-4000 level.

GEOLOGY
Sul Ross State University, located in mountainous far west Texas, is in an ideal locality for geologic studies. The campus is surrounded by the Cenozoic-aged Trans Pecos Magmatic Province. Paleozoic-aged sedimentary rocks of the Marathon Basin and the Glass Mountains (including the Marathon-Ouachita fold and thrust belt) are a short 20 minute drive from campus. Several national and state parks known for their geology are also near campus. Big Bend National Park, Davis Mountains State Park and Big Bend Ranch State Park are all within 100 miles of the campus and Guadalupe Mountains National Park and Carlsbad Caverns National Park are within 200 miles of campus. The department also has access to the Christmas Mountains (70 miles) for geological studies. Notable geologic features in and around these parks includes significant karst and cavern development, the Permian reef system, exposures of lavas, tuffs and intrusive rocks, large and small caldera systems, structural domes related to laccolith emplacement (the Solitario and the Christmas mountains) and evidence of the southern extension of the Rio Grande rift. Hydrologic features of far west Texas include numerous major and minor aquifers, multiple spring systems and the Rio Grande, Pecos and Devils rivers.
The Geology Program emphasizes hands-on experience with geologic samples and geologic/geographic computer applications. Day-long or weekend-long field trips are an important component of the majority of the classes. The curriculum is broad-based and provides an excellent background that allows Geology graduates to find employment in industry (oil & gas, hydrogeology, geologic hazards, and mining), environmental concerns, state and federal agencies, teaching, or to pursue advanced Geology degrees.

The program offers undergraduate courses leading to the Bachelor of Science degree in (1) Professional Geology and (2) Composite Science for Teachers.

- The first program embodies a concentrated training to prepare majors for graduate study or employment as a professional geologist.
- The second program trains students to pursue elementary and high school teaching careers. See your major advisor for details.

The department also offers graduate courses leading to a Master of Science in Geology.

**Bachelor of Science - Geology Degree Plan**

Please go to the following links to view the Geology degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Geology](#)
- [List of University Courses](#)

**Suggested Course Sequence for Bachelor of Science in Geology**

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology 1303, 1103, 1304, 1104</td>
<td>8</td>
</tr>
<tr>
<td>Chemistry 1311 and 1111</td>
<td>4</td>
</tr>
<tr>
<td>Math two from 1314, 1316, 2413 or higher</td>
<td>6-7</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>United States History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>First Year Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total 31-32**

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology 2405</td>
<td>4</td>
</tr>
<tr>
<td>Geology 2000-level course</td>
<td>4</td>
</tr>
<tr>
<td>Geology Adv. one 3000- or 4000-level</td>
<td>3-4</td>
</tr>
<tr>
<td>Physics 1301/1101 or 2325/2125</td>
<td>4</td>
</tr>
<tr>
<td>ART 1301, FA 1315, IT 2304, MUS 1303, 1308, THEA 1310</td>
<td>3</td>
</tr>
<tr>
<td>ENG 2341, 2331, 2312, 2315, 2322, 2323, 2327, 2328, MAS 2301, PHIL 1301, or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td>Minor</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total 27-28**

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology 3403</td>
<td>4</td>
</tr>
<tr>
<td>Geology 3408</td>
<td>4</td>
</tr>
<tr>
<td>Geology Adv. two 3000- and/or 4000-level</td>
<td>6-8</td>
</tr>
<tr>
<td>CHEM 1312/1112 or Physics 1302/1102 or 2326/2126</td>
<td>4</td>
</tr>
<tr>
<td>Two from COMM 1307, 1310, ENG 2341, 2331, 2312, 2315, 2322, 2323, THEA 2304, or 2336</td>
<td>6</td>
</tr>
<tr>
<td>Minor</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total 30-32**

**Junior or Senior Summer**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geology 3601</td>
<td>6</td>
</tr>
</tbody>
</table>

**Total 30-32**
Senior Year
Geology 4401 ........................................................................................................4
Geology 4403 ........................................................................................................4
Geology Adv. one 3000- or 4000-level .................................................................3-4
ANTH 1301, ECO 2301, 2302, GEOG 1302, 2302, PSY 1302, SOC 2303 .................3
Political Science 2305 and 2306 .......................................................................6
Minor .........................................................................................................................6

Total 26-27
Grand Total 120

No course with a grade less than “C” can be used to fulfill Geology course requirements. 
Students must have a 2.0 or better grade point in each of math and science requirements.

We offer Texas teacher certification (secondary certification). See your major advisor for details.

Bachelor of Science
Composite Science in Geology Teacher Certification Degree Plan

Please go to the following links to view the Geology – Teacher Certification degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Geology Teacher Certification
- List of University Courses

Geology as a Minor

Recommended courses: Either Geology 1303/1103 or GEOL 1305/1105, GEOL 1304/1104,
GEOL 2301, 7 SCH 3000-4000 level courses.

GRADUATE PROGRAM IN GEOLOGY
(Master of Science with a Major in Geology)

The graduate program at Sul Ross emphasizes the fundamentals of geology through an integrated field and laboratory approach leading to the Master of Science degree.

ADMISSION
A. For full admission to the Graduate Program in Geology, the following are required:
   1. Acceptance by the Biology, Geology, and Physical Sciences Department
   2. An acceptable undergraduate academic record which includes the completion of the following or their equivalents:
      a. Math 2413 Calculus I
      b. Any one of the following three courses:
         1. Math 2414 Calculus II
         2. Math 2318 Linear Algebra
         3. Computer Programming Class
      c. Chemistry 1311/1111 or 1312/1112
      d. Physics 1301/1101 or 1302/1102 or higher
      e. Geology 2405 Optical Mineralogy
      f. Geology 3402 Structural Geology
      g. Geology 3408 Stratigraphy and Sedimentation
      h. Geology 3601 Field Geology
      i. Geology 4401 Sedimentary Petrology
Geology 4403 Igneous and Metamorphic Petrology

3. Completion of the Graduate Record Examination (General) with an acceptable score.

B. Students may be conditionally admitted subject to completion of the following:
   1. Leveling work to satisfy the undergraduate requirements listed in A.2. above.
   2. Completion of the Graduate Record Exam (General) with an acceptable score during
      the initial year of enrollment.

Geology Graduate Degree Requirements

The graduate program requires the successful completion of course work with the option to
complete and successfully defend a thesis.

Students must select at least one course from each of the following groups:
   a. 5306, 5312, 5332, 5401
   b. 5308, 5316, 5317, 5402, 5403, PHSC 4401
   c. 5320, 5322, 5326, 5328
   d. 5101

Plan 1. Thesis Option: Thirty semester credit hours of coursework in Geology, including 6 SCH
   of thesis (6301 and 6302), and a minimum of 24 SCH of 5000-level courses. A maximum of 6
   SCH of approved graduate credit may be transferred from another accredited institution. Any
   transfer requires the approval of both the departmental advisor and the Dean of the College of
   Arts and Sciences prior to finalizing the degree plan.

Plan 2. Non-thesis Option: Completion of 36 SCH of coursework in Geology and pass an oral
   and a written exam. Six to eight SCH of coursework in a department other than Geology may be
   applied toward the degree with the approval of the graduate committee.

A maximum of 8 SCH qualifying transfer courses may be counted. Any transfer requires the
approval of both the departmental advisor and the Dean of the College of Arts and Sciences prior
to finalizing the degree plan. Courses not counted toward the graduate degree, such as leveling
courses, are noted on the transcript with an asterisk and are not calculated in the graduate grade
point average.

Note: Most of the courses are offered on alternate years.

ENVIRONMENTAL STUDIES

College of Arts and Sciences
College of Agricultural and Natural Resource Sciences
E-mail: arts-sciences@sulross.edu
E-mail: anrs@sulross.edu

Minor Description

Environmental Studies is an interdisciplinary minor that encourages students to delve into the
problems and prospects of the environment. The environmental studies minor allows students to
gain fundamental knowledge of science as well as literature and the law. This basic competency
establishes a comprehensive context for understanding the methodologies and problems of
studying environmental issues. The areas to be selected from include Biology, Chemistry,
Geology, Humanities and Social Sciences, and Natural Resource Management. This
concentration provides depth of knowledge with advanced analytical skills and serves as
preparation for graduate study or varied forms of employment in environmental work.

Environmental Studies as a Minor:
A minor in Environmental Studies may be obtained by taking a minimum of eighteen semester
credit hours. Students are required to take three courses from the following list of core classes: Biology 2406; English 2315; Geology 1305/1105; Geology 3401; Natural Resource Management 4301; Political Science 2304. Students must take two or more advanced courses (at least 6 SCH) in Environmental Studies sufficient to bring their total semester credit hours to at least eighteen.

DEPARTMENT OF COMPUTER SCIENCE AND MATHEMATICS

College of Arts and Sciences
Office: Jim Pitts Academic and Computer Resource Center (ACR) 107
Phone: (432) 837-8106
Fax: (432) 837-8397
cmath@sulross.edu

Assistant Professor and Chair: Angela Brown, Ph.D.
Professor: Kris Jorgenson, Ph.D.
Assistant Professors: Eric Funasaki, Ph.D., Kennard Laviers, Ph.D.
Lecturers: Marina Kimball, M.S., Thea Glenn, M.S.

Program Description
The Department of Computer Science and Mathematics offers coursework leading to Bachelor of Science degrees in both Computer Science and Mathematics, as well as minors in these fields. Some Mathematics courses may be taken for graduate credit in support of a Master of Education degree in Secondary Education with a specialization in Mathematics. Additionally, a pre-engineering program is available through the department; in which students complete most undergraduate core curriculum requirements before transferring to other universities to complete their engineering degrees (a suggested course sequence is included in the Mathematics section).

The Computer Science program offers several concentrations: Communication Design, Game Technology, Digital Artist, Cyber Security, and Traditional Computer Science. The program provides professional training in Computer Science for students interested in becoming software engineers, in becoming high school computer science teachers, or simply in augmenting other skills with the requisite knowledge of computers and programming necessary to be successful in the modern workplace.

The Mathematics program has as its primary goal the preparation of teachers of mathematics at the elementary and secondary levels. A broad variety of coursework at the undergraduate level has been designed to support this goal, as well as to adequately prepare students for careers in industry or further study in graduate school.

Career Opportunities
Computer Science
Computer Network Support Specialist
Computer Operations Manager
Database Applications Program Analyst or Designer
Game Designer
Game Programmer
Programmer or Administrator
Programming Team Member, Specializing in Design, Testing, or Documentation
Secondary School Educator
Computer Science Teacher
Engineering Systems Analyst, Systems Manager, or Programmer

Mathematics
- Actuary
- Cryptologist
- Financial Analyst
- Mathematician
- Math Specialist Teacher at Elementary, Middle, or High School Level
- Numerical Analyst
- Operations Research Consultant
- Statistician
- Stockbroker

Features
The department is located in the Jim Pitts Academic and Computer Resource Center (ACR Building). Many of our classes utilize computer software for a deeper understanding of the material. Many opportunities to work closely with professors provide ample opportunity for undergraduate research.

Scholarships
**Gary Measures Memorial Computer Science Scholarship**
One award for an outstanding junior or senior Computer Science student. To be eligible, the student must have a GPA of at least 3.0 overall and a 3.0 GPA in Computer Science.

**Mathematics Excellence Scholarship**
Two scholarships are awarded for full-time undergraduate Mathematics students exhibiting excellence in their coursework.

**Robert P. Amacker Memorial Scholarship**
One award to a junior or senior Mathematics, Chemistry, or Geology major with a GPA of 3.0 or more.

**Vic and Mary Jane Morgan Mathematics Scholarship**
Junior or senior mathematics majors having an overall GPA of at least 3.0. Preference will be given to majors who are entering the teaching profession.

**Juan N & Elisa U. Franco Scholarship**
Undergraduates. Preference given to majors in Mathematics and to graduates of Fort Hancock, Texas High School. Graduates from the following High Schools are eligible: Tornillo, Fabens, Dell City, Sierra Blanca, Clint, Van Horn, Marfa, Alpine, Presidio, Fort Davis, Balmorhea, Pecos and other small towns in West Texas. Beginning freshman must be fully admitted. Returning students must have a minimum cumulative 2.5 GPA.

**COMPUTER SCIENCE**

**Bachelor of Science - Computer Science Degree Plan**
Please go to the following links to view the Computer Science degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- Computer Science
- List of University Courses

**Credit for Math 1314 may be obtained by presenting adequate scores on CLEP, DANTES, ACT, or SAT examinations as shown elsewhere in the catalog under the heading "Credit by Examination".**
Bachelor of Science
Computer Science – Cyber Security Degree Plan

Please go to the following links to view the Computer Science Cyber Security degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- [Computer Science – Cyber Security](#)
- [List of University Courses](#)

**Credit for Math 1314 may be obtained by presenting adequate scores on CLEP, DANTES, ACT, or SAT examinations as shown elsewhere in the catalog under the heading "Credit by Examination".**

Bachelor of Science
Computer Science – Game Technology

Please go to the following links to view the Computer Science Gaming Technology degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- [Computer Science – Game Technology](#)
- [List of University Courses](#)

**Credit for Math 1314 may be obtained by presenting adequate scores on CLEP, DANTES, ACT, or SAT examinations as shown elsewhere in the catalog under the heading "Credit by Examination".**

**Suggested Course Sequence for Bachelor of Science in Computer Science**

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1309, 1320</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1314, 1316</td>
<td>6</td>
</tr>
<tr>
<td>Component Area Option Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Creative Arts Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>First Year Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total 31**

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 2308, 2315, 2360, 3310</td>
<td>12</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Minor</td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy, &amp; Culture Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science Core Requirements and Corresponding Labs</td>
<td>8</td>
</tr>
</tbody>
</table>

**Total 32**

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 3331,3360,and two other courses numbered 3000 or higher</td>
<td>12</td>
</tr>
<tr>
<td>Minor</td>
<td>9</td>
</tr>
<tr>
<td>Additional Science Requirement</td>
<td>4</td>
</tr>
<tr>
<td>Social &amp; Behavioral Science Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Elective Hours</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total 30**

**Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 4310, 4311, 4320, 4340 and two other courses numbered 3000 or higher</td>
<td>18</td>
</tr>
</tbody>
</table>

- [Index](#) 144 TOC
Minor..................................................................................................................................................6
Component Area Option Core Requirement.......................................................................................... 3
Total 27
Grand Total 120

Computer Science as a Minor

Computer Science 1309, 1320*, 2315 and either 2305 or 2360 ..............................................................12
6 additional advanced hours in CS, CSAT, CSST, or CIS ........................................................................6
Total 18

TEACHER CERTIFICATION IN COMPUTER SCIENCE
Teacher Certification in Computer Science (Grades 8-12) Required Education Courses: ED3300, 3302, 3305, 4312, 4314, 4605.
Required Computer Science Courses: CS 1309, 1320, 2308, 2315, 2360, 4320; and select 3 courses from the following: CS 3310, CS 3320, CS 3331, CS 4340; plus, any other requirements needed to satisfy major or minor requirements for the student.

Additionally, any student seeking teacher certification is strongly advised to consult frequently with an advisor in both the content area of certification and in the Education Department, since state requirements for teacher certification are subject to change with little notice.

MATHEMATICS

Bachelor of Science - Mathematics Degree Plan
Please go to the following links to view the Mathematics degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

* Mathematics
* List of University Courses

* Majors in mathematics may obtain credit for Math 1314 and/or Math 1316 by presenting adequate scores on CLEP, DANTES, ACT, or SAT examinations as shown elsewhere in the catalog under the heading, "Credit by Examination" and are encouraged to do so.

Suggested Course Sequence for Bachelor of Science in Mathematics.

Freshman Year
Mathematics 2413, 2414 ....................................................................................................................................8
English 1301, 1302 .......................................................................................................................................6
Science Core Requirement and Labs ..............................................................................................................8
Component Area Option Core Requirement ...............................................................................................3
History 1301, 1302 .....................................................................................................................................6
First Year Seminar .....................................................................................................................................1

Total 32

Sophomore Year
Mathematics 2318, 3415 ...............................................................................................................................7
Language, Philosophy, Culture Core Requirement ......................................................................................3
Component Area Option Core Requirement ...............................................................................................3
Creative Arts Core Requirement ..................................................................................................................3
Social & Behavioral Science Core Requirement ..........................................................................................3
Political Science 2305 and 2306 ..................................................................................................................6
Multicultural Core Requirement ..................................................................................................................3
Minor .........................................................................................................................................................3
Junior Year
Mathematics 3320, 3340, one of 4320, 4330, or 4360 ................................................................. 9
One other advanced Mathematics course .......................................................... 3
Computer Science 1309 .......................................................... 3
Minor .................................................................................................................. 6
Physics 2325 and 2326 .................................................................................. 6
Physics Labs 2125 and 2126 ........................................................................ 2
Elective ........................................................................................................... 1
Total 31

Senior Year
Two of Mathematics 4320, 4330, 4360 ...................................................................... 6
Mathematics 4390 and two other SCH advanced course ........................................... 9
Minor .................................................................................................................. 9
Elective ........................................................................................................... 3
Total 30

Mathematics as a Minor
Mathematics 1314 and 1316 if needed* ...................................................................... 0-6
Mathematics 2318, 2413, 2414, 3415 ........................................................................ 15
6 additional advanced SCH in Mathematics ......................................................... 6
Total 21-27

*Minors in mathematics may obtain credit for Math 1314 and/or Math 1316 by presenting adequate scores on CLEP, DANTES, ACT, or SAT examinations as shown elsewhere in the catalog under the heading, “Credit by Examination” and are encouraged to do so.

TEACHER CERTIFICATION IN MATHEMATICS
Teacher Certification in Mathematics (Grades 8-12)

Teacher Certification in Mathematics Degree Plan
Please go to the following links to view the Teacher Certification in Mathematics degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- Teacher Certification in Mathematics
- List of University Courses

Required Education Courses: ED 3300, 3302, 3305, 4312, 4314, and 4605

Required Mathematics Courses: Math 1314 and 1316 (or credit by examination), Math 2318, 2413, 2414, 3301, 3415, 3320, 3330, 3340, 3350, and two advanced level Mathematics courses, plus any other requirements needed to satisfy major or minor requirements for graduation.

Elementary Mathematics Specialist Certification (Grades 4-8)

All students seeking elementary-level certification must do so in the Department of Education under the Interdisciplinary Studies major. See the Education section of this catalog for information on Elementary Education Areas of Specialization, Mathematics at the elementary (grades 4-8) level. Required Mathematics Courses: Math 1314 and 1316 (or credit by examination), Math 1342, 2413, 2310, 2311, 2414, 3301, 3340, 3320, and 3350.
Any student seeking teacher certification is strongly advised to consult frequently with an advisor in both the Department of Education and in the Department of Mathematics. State requirements for teacher certification often change on short notice, and requirements stated in a printed catalog are sometimes out of date.

**PRE-ENGINEERING PROGRAM**

**Pre-Engineering Program Degree Plan**

Please go to the following links to view the Pre-Engineering Program degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- Pre-Engineering Program
- List of University Courses

Students participating in the pre-engineering program take courses in science, mathematics, and general education for two years before transferring to an engineering school. During the first semester of the student's second year, he or she should begin the application process to the chosen engineering school.

**Suggested Course Sequence for Pre-Engineering Program**

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics 1314, 1316 (if needed)</td>
<td></td>
</tr>
<tr>
<td>Mathematics 2413, 2414</td>
<td></td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td></td>
</tr>
<tr>
<td>Chemistry 1401, 1402</td>
<td></td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>34</strong></td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics 2318, 3320 and 3415</td>
<td></td>
</tr>
<tr>
<td>Computer Science 1309, 1320</td>
<td></td>
</tr>
<tr>
<td>Physics 2401, 2402</td>
<td></td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td></td>
</tr>
<tr>
<td>Social Science</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>33</strong></td>
</tr>
</tbody>
</table>

Students who are working toward a Bachelor of Arts or Fine Arts degree must complete at least one course from 1314, 1332, or 1342. Students working toward a Bachelor of Science degree must complete an additional course numbered 1314, 1316, 1342 or higher. Students working toward a Bachelor of Business Administration degree must complete two math courses. Students in Interdisciplinary Studies (working toward teacher certification at the elementary or middle school level) must take either Math 1314 or 1342 (Math 1314 is recommended), as a prerequisite for Math 2310.

Because of the highly sequential nature of the Mathematics curriculum, students are strongly advised not to enroll for any course until a grade of “C” or better is earned in any prerequisite course.
DEPARTMENT OF FINE ARTS AND COMMUNICATION
(including Art, Communication, Journalism, Music and Theatre)

College of Arts and Sciences
Office: Fine Arts Building 106
Phone: (432) 837-8218
E-mail: erumsey@sulross.edu

Professor and Chair: Esther L. Rumsey, Ph.D.

Professors: Carol H. Fairlie, M.F.A., Donald C. Freed, Ph.D., and Dona W. Roman, M.F.A.

Associate Professor: Karrin Ford, Ph.D. and Joseph G. Velasco, Ph.D.


Program Description
The Department of Fine Arts and Communication, comprising the academic disciplines of art, communication, journalism, music and theatre, offers the following degrees and teacher certifications:

- Bachelor of Arts: Communication
- Bachelor of Fine Arts: Art and Theatre
- Bachelor of Music
- Master of Arts: Art
- Teacher Certification: Art, Communication, Music and Theatre

In addition, minors are offered in each of the four areas and in photography and journalism. Undergraduate course work is offered in each of the four areas, Journalism and Fine Arts; graduate course work is offered in Art, Communication, Music, and Theatre.

The Department of Fine Arts and Communication, which firmly supports Sul Ross State University's "student-centered campus" philosophy, offers students invaluable "hands-on" training and opportunities through its various courses and activities. Through their all-encompassing curricula, the programs in art, communication, music, and theatre prepare their students for the graduate and/or professional world: as educators, as artists, as performers, as technicians, etc.

The Department serves as one of the primary cultural centers for the Big Bend region of West Texas. Therefore, the Department's four programs offer a broad range of creative activities, including student and professional art shows, vocal and instrumental concerts, television, film and radio productions, year-round theatrical productions, and radio theatre.

All students are eligible to join the eight honorary societies, and clubs that are sponsored by the Department of Fine Arts and Communication.

Honorary societies include Lambda Pi Eta (the national communication honorary society), Alpha Psi Omega (the national theatre honorary society), and Kappa Pi (the national art honorary society). Student organizations include the Art Club (for students whose interests lie in the visual arts), the Music Club (for students who wish to promote the activities of the Music Program), the Sul Ross Theatrical Society (for all students interested in theatre arts), and the Video Club (for students interested in producing independent video/film projects).

Career Opportunities

Art
- 3-D Artist
- Digital Artist
- Museum Curator
Features
The Department of Fine Arts is located in the Francois Fine Arts Building, with the main office and the chair’s office in FAB 106. Departmental facilities located in the Fine Arts Building include the band hall (FAB 100), the art gallery (FAB 102), the costume shop (FAB104), the Studio Theatre (FAB105), the choir room (FAB 200), the television production studio (FAB 205), the radio station and production room (FAB 206), the computer lab (FAB 207), as well as several classrooms, music practice rooms, and faculty offices. Additionally, the Department has a scene shop, located at the Kokernot Outdoor Theatre, and a ceramics and sculpture annex, located to the east of the Industrial Technology Building. Sul Ross State University has four performing spaces: Marshall Auditorium (a 700 seat proscenium facility), the Studio Theatre (a 120 seat proscenium facility), the Kokernot Outdoor Theatre (a 200 seat modified, outdoor proscenium theatre), and the Kokernot Amphitheatre (a 100+ seat natural amphitheatre). State-of-the-art lighting, sound and rigging have recently been installed in Marshall Auditorium and the Studio Theatre. The Kokernot Outdoor Theatre and Amphitheatre have been designated by the Texas Commission on the Arts as part of Alpine’s State Cultural District.

Scholarships
Alpine Gallery Night Scholarship
One $500 scholarship for a full-time undergraduate majoring in Art; Deadline is March 1 of each year. Contact Art Program for further details.

Henry Bertrand Jr. Memorial Scholarship
Two $2,000 scholarships; one Scholarship to be awarded to a sophomore, junior or senior in each of the following majors: Communication and Theatre. Recipients must have a cumulative grade point average of 3.0. Preference is to be given to students seeking self-improvement through communication, public speaking, vocabulary development, development of extemporaneous speaking abilities and toastmaster skills, and development of the ability to express oneself completely, confidently and with a sense of humor.

Wade "Bubba" Carroll Scholarship
One $500 scholarship for a full-time theatre student who is in good academic and disciplinary standing, and is active in SRSU theatre productions. Contact the Theatre Program for further details.

Dan Blocker/Freda Powell Scholarships in Theatre
Six to 20 $1,000 scholarships for students who are in good academic and disciplinary standing and are active in SRSU theatre productions. Preference is given to students who major or minor in theatre. Deadline is prior to each semester. Contact the Theatre Program for further details.

Elizabeth Keefer Boatright Scholarship
One or two $200-400 scholarship(s) for art majors, who have a minimum of a 2.75 college cumulative grade point average and a 3.0 cumulative grade point average in art. Applicants must submit a portfolio of their work for consideration. Contact the Art Program for further details.

Richard D. Bryan Memorial Scholarship
One to four $200-500 need-based scholarship(s) for music majors who are in good academic and disciplinary standing. Preference is given to students seeking all-level or secondary teacher certification with a music major or minor. Additional preference is given to students whose principal area of study is band. Contact the Music Program for further details.

Grace M. Davis Drama Fund Scholarship
One $1,000 – 2,000 scholarship for the outstanding theatre major who is in good academic and disciplinary standing

Laura A. Eaves Scholarship
One $200 scholarship for a full-time student majoring in Art. Contact Art Program for further details.

Paul and Teeby Forchheimer Communication Scholarship
One to three $200-400 scholarships for undergraduate communication majors, who are in good academic and disciplinary standing. Deadline is prior to each semester. Contact the Communication Program for further details.

Sarah Miltia Hill Scholarship
One $200 scholarship for art majors, who have a minimum of a 3.0 cumulative grade point average. Preference is given to art majors seeking teacher certification. Contact the Art Program for further details.

Music Activity Award
10 to 50 $50-200 awards for students, who are in good academic and disciplinary standing, demonstrate ability and participate in a music ensemble. Deadline is prior to fall and spring semesters. Contact the Music Program for further details.

Music Scholarship
Ten to twenty $1,000 scholarships for undergraduate music major who are in good academic and disciplinary standing. Deadline is prior to each semester. Contact the Music Program for further detail.

**Mary E. Thain Memorial Art Endowment**
One $400 scholarship for undergraduate or graduate Art major with a 2.5 cumulative grade point average and a 3.0 cumulative grade point average in Art. Contact Art Program for further details.

**Mary Jane Micou Wade and Charles E. Wade Scholarship**
One or two $200-500 scholarship(s) for music majors, who have a minimum of a 3.0 cumulative grade point average and must participate in the SRSU Band Program. Preference is given to students seeking all-level teacher certification with music major or minor. Contact the Music Program for further details.

**ART**

Sul Ross State University is located in an area which has served as a source of inspiration for many famous artists as diverse as the minimalist/conceptual sculptor Donald Judd and painter Georgia O'Keeffe. The natural beauty of the land, its historic associations, and an incredible sense of open space found here are strong attractions for creative individuals. Studio art classes are small and friendly. Students work closely with their instructors. Continuous art exhibitions are held in both the Francois Gallery in the Fine Arts building and the Museum of the Big Bend located on campus. In addition, the Wildenthal Library, with a significant collection of art books and other visual aids, provides art students with excellent support resources.

Sul Ross Offers both a BFA and MA in Art.

**Bachelor of Fine Arts in Art Degree Plan**
The BFA in art is a specialized degree that offers a broad range of art classes plus a 12 hour art specialization within one of four tracks: Studio Art, Digital Art, Art History, and Art Education with certification. Please go to the following links to view the Art degree tracks and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Art Studio](#)
- [List of University Courses](#)

*The BFA with certification degree is 121 hours. Art Education Majors will take 6 SCH in ART 3303 (Art theory) and ART 3309 (Crafts) (block two) as part of their area of specialization and complete block one and three of the education certification.

*A senior exhibition or research project is required for all graduating Art majors. A competency review of all art work passed must be taken before enrolling in the 4301 senior advanced studio. A written proposal for the senior capstone ART 4303 must be submitted to the major advisor in ART 4302 advanced studio, and approved by the faculty, the semester before the capstone is scheduled. All graduating Art majors are required to submit a digital portfolio to be reviewed during their final year.*

**Art as a Minor**
To minor in Art, a student must consult with an Art Program advisor to help coordinate the classes to take. An Art minor must complete 18 hours in art with a total of 6 advanced hours. Required classes include:

- 3sch Art 1302 (Drawing I), 3sch Art 1303 (Design I),
- 3sch of Art History, selected from: Art 1307, 1308, 3308 contemporary Art history, 3307
Women in Art, 3313 European Art & arch., 3314 Latin American Art, or 3310 special topics in Art History.

- 3sch of a two-dimensional class; either Art 2301 (Painting), Art 2302 (Watercolor), Art 3302 (Printmaking)
- 3sch of a three-dimensional class; either Art 2305 (Ceramics) or Art 2309 (Sculpture),
- 3sch of an advanced studio; Art 3301, 4301 or 3310

Photography as a Minor

A Photography Minor must complete 18 semester credit hours, including six (6) advanced semester credit hours. Students must take Art 1303 (Design I), IT 2304 (Photography), and IT 3354 (Studio Photography). Student must take two or more advanced courses (at least 6 semester credit hours) in Photography sufficient to bring their total semester credit hours to at least eighteen.

- Art History
- List of University Courses

Bachelor of Fine Arts (Art Major)

BFA specialization within one of four tracks; Studio Art, Digital Art, Art History and Art Education with certification.

Art majors must choose a track, and an area of specialization. Areas of specialization in the Studio track are: Ceramics, Painting, Drawing, Printmaking, Mixed media, and Sculpture. Areas of specialization in the Digital track are illustration, animation and graphic design. Art Education Majors will take 6 SCH in ART 3303 (Art theory) and ART 3309 (Crafts) and blocks 1 and 4 in the education certification program as part of their area of specialization. Art History majors will take independent studies in art history under 3301, 4301, 4302 with proposal and 4303 capstone project.

Suggested Course Sequence for Bachelor of Fine Arts degree with a major in Studio Art or Art History.

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Seminar: SRSU 1101</td>
<td>1</td>
</tr>
<tr>
<td>Drawing 1 and 2: ART 1316 or 1317</td>
<td>6</td>
</tr>
<tr>
<td>Design 1 and 2: ART 1311, 1312, or 2313</td>
<td>6</td>
</tr>
<tr>
<td>Art History: ART 1303 or 1304</td>
<td></td>
</tr>
<tr>
<td>Mathematics: MATH 1314, 1316, 1332, 1342</td>
<td>3</td>
</tr>
<tr>
<td>Communication: ENG 1301, 1302, 2311</td>
<td></td>
</tr>
<tr>
<td>Component Area: COMM 1310, 1311, 1320; ENG 2312, 2315, 2322, 2323, 2331, 2341; Thea 2404, 2336</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>34</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ceramics 1 or Sculpture: ART 2346 or 2326</td>
<td>3</td>
</tr>
<tr>
<td>Painting: ART 2316 or 2366</td>
<td>6</td>
</tr>
<tr>
<td>American History: HIST 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Government/Political Science: PS 2305, 2306</td>
<td>3</td>
</tr>
<tr>
<td>Intro to Animation or Intro to Maya: ARTC 2331 or 3334</td>
<td>3</td>
</tr>
<tr>
<td>Design 1 and 2: ART 1311, 1312, or 2313</td>
<td>3</td>
</tr>
<tr>
<td>Language, Philosophy &amp; Culture: ENG 2312, 2315, 2322, 2323, 2327, 2328, 2331, 2341; HIST 2301, 2302</td>
<td></td>
</tr>
</tbody>
</table>
MAS 2301; PHIL 1301; WS 2301 .......................................................... 3
Life and Physical Science: ASTR 1303, 1304; BIOL 1311, 1313; CHEM 1311, 1312; GEOL 1303, 1304, 1305; IT 1309; NRM 1301, 2303, 2305; PHYS 1301, 1302 ................................................ 6
Creative Arts: ART 1301, FA 1302, 1315; IT 2304; MUS 1303, 1308, 1312; THEA 1310 ........... 3
Total 33

Junior Year
Design 1 and 2: ART 1311, 1312, or 2313 ........................................................................ 3
Intro to Animation or Intro to Maya: ARTC 2331 or 3334 ................................................. 3
Advanced Animation: ARTC 3340 ................................................................................. 3
Advanced Maya: ARTC 4303 .................................................................................. 3
Printmaking: ART 3302 .............................................................................................. 3
Advanced Studio: ART 3301 ...................................................................................... 3
Contemporary Art History: ART 3308 ........................................................................ 3
Area of Specialization: ART 4301 ................................................................................ 3
Social & Behavioral Science: ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2303 ................................................................. 3
Upper Level Electives ................................................................................................. 3
Total 30

Senior Year
Special Topics: ART 3310 ................................................................. 3
Government/Political Science: PS 2305 or 2306 .......................................................... 3
Field Studies: FA 3303 .............................................................................................. 3
Area of Specialization: ART 4302 ........................................................................ 3
Exhibition Capstone Project: ART 4303 ......................................................................... 3
Art History for the designer: ARTC 3324 ..................................................................... 3
Electives 3000 level or above ................................................................................ 8-9
Total 26
Grand Total 121

- No course with a grade less than the “C” can be used to fulfill art major course requirements.
- *These classes may be offered every other year.

A summer session is recommended immediately preceding and following the sophomore year to reduce the heavy maximum loads during the junior and senior years. A 3000 level proficiency review must be passed before entering into the 4301 studio art concentration. A formal proposal for a capstone exhibition must be submitted to the major advisor the semester before the student enrolls in their final studio class.

- Art Digital Design
- List of University Courses

Suggested Course Sequence for Bachelor of Fine Arts degree with a major in Digital Art.

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>First Year Seminar: SRSU 1101</td>
<td>1</td>
</tr>
<tr>
<td>Drawing 1 and 2: ART 1316 or 1317</td>
<td>6</td>
</tr>
<tr>
<td>Design 1 and 2: ART 1311, 1312, or 2313</td>
<td>6</td>
</tr>
<tr>
<td>Art History: ART 1303 or 1304</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics: MATH 1314, 1316, 1332, 1342</td>
<td>3</td>
</tr>
<tr>
<td>Communication: ENG 1301, 1302, 2311</td>
<td>6</td>
</tr>
<tr>
<td>Component Area COMM 1310, 1311, 1320; ENG 2312, 2315, 2322, 2323, 2331, 2341; THEA 2304, 2336</td>
<td>6</td>
</tr>
</tbody>
</table>
Sophomore Year
Ceramics 1 or Sculpture: ART 2346 or 2326 ........................................... 3
Painting: ART 2316 or 2366 .............................................................. 3
American History: HIST 1301, 1302 .............................................. 6
Government/Psychological Science: PS 2305, 2306 ....................... 3
Intro to Animation or Intro to Maya: ARTC 2331 or 3334 .......... 3
Design 1 and 2: ART 1311, 1312, or 2313 ................................. 3
Language, Philosophy & Culture: ENG 2312, 2315, 2322, 2323, 2327, 2328, 2331, 2341; HIST 2301, 2302; MAS 2301; PHIL 1301; WS 2301 ................................................................. 3
Life & Physical Science: ASTR 1303, 1304; BIOL 1311, 1313; CHEM 1311, 1312; GEOL 1303, 1304, 1305; IT 1309; NRM 1301, 2303, 2405; NRM 1301, 2303, 2305, PHYS 1301, 1302 ......... 6
Creative Arts: ART 1301; FA 1302, 1315; MUS 1303, 1308, 1312, THEA 1310 ................................................................. 3

Junior Year
Design 1 and 2: ART 1311, 1312, or 2313 ........................................... 3
Intro to Animation or Intro to Maya: ARTC 2331 or 3334 ........ 3
Advanced Animation: ARTC 3340 ................................................. 3
Advanced Maya: ARTC 4303 ............................................................ 3
Printmaking: ART 3302 ................................................................. 3
Advanced Studio: ART 3301 ........................................................... 3
Contemporary Art History: ART 3308 ........................................... 3
Area of Specialization: ART 4301 .................................................. 3
Social & Behavioral Science: ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2303 ................................................................................................. 3
Upper Level Electives ........................................................................ 3

Senior Year
Special Topics: ART 3310 ............................................................... 3
Government/Psychological Science: PS 2305 or 2306 ............... 3
Field Studies: FA 3303 ................................................................. 3
Area of Specialization: ART 4302 ................................................ 3
Exhibition Capstone Project: ART 4303 ..................................... 3
Art History for the designer: ARTC 3324 .................................... 3
Electives 3000 level or above ......................................................... 8-9

Total 34

Total 33

Total 30

Total 26

Grand Total 120

- No course with a grade less than the “C” can be used to fulfill art major course requirements.
- *These classes may be offered every other year.

A summer session is recommended immediately preceding and following the sophomore year to reduce the heavy maximum loads during the junior and senior years. A 3000 level proficiency review must be passed before entering into the 4301 studio art concentration. A formal proposal for a capstone exhibition must be submitted to the major advisor the semester before the student enrolls in their final studio class.

- Art Teacher Certification
- List of University Courses

Suggested Course Sequence for Bachelor of Fine Arts degree with a major art education
Freshman Year Hours
First Year Seminar: SRSU 1101 ................................................................. 1
Drawing 1 and 2: ART 1316 or 1317 ....................................................... 6
Design 1 and 2: ART 1311, 1312, or 2313 ........................................... 6
Art History: ART 1303 or 1304 ............................................................... 6
Mathematics: MATH 1314, 1316, 1332, 1342 ................................... 3
Communication ENG 1301, 1302, 2311 ............................................. 6
Component Area: COMM 1310, 1311, 1320; ENG 2312, 2315, 2322, 2323, 2331, 2341; THEA 2304, 2336 ........................................................................ 6

Total 34

Sophomore Year
Ceramics 1: ART 2346 ........................................................................... 3
Painting: ART 2316 or 2366 ................................................................. 3
American History: HIST 1301, 1302 ................................................. 6
Government/Political Science: PS 2305, 2306 .................................. 3
Design Communication: 2313 ............................................................. 3
Language, Philosophy & Culture: ENG 2312, 2315, 2322, 2323, 2327, 2328, 2331, 2341; HIST 2301, 2302; MAS 2301; PHIL 1301; WS 2301 ....................................................... 3
Life & Physical Science: ASTR 1303, 1304; BIOL 1311, 1313; CHEM 1311, 1312; GEOL 1303, 1304, 1305; IT 1309; NRM 1301, 2303, 2305; PHYS 1301, 1302 ....................................................... 6
Creative Arts: ART 1301, FA 1302, 1315; MUS 1303, 1308, 1312; THEA 1310 ........................................................................ 3

Total 33

Junior Year
Ceramics 2: ART 2347 ........................................................................... 3
Sculpture: ART 2326 ............................................................................ 3
*Printmaking: ART 3302 ..................................................................... 3
Art Theory: Methods and Materials for the Classroom Teacher: ART 3303 ................................................................. 3
Contemporary Art History: ART 3308 ............................................... 3
Area of Specialization ART 4301 ....................................................... 3
Government/Political Science: PS 2305 or 2306 ............................... 3
Social & Behavioral Science: ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2303 ................................................................. 3
Development and Learning Theories: ED 3302 .................................. 3
Reading Skills for Content Areas: ED 4314 ....................................... 3

Total 30

Senior Year
Field Studies: FA 3303 ........................................................................ 3
Curriculum and Instruction: ART 3309 ............................................. 3
Area of Specialization: ART 4302 ....................................................... 3
Exhibition Capstone Project: ART 4303 ............................................ 3
Multicultural Art History ................................................................. 3
Principles of Education: ED 3300 .................................................. 3
Classroom Management: ED 4322 ............................................... 3
Student Teaching: ED 4601, 4602, 4603, or 4605 ............................. 3

Total 24
Grand Total 121

- No course with a grade less than the “C” can be used to fulfill art major course requirements.
- *These classes may be offered every other year.
A summer session is recommended immediately preceding and following the sophomore year to reduce the heavy maximum loads during the junior and senior years. A 3000 level proficiency review must be passed before entering into the 4301 studio art concentration. A formal proposal for a capstone exhibition must be submitted to the major advisor the semester before the student enrolls in their final studio class.

**MASTER OF ART**

Master’s of Arts in Art Degree in Studio Art or Art History

The MA in Studio Art prepares students to teach and work in the field, community art colleges, art museums and community-based art programs. Students entering this program are expected to have a BA or BFA in Art, at least 30 hours in core and advanced studio art and 6 - 9 hours of core art history classes. They must have achieved competencies in the foundational skills of drawing and design and have a 2-d or 3-d specialization. The masters of Art core outcomes are based on standards developed by NASAD and by CAA (College Arts Association) Through the MA core art coursework, all students must take a contemporary art history class, a special topics in art history and a pedagogical class on teaching methods at the college level. The main body of the MA coursework focuses on proficiency in a specific area of specialization. Students must also have 3 graduate classes in a minor area. In art history, this becomes a topical field relating to their area of interest. Students are required to demonstrate their professional readiness through the development of Final Thesis or Problem in Lieu of thesis proposal and a Final Thesis Project or capstone. All students receiving an MA in Art must also pass a comprehensive written and oral exam.

**COMMUNICATION**

The humanistic study and practice of human communication—whether applied to individuals relating to others, family units, public forums, or media forms—provides the fundamental basis for understanding our ways of thinking, knowing, and relating to each other through the symbols we share. Analysis of the ways in which symbols are created, upheld, or destroyed provides us with the means to enhance, maintain, or demean the human condition. While the choice ultimately resides within each individual, our approach to the study and practice of human communication is rooted in the belief that enhancement of the human condition is a distinctively humanistic act—one in which all mankind should participate.

The B.A. degree is offered in Communication, with specialized concentrations in Interpersonal Communication, Broadcast Media, or Strategic Communication. Journalism courses may be applied to the non-teacher certification communication major or minor with permission of communication advisor. Secondary Teacher certification is offered in communication.

An interpersonal communication concentration provides a theoretical and practical understanding of human interaction, including traditional speech communication (i.e., public speaking, debate and small group) as well as social science areas of communication (i.e., family communication, gender communication and interpersonal communication). Course work includes communication theory and research as well as development of effective communication skills. A degree in interpersonal communication gives students tremendous flexibility in terms of career choices because effective communication is widely recognized as vital to such fields as education, human relations, international relations, health and human services, law, and government.

A broadcast media concentration provides a strong understanding of mass communication, encompassing the broadcast industry, new media and basics of video and audio production. Students study both theoretical principles and technical application of those principles. Course
work includes all aspects of audio and video production applying a variety of approaches. Majors are expected to learn how the various fields in mass communication are structured and function, and to understand how the media are converging and the consequences of that convergence. The broad based approach to media studies prepares students for current employment and opportunities created by developing technologies. Students who complete the broadcast media concentration will have many career options, especially in the broadly defined fields of journalism, radio, television, video, new media, advertising, strategic public relations, and integrated communications.

A strategic communication concentration provides a theoretical and practical understanding of goal oriented communication. Students study both practical aspects of communication design such as message construction, media relations, and media production as well as theoretical concepts such as theories of attitude change, and persuasion, paired with journalism minor, the strategic communication concentration prepares students for careers in communication management such as public relations, public information, communication director, political campaigns and corporate communications.

The communication program sponsors LISN (the Lobo Information and Sports Network comprised of KSRU Radio and KSRU TV); and Lambda Pi Eta (National Communication Honor Society).

Facilities for KSRU Radio and KSRU TV include a live video studio, a radio control room, digital video editors, PC digital audio editors, and field video equipment. KSRU-TV (Cable Channel 12) students produce various campus, educational, and informational projects throughout the year. Courses in electronic media and participation in media activities and projects are open to all Sul Ross students.

The University is a member of the National Communication Association, the National Association of College Broadcasters, and the Texas State Communication Association.

<table>
<thead>
<tr>
<th>Bachelor of Arts</th>
<th>Communication - Interpersonal Communication Concentration Degree Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>Please go to the following links to view the Communication – Interpersonal Communication degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.</td>
<td></td>
</tr>
<tr>
<td>• Communication – Interpersonal Communication Concentration</td>
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<tr>
<td>• List of University Courses</td>
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<table>
<thead>
<tr>
<th>Bachelor of Arts</th>
<th>Communication - Broadcast Media Concentration Degree Plan</th>
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<tr>
<td>Please go to the following links to view the Communication– Broadcast Media degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.</td>
<td></td>
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<td>• Communication – Broadcast Media Concentration</td>
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<tr>
<td>• List of University Courses</td>
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<table>
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</thead>
<tbody>
<tr>
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</tr>
<tr>
<td>• Communication – Strategic Communication Concentration</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Arts

Communication– Secondary Certification Degree Plan

Please go to the following links to view the Communication – Secondary Certification degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Communication – Secondary Certification
- List of University Courses

Bachelor of Arts

(Communication Major with Secondary Teacher Certification)

Speech Communication (36 semester credit hours): COMM 1311, 1307, 1318, 2333, 2308, 3304, 3305, 1320, 3309 or 4305, 3311 or 4307, 4301, 4302, 4310.

Communication as a Second Teaching Area (minor) Speech Communication (24 semester credit hours): COMM 1311, 1307, 2333, 3304, 3305, 4310

Communication as a Minor

18 semester credit hours of coursework to include 1311, 2333, 1320; 3304 or 4301; plus, additional 6 semester credit hours.

Suggested Course Sequence for Bachelor of Arts in Communication – Broadcast Media.

Since many communication courses are offered every other year, schedule adjustments may be necessary.

First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 1311*, 1307, 2306 or 2307</td>
<td>9</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Spanish 1401, 1402</td>
<td>8</td>
</tr>
<tr>
<td>Theatre 2304**</td>
<td>3</td>
</tr>
<tr>
<td>**Total 31</td>
<td></td>
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</table>

Second Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Communication 2333, 2306 or 2307, 2308</td>
<td>9</td>
</tr>
<tr>
<td>English 2301 or other literature</td>
<td>6</td>
</tr>
<tr>
<td>History 1302</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
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<tr>
<td>Theatre 2304**</td>
<td>3</td>
</tr>
<tr>
<td>**Total 31</td>
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Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Communication 3304 or 4301, 3305, 1320</td>
<td>9</td>
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<tr>
<td>Journalism 2301 or English 2304</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4</td>
</tr>
<tr>
<td>Minor</td>
<td>12</td>
</tr>
<tr>
<td>Social Science 2301, 2302</td>
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</tr>
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<td>**Total 31</td>
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Fourth Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>**Total 31</td>
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</tr>
</tbody>
</table>
**Suggested Course Sequence for Bachelor of Arts in Communication – Interpersonal Communication.** Since many communication courses are offered every other year, schedule adjustments may be necessary.

### First Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 1311*, 2303, 2305</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Theatre 2304**</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>27</td>
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### Second Year

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<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>Communication 1318, 2333, 2308***, 1320</td>
<td>9</td>
</tr>
<tr>
<td>English 2301 or other literature</td>
<td>3</td>
</tr>
<tr>
<td>Fine Art</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics</td>
<td>8</td>
</tr>
<tr>
<td>Political Science 2301, 2302</td>
<td>6</td>
</tr>
<tr>
<td>Theatre 2304**</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31</td>
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### Third Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Communication 3304, 3311*** or 4307***, 3309 or 4305</td>
<td>9</td>
</tr>
<tr>
<td>English 2304 or Jour 2301</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4</td>
</tr>
<tr>
<td><strong>Minor</strong></td>
<td>12</td>
</tr>
<tr>
<td>Social Science 2301, 2302</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>31</td>
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### Fourth Year

<table>
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<th>Course</th>
<th>Hours</th>
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<tr>
<td>Communication 4301, 4302, 4310</td>
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<tr>
<td>Communication, Advanced</td>
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<tr>
<td><strong>Minor</strong>, Advanced</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>13</td>
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<tr>
<td><strong>Total</strong></td>
<td>31</td>
</tr>
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</table>

**Grand Total 120**

*Meets Oral Communication requirement.
** Meets 3 SCH of Fine Arts requirement.
***Meets Multicultural Social Science requirement.
****Meets Computer Science competency requirement.
Journalism Minor

Students will complete 18 SCH in Journalism including Journalism 2311 and 3301 plus 12 additional SCH with at least 3 advanced, selected from Journalism, IT 2304, or COMM 2308.

MUSIC

The Music Program of the Department of Fine Arts and Communication offers opportunities for students of all backgrounds. Music study is available in both instrumental music and vocal music. Course offerings include music theory, music history and literature, as well as private instruction, in keyboard, voice, guitar, woodwinds and brass. Performing ensembles include university choir, wind ensemble, jazz ensemble, mariachi ensemble, and marching band. These ensembles are open to all students. Scholarship funds are readily available for those interested in participating in these ensembles. Further, substantial scholarships are available for students who declare music as a major.

For the student interested in music as a career, the department offers various concentrations in music. The major may serve as a foundation for careers in music business and music related activities. The Bachelor of Music degree coupled with the certification requirements of the Education Department qualifies a student to teach music in private and public schools, grades K-12. For those students interested in a professional musical career, there are also many opportunities in the field such as performance, teaching in the private studio, music business and merchandising, music composition and arranging, and music technology. The Sul Ross music program can help students explore these areas as well as prepare for graduate school.

Students may choose music as a minor. A music minor affords the opportunity to develop musical skills and to further explore musical creativity. The Sul Ross Music Club supports musical activities on campus and provides opportunities for leadership and fellowship among all students interested in music.

The Department of Fine Arts and Communication also offers select graduate courses in music that can be applied to the Master of Liberal Arts, Master of Education, or as a minor for other masters' programs.

Music as a Major

The major in music includes Music 1111 (multiple enrollments), 1181, 1116, 1117, 1308, 1311, 1312, 2116, 2311, 3111 (multiple enrollments), 3141, 3311, 3313, 3316, 3341, 4215, 4216, 4311, 4131, and Piano Proficiency Examination.

The major for students seeking certification includes Music 1111 (multiple enrollments), 1181, 1116, 1117, 1308, 1311, 1312, 2116, 2311, 3111 (multiple enrollments), 3141, 3311, 3313, 3316, 3341, 4215, 4216, 4311, 4131, and Piano Proficiency Examination. In addition, the following courses from the Department of Education: ED 3300, 3301, 3302, 3303, 4314, 4322, 4603.

Specialty techniques courses for concentration in instrumental or vocal music may include Music 1114 (two-three enrollments), 1183, and 1314. See an adviser in Fine Arts and Communication for specific requirements.

A Piano Proficiency Examination must be passed before the last semester.

Music as a Minor

Eighteen semester credit hours in music are required for a music minor (without teacher certification). Courses must include Music 1303 or Music 1116 and Music 1311. Six semester credit hours of music must be at the upper division level. The student must complete four semester
credit hours in the area of ensembles, vocal or instrumental; no more than four hours of ensemble may count toward 18 SCH total.

**Second teaching field music coursework**

2 hours of 3111 (principal instrument or voice); Piano Proficiency Examination; 3 hours of 1114 or 1314; 1116, 1117, 1308, 1311, 1312, 3141, 3313, 3316, 3341 and 4311 for a total of 34 approved SCH.

**Elementary Education Area of Specialization**

Music 1111-01, 1111-03, 1111-16, 1181, 1116, 1308, 1311, 3111-01, 3111-03, 3112, 3311, 3313 or 4311.

**Bachelor of Music Vocal Concentration Degree Plan**

Please go to the following links to view the Music – Vocal Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Music – Vocal Concentration
- [List of University Courses](#)

**Bachelor of Music Vocal – Education Degree Plan**

Please go to the following links to view the Music – Vocal - Education degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Music – Vocal - Education
- [List of University Courses](#)

**Bachelor of Music Instrumental Concentration Degree Plan**

Please go to the following links to view the Music – Instrumental Concentration degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Music – Instrumental Concentration
- [List of University Courses](#)

**Bachelor of Music Instrumental – Education Degree Plan**

Please go to the following links to view the Music – Instrumental – Education degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Music – Instrumental - Education
- [List of University Courses](#)

**Bachelor of Music Business Degree Plan**

Please go to the following links to view the Music Business degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Music – Business
- [List of University Courses](#)
Music Major (Vocal Concentration):
Music 1181, 1111-01 (two enrollments), 1111-02 (three enrollments), 1112, 1114, 1116, 1117, 3112, 1113, 3113 (four enrollments), 3111-01 (three enrollments), 3111-02 (three enrollments), 1308, 1314, 1311, 1312, 2311, 2116, 3141, 3313, 3341, 4131, 4216, 4311, and Piano Proficiency Examination........................................47
Music 1112-01, 1113, 3112-01, 3113.................................................................5

Or

Music Major (Instrumental Concentration):
Music 1111-01, 1181, 3111-01, 1111 (four enrollments with number indicating the principal instrument), 1112, 3112, 1113, 3113 (four enrollments), 1114 (two enrollments), 1116, 1117, 1311, 1312, 2116, 2311, 3111, 3141, 3341 (three enrollments with number indicating the principal instrument), 3311, 3313, 3316, 4131, 4215, 4216, 4311 and Piano Proficiency Examination.................................56

Music Electives ...............................................................................................6

Total 120

Some courses are offered in alternate semesters or in alternate years and some have prerequisites. Therefore, to ensure realistic planning, prospective music major or minor students should consult with the music major advisor as soon as possible after becoming a student at Sul Ross State University.

Each student pursuing a music major under this program must participate in instrumental ensembles and/or choral ensembles which correspond most closely to the principal instrument or voice during every semester of study. Music Majors must earn a grade of C or better in their music courses.

Suggested Course Sequence for Bachelor of Arts in Music degree – Vocal Concentration

Freshman Year

<table>
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<tr>
<th>Course</th>
<th>Hours</th>
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<td>Music 1181, 1111-01, 1111-02 (two enrollments), 1308 or 1314, 1116, 1117, 1311, 1312</td>
<td>15</td>
</tr>
<tr>
<td>Communication</td>
<td>3</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
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<tr>
<td>United States History</td>
<td>6</td>
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<td>Music Electives</td>
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Total 33

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Music 1111-03 (two enrollments), 1308 or 1314, 2116, 2311, 3141, and 3341</td>
<td>13</td>
</tr>
<tr>
<td>English 2301 or other literature</td>
<td>6</td>
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<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1310 or higher</td>
<td>3</td>
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<tr>
<td>Music Electives</td>
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Total 31

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Music 3111-01 (two enrollments), 3111-02 (two enrollments), 3316 or 4216, 3311, 3313 or 4311</td>
<td>12-13</td>
</tr>
<tr>
<td>Social Science</td>
<td>3</td>
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<tr>
<td>Music Electives</td>
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Total 29-30

Senior Year

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<tbody>
<tr>
<td>Music 3111-01, 3111-02, 3313 or 4311, 3316 or 4216</td>
<td>7-8</td>
</tr>
<tr>
<td>Multicultural</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science</td>
<td>4</td>
</tr>
</tbody>
</table>
A Piano Proficiency Examination must be passed before the last semester.

### Suggested Course Sequence for Bachelor of Arts in Music degree – Instrumental Concentration

#### Freshman Year
- **Music**: 1181, 1111-01, 1111-(two enrollments in principal instrument), 1312 or 1116, 1117, 1311, 1312
- **Communication**
- **English**: 1301, 1302
- **United States History**: 
- **Music Electives**: 
- **Total**: 15

#### Sophomore Year
- **Music**: 1111-(two enrollments), 1114, 1183, 2116, 2311, 3141, 3341
- **Computer Requirement**
- **English**: 2301 or other literature
- **Political Science**: 2305, 2306
- **Music Electives**: 
- **Total**: 12

#### Junior Year
- **Music**: 1114, 3111-01, 3111-(two enrollments), 3311, 3313 or 4311, 3316 or 4216
- **Mathematics**: 1310 or higher
- **Music Electives**: 
- **Total**: 12

#### Senior Year
- **Music**: 3111-, 3313 or 4311, 3316 or 4216, 4215
- **Multicultural**: 
- **Laboratory Science**: 
- **Music Electives**: 
- **Total**: 8

### THEATRE

The impulse toward theatre is universal. Wherever human society has developed so has the drive to create, educate, and entertain. Theatre is a way of seeing men and women in action, of observing what they do and why they do it. Because human beings are the subject and the means of expression, theatre is one of the most immediate ways of experiencing what it means to be human. Individuals who explore the world of theatre grow in understanding of cultural diversity, self-knowledge, communications skills, and self-expression. With numerous opportunities for "hands-on" performance and technical experiences, coupled with invaluable classroom academics, the Theatre Program at Sul Ross offers a practical general overview of the performance and technical aspects of theatre.

The Bachelor of Fine Arts degree is offered in Theatre. All-level teacher certification is also available.
With this pre-professional degree, students can emphasize acting, theatrical design or teaching. Application to the Bachelor of Fine Arts program involves an audition or portfolio review, evidence of scholarly and creative achievement, and potential for excellence in the field. Acceptance into the program and continuation are dependent upon the student's continued growth, sense of professionalism, and commitment to the art. The suggested curriculum and degree plans will place an emphasis on academic achievement and pre-professional degree attainment. As such, the area of study in a minor field has been eliminated in order to provide focused study in theatre arts. Our current program is grooming students to pursue professional advanced degrees in acting, directing, playwriting, design, and technical production. A teacher certification track is also available. A grade of "C" or better must be achieved in all required theatre courses in or to complete a B.F.A. in theatre.

Graduate hours in Theatre may be used for a Master of Education degree or a Master of Arts in Liberal Arts.

The University is a member of the following organizations in the theatre field: the Theatre Communication Group, the Association for Theatre in Higher Education, Southwest Theatre and Film Association, United States Institute of Theatre Technology, and the Texas Educational Theatre Association.

Oral communication requirement: Theatre 2304 (Oral Performance for the Non-Major) and THEA 2336 (Voice for the Actor) will fulfill the General Education Core Curriculum requirement.

Fine Arts requirement: Theatre 1302 (Introduction to Theatre) will fulfill the General Education Core Curriculum requirement.

### Bachelor of Fine Arts

#### Theatre – Acting and Directing Degree Plan

Please go to the following links to view the Theatre – Acting and Directing Degree Plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Theatre – Acting and Directing](#)
- [List of University Courses](#)

#### Suggested Course Sequence for Bachelor of Fine Arts in Theatre - Acting and Directing

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 1121, 2120, 1310, 1351, 1352, 2304, 2336</td>
<td>20</td>
</tr>
<tr>
<td>ENG 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>MATH 1332, 1314, or 1342</td>
<td>3</td>
</tr>
<tr>
<td>SRSU 1101</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total 30**

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 1322, 1371, 2112, 2120, 2306, 2307, 2331</td>
<td>17</td>
</tr>
<tr>
<td>Language, Philosophy &amp; Culture: ENG 2341, 2331, 2312, 2315, 2322, 2323, 2327, 2328, MAS 2301, PHIL 1301 or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td>PSY 1302</td>
<td>3</td>
</tr>
<tr>
<td>American History: HIST 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Music 1112</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total 30**

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre: 3101, 3302, 3303, 3308, 3309, 3312, 3316, 3317</td>
<td>22</td>
</tr>
<tr>
<td>FA 3303</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 30**
Music 1112 ........................................................................................................... 1
Government/Political Science: PS 2305, 2306 ......................................................... 6

**Total 32**

**Senior Year**
Theatre 2112, 3315, 3318, 4101, 4304, 4306, 4307, 4308 ........................................... 20
Life & Physical Science: ASTR 1303, 1304, BIOL 1311, 1313, CHEM 1311, 1312, GEOL 1303, 1304, 1305, IT 1309, NRM 1301, 2305 .................................................. 6
Music 1112 ........................................................................................................... 1
Electives .................................................................................................................. 3

**Total 30**
**Grand Total 120**

Bachelor of Fine Arts
Theatre – Technical Design and Production Degree Plan

Please go to the following links to view the Theatre – Technical Design and Production Degree Plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Theatre – Technical Design and Production](#)
- [List of University Courses](#)

Suggested Course Sequence for Bachelor of Fine Arts in Theatre – Technical Design and Production

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 1101, 1102, 1310, 1351, 2303</td>
<td>11</td>
</tr>
<tr>
<td>ART 1302</td>
<td>3</td>
</tr>
<tr>
<td>ENG 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>HIST 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>PSY 1302</td>
<td>3</td>
</tr>
<tr>
<td>SRSU First Year Seminar</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total 30**

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 2101, 2102, 2301, 2311</td>
<td>8</td>
</tr>
<tr>
<td>ENG 2341, 2331, 2312, 2315, 2322, 2323, 2327, 2328, MAS 2301, PHIL 1301 or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td>MATH 1332, 1314, 1342</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 1303, 1304, BIOL 1311, 1313, CHEM 1311, 1312, GEOL 1303, 1304, 1305, IT 1309, NRM 1301, 2305</td>
<td>3</td>
</tr>
<tr>
<td>CSAT 2307</td>
<td>3</td>
</tr>
<tr>
<td>IT 2307</td>
<td>3</td>
</tr>
<tr>
<td>PS 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>MUS 1112</td>
<td>1</td>
</tr>
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</table>

**Total 30**

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 3101, 3102, 3302, 3303, 3305, 3306, 3307, 3309, 3312</td>
<td>27</td>
</tr>
<tr>
<td>FA 3303</td>
<td>3</td>
</tr>
</tbody>
</table>

**Total 30**

**Senior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 3311, 3313, 3314, 3315, 3316, 3318, 4101, 4304, 4307</td>
<td>25</td>
</tr>
<tr>
<td>Electives</td>
<td>5</td>
</tr>
</tbody>
</table>

**Total 30**
**Grand Total 120**
Bachelor of Fine Arts
Theatre – Theatre Education Degree Plan

Please go to the following links to view the Theatre – Theatre Education degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Theatre – Theatre Education
- List of University Courses

Suggested Course Sequence for Bachelor of Fine Arts in Theatre - Education

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 1101, 1102, 1310, 1351, 2303, 2306</td>
<td>14</td>
</tr>
<tr>
<td>ENG 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>HIST 1301, 1302</td>
<td>6</td>
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<tr>
<td>PSY 1302</td>
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<tr>
<td>SRSU 1101</td>
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</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 2101, 2102, 2301, 2304, 2307, 2311</td>
<td>14</td>
</tr>
<tr>
<td>English 2341, 2331, 2312, 2315, 2322, 2323, 2327, 2328, MAS 2301, PHIL 1301 or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td>Math 1332, 1314, or 1342</td>
<td>3</td>
</tr>
<tr>
<td>ASTR 1303, 1304, BIOL 1311, 1313, CHEM 1311, 1312, GEOL 1303, 1304, 1305, IT 1309</td>
<td>3</td>
</tr>
<tr>
<td>NRM 1301, 2305</td>
<td>3</td>
</tr>
<tr>
<td>PS 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Music 1112</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Junior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre: 3101, 3102, 3302, 3303, 3304, 3306, 3316, 3309, 3312, 3316</td>
<td>26</td>
</tr>
<tr>
<td>FA 3303</td>
<td>3</td>
</tr>
<tr>
<td>Music 1112</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

Senior Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 3307, 3308, 3311, 3313, 3314, 3318, 4101, 4102, 4304, 4307</td>
<td>26</td>
</tr>
<tr>
<td>Music 1112</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>27</td>
</tr>
</tbody>
</table>

Electives                                                                 | 5     |

Grand Total                                                             | 120   |

18 SCH hours of coursework to include 6 SCH advanced; no more than 6 SCH from the following can be used for a minor: Theatre 1101, 1102, 2101, 2102, 2308, 3101, 3102, 3303, 3307, 4101, or 4102.

Bachelor of Arts (Theatre Major with Secondary Certification)

Required Education Courses: ED3300, 3302, 3305, 4312, 4314, 4605 Theatre: Thea1301, 2303, 3302, 3310, 3316, 4303, 4307, plus 3 SCH from 2308, 3303, or 3307.

Bachelor of Arts (Theatre Major)

The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in Theatre.

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theatre 1301, 1302, and select from 2301, 3301, 3312</td>
<td>12</td>
</tr>
<tr>
<td>Communication 1303 or Theatre 2304</td>
<td>3</td>
</tr>
</tbody>
</table>
English 1301, 1302 .................................................................6
United States History ................................................................3
Mathematics 1310 or higher ......................................................3
Physical Education 1150 and one activity course .....................2

Total 29

Sophomore Year
Theatre select from 2301, 2311, 3301, 3302, 3303, 3306, 3312 or 3316 ..............................................12
English 2301 or other literature ..............................................3
Foreign Language ..................................................................6-8
Multicultural Social Science or Social Science .......................3
Laboratory Science ................................................................4

Total 28-30

Junior Year
Theatre select from 2311, 3302, 3306, 3316 or 4303 ..................3-12
English 2301 or other literature ..............................................3
United States History .............................................................3
Multicultural or Social Science ................................................3
Political Science 2305 or 2306 ..............................................3
Laboratory Science ...............................................................4
Electives (including 3 SCH computer based course) ..................3-6

Total 31-33

Senior Year
Theatre 4307 plus 4303 (if not taken) ......................................3-6
Political Science 2305 or 2306 ..............................................3
Electives ...........................................................................3-6

Total 31-33

Grand Total 120

- Theatre – Film Production
- List of University Courses

GENERAL STUDIES
College of Arts and Sciences
E-mail: arts-science@sulross.edu

General Studies Advisor: James W. Downing, Ph.D., Dean, College of Arts and Sciences and
Professor of Psychology, Behavioral and Social Sciences

Program Description
The Bachelor of Arts in General Studies is an individualized program of study designed for the
student who wishes to pursue an unspecified program of study with which to meet the student's
particular needs. It is a flexible degree program open to full or part-time students. This degree
reflects a major in General Studies with no minor. General Studies is an interdisciplinary major
that encourages students to delve into the problems and prospects of society. Students may
select courses from the entire university; suitting studies to the student's own interests and needs
without regard to required courses. Students must fulfill the regular requirements for a Bachelor
of Arts degree. The general studies common core gives all students fundamental knowledge of
skills necessary to competently express themselves, think creatively, solve problems, and
understand the nature and function of people and the environment. This basic competency
establishes a comprehensive context for understanding the methodologies and problems of
studying issues. The semester the student graduates, the student must also enroll in and
successfully complete General Studies (GS) 4100, Senior Assessment.

At the time of entrance into the program each student must complete a degree plan with a General Studies advisor.

### General Studies Degree Plan

Please go to the following links to view the General Studies degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [General Studies](#)
- [List of University Courses](#)

## DEPARTMENT OF LANGUAGES AND LITERATURE

(including English, Spanish, and Women's Studies)

**Department of Languages and Literature**

**College of Arts and Sciences**

Office: Morelock Academic Building, 114

Phone: (432) 837-8151

Fax: (432) 837-8714

E-mail: lbutler@sulross.edu

Professor and Chair: Laura Payne, Ph.D.

Professors: Sharon Hileman, Ph.D. and Nelson Sager, Ph.D.

Associate Professors: Ian Peddie, Ph.D., Francine Richter, Ph.D. and Filemón Zamora, Ph.D.

Assistant Professors: Theron Francis, Ph.D. and Rosemary Briseño, Ph.D.

Lecturers: Ilda Gonzalez, M.A., and Susan Spring, M.A.

## Program Description

The Department of Languages and Literature offers coursework leading to Bachelor of Arts degrees in English and Spanish, as well as minors in English, Spanish, and Women's Studies.

## ENGLISH

The undergraduate English program provides professional training for students interested in becoming certified to teach; students interested in an emphasis on creative writing; and students interested in pre-professional studies in law, medicine, and other fields. The program prepares undergraduates to enter graduate programs in language and literature.

### Career Opportunities

- Copywriter
- Editor
- Grant Writer
- Journalist
- Media Writer
- Public Relations Positions
- Researcher
- Teacher
- Technical Writer

### Scholarships
Henry Bertrand, Jr. Memorial Scholarship. One $2,000 scholarship to be awarded to a sophomore, junior, or senior in English. Recipients must have a cumulative 3.0 GPA. Preference is given to students seeking self-improvement through communication, public speaking, vocabulary development, development of extemporaneous speaking abilities and toastmaster skills, and development of the ability to express oneself completely, confidently and with a sense of humor.

Ira Blanton Folklore Scholarship. The Ira Blanton Folklore Scholarship for undergraduates and graduates carries a $500-$1,000 annual award and is given to students interested in folklore who have a 3.0 GPA.

Kathryn Walker-Clayton Williams, Sr. Scholarship. The Kathryn Walker-Clayton Williams, Sr. Scholarship for undergraduate and graduate students carries a $1,000 annual award and is given to outstanding English majors.

Bachelor of Arts
(English Major-120 hours)

The undergraduate English program provides professional training for students interested in becoming certified to teach; students interested in an emphasis on creative writing; and students interested in pre-professional studies in law, medicine, and other fields. The program prepares undergraduates to enter graduate programs in language and literature.

English as a Minor

2322, 2323, 2327, 2328, plus 6 additional advanced elected SCH in English.

All sophomore and advanced English courses require completion of the freshman English courses as a prerequisite.

Bachelor of Arts - English Degree Plan

Please go to the following links to view the English degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- English
- List of University Courses

Suggested Course Sequence for Bachelor of Arts in English

Freshman Year (Hours)
English 1301; 1302 or 2311 Communication Core Requirement ......................................................... 6
Communication 1311; English 2331 Component Area Option Core Requirement .................................. 6
Creative Arts Core Requirement ........................................................................................................ 3
Mathematics Core Requirement ........................................................................................................ 3
American History Core Requirement ................................................................................................. 6
Foreign Language ............................................................................................................................ 6-8
First Year Seminar ............................................................................................................................. 1

Total 31-33

Sophomore Year
English 2341 Language, Philosophy, and Culture Core Requirement3 .................................................
English 2322, 2323, 2327, 232812
Life and Physical Sciences with Labs Core Requirement ................................................................. 8
Social and Behavioral Sciences Core Requirement .............................................................................. 3
Political Science Core Requirement ................................................................................................... 6

Total 32
Junior Year
English 3303; 3304; 3312; Advanced English elective ..........................................................12
Minor .......................................................................................................................................9
Electives ....................................................................................................................................9
Total 30

Senior Year
English 4300; 3301; 4320; English elective ............................................................................12
Minor .......................................................................................................................................9
Electives ....................................................................................................................................6
Total 27

Bachelor of Arts
English – Secondary Teacher Certification Degree Plan
Please go to the following links to view the English – Secondary Teacher Certification degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.
- English – Secondary Teacher Certification
- List of University Courses

Bachelor of Arts
English – Writing Concentration Degree Plan
Please go to the following links to view the English – Writing Concentration degree plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.
- English – Writing Concentration
- List of University Courses

GRADUATE PROGRAM IN ENGLISH
The graduate program in English is designed to meet the needs of students who wish to teach at the high school and community college levels; students who wish to pursue a Ph.D. in English; and students who desire to specialize in creative writing. A variety of options is available to assist students in achieving their objectives:
- the 36 SCH English program option (36 SCH English courses);
- the major/minor program option (24-30 SCH in English; 6-12 SCH in another enhancing field/area);
- the thesis option in literature or writing (24 SCH English; 6 SCH thesis);
- the portfolio option in creative writing (33 SCH English; 3 SCH portfolios).

All graduate students, regardless of option, must complete 6 SCH in English literature, 6 SCH in American literature, and 6 SCH in language/writing/theory. In addition, all graduate students must pass a comprehensive M.A. exam near the end of their studies. Thesis students must provide an oral defense of the thesis.

The graduate faculty can guide students who wish to focus on American and English literature, creative writing, as well as literary and composition theory. The faculty includes those who specialize in linguistics, language and theory, cultural and gender studies, environmental studies, and creative writing.
SPANISH

The Spanish program provides professional training for students interested in becoming certified
to teach; students interested in preparing for careers in interpretation and translation and for
students desiring to enter other career fields.

Career Opportunities

<table>
<thead>
<tr>
<th>Bilingual Program Officer</th>
<th>Public Relations Officer</th>
<th>Teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Court Interpreter</td>
<td>Publishing Positions</td>
<td>Translator</td>
</tr>
<tr>
<td>Government Positions</td>
<td>Social Worker</td>
<td></td>
</tr>
</tbody>
</table>

Spanish Scholarships

**Stather Elliott Thomas Excellence Fund.** The Stather Elliott Thomas Excellence Fund awards
one to six scholarships to undergraduates with a 3.0 GPA in Spanish and 2.0. GPA overall.

**Spanish as a Minor**

Spanish 2311, 2312, 3308, 3315, 3316, and 3 SCH elected Spanish (6 SCH must be advanced).

**Bachelor of Arts - Spanish Degree Plan**

Please go to the following links to view the Spanish degree plan and to see the full list course
descriptions. All of the university courses are also included at the end of the catalog.

- [Spanish](#)
- [List of University Courses](#)

**Suggested Course Sequence for Bachelor of Arts in Spanish**

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 2311; 2312</td>
<td>6</td>
</tr>
<tr>
<td>English 1301; 1302 or 2311 Communication Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Communications 1311 Component Area Option</td>
<td>3</td>
</tr>
<tr>
<td>Social and Behavioral Sciences Science Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Creative Arts Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>American History Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td>First Year Seminar</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total 31</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 2305; 3301; 3308</td>
<td>9</td>
</tr>
<tr>
<td>Mexican American Studies 2301 Language, Philosophy, and Culture Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>English 2312; 2315; 2322; 2323; 2331; or 2341 Component Area Option Requirement</td>
<td>3</td>
</tr>
<tr>
<td>English 2341 or equivalent literature course</td>
<td>3</td>
</tr>
<tr>
<td>Life and Physical Sciences with Labs Core Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Political Science Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total 32</strong></td>
<td></td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spanish 3310, 3311, 3315, 3316</td>
<td>12</td>
</tr>
<tr>
<td>Minor</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>9</td>
</tr>
<tr>
<td><strong>Total 30</strong></td>
<td></td>
</tr>
</tbody>
</table>
Senior Year
Spanish 4310, 4311 advanced Spanish elective .................................................................9
Minor ....................................................................................................................................9
Electives ..................................................................................................................................9
Total 27

Bachelor of Arts – Spanish – Teacher Certification Degree Plan
Please go to the following links to view the Spanish – Teacher Certification Degree Plan and to see the full list of course descriptions. All of the university courses are also included at the end of the catalog.

- Spanish – Teacher Certification
- List of University Courses

WOMEN'S STUDIES
Coordinator: Sharon L. Hileman, Ph.D., Dean of Graduate Studies and Professor of English, Languages and Literature

Women's Studies is intended to increase a student's knowledge and appreciation of the needs, contributions, problems, and aspirations of women—and also of the way that gender shapes the lives of both women and men. The courses emphasize cultural diversity and the varied experiences faced by women in the United States and in the world.

The interdisciplinary nature of Women's Studies provides the opportunity to examine several theoretical/critical frames (e.g., historical, sociological, legal, psychological, ethnographic, scientific, political, aesthetic).

The program in Women's Studies is supervised by the Coordinator of Women's Studies and by the Women's Studies Advisory Committee, which includes program faculty and students.

The structure of the Women's Studies Program at Sul Ross State University is designed to maximize opportunities for participation of all community members.

A minor in women's studies prepares one for a position in business, government, the non-profit sector, or the professions. It also prepares students for graduate studies in a wide range of fields.

Women's Studies as a Minor
To complete a Women's Studies minor, students must earn at least eighteen semester credit hours in courses approved for Women's Studies credit including WS 2301 (Introduction to Women's Studies), WS 3301 (Topics in Women's Studies), and WS 4310 (Senior Colloquium in Women's Studies). At least nine (9) semester hours must be at the upper division level.

Students must select their additional classes from a variety of other courses appropriate for the Women's Studies minor which are taught regularly or as special topics in a number of departments of Sul Ross; these include, but are not limited to the following:

- Communication 3311, Gender Communication
- Criminal Justice 3311, Women and Crime
- English 4312, Women in Literature
- History 4321, History of American Women
- Political Science 2307, Women and the Law
- Political Science 3315, Women and Politics

For additional approved courses consult the Women's Studies section of the Schedule of Classes for each semester and the Women's Studies Coordinator.
LIBERAL ARTS
College of Arts and Sciences & College of Graduate Studies
E-mail: shileman@sulross.edu

Liberal Arts Advisor: Sharon L. Hileman, Ph.D., Dean of Graduate Studies and Professor of English, Languages and Literature

Program Description
The Master of Arts in Liberal Arts is an individualized program designed for the graduate student who wishes to pursue interdisciplinary studies. Such a program encourages students to consider issues and problems in society, culture, literature, science, art, and/or communication. Students will develop comprehensive contexts for Scholarly work and appropriate methodologies for such studies.

Graduate students in Liberal Arts may earn a Master of Arts degree by selecting 33 hours of graduate courses from three disciplines (programs) with the approval of their major advisor and committee. Two of the three disciplines must be from the College of Arts and Sciences. The discipline with the greatest number of semester credit hours is required to be a discipline in the College of Arts and Sciences. In addition, students will complete LA 5101 and LA 5301, LA 5101 and LA 5301 may not be taken concurrently.

- List of University Courses

At the time of entrance into the program each student must complete a degree plan with a Liberal Arts advisor and select a committee based on the student's areas of interest. Leveling work may be required in some disciplines.
The College of Education and Professional Studies consists of the following departments:

- Business Administration
- Education
- Homeland Security and Criminal Justice
- Industrial Technology
- Kinesiology and Human Performance
- Law Enforcement Academy

Students may select a variety of degrees that include a strong general education component and specialized courses in the major or minor. Students can prepare for either immediate entry into their chosen careers or advanced study.

**Degree Programs in Professional Studies**

- Bachelor of Business Administration
- Bachelor of Science with majors in Criminal Justice, Homeland Security, Industrial Technology, Interdisciplinary Studies (includes teacher certification), and Kinesiology and Human Performance.
- Master of Business Administration
- Master of Education: Emphasis in Diagnostian, Counselor Education, Educational Leadership, Reading Specialist, and Physical Education.
- Master of Science in Criminal Justice
- Master of Science in Homeland Security
- Master of Science in Health and Human Performance

**DEPARTMENT BUSINESS ADMINISTRATION**

**College of Education and Professional Studies**

Dolph Briscoe Administration Building, 316  
Box C-35, Alpine, TX 79832  
(432) 837-8066  
Fax: (432) 837-8003  
E-mail: wcgreen@sulross.edu

Interim Chair and Professor: William C. Green, Ph.D.  
Professor: Pamela C. Marett, Ph.D.  
Assistant Professor: Mary Jane Sauceda, Ph.D., CPA  
Lecturer: Linda McAnally, M.B.A.

The Department of Business Administration at Sul Ross State University offers two degrees, one
concentration and one minor: the Bachelor of Business Administration Degree (BBA), 120 semester credit hours; the Master of Business Administration Degree (MBA), 36 semester credit hours; an accounting concentration and a minor in Business Administration.

**Bachelor of Business Administration (BBA)**

120 semester credit hours

The Bachelor of Business Administration Degree program provides a broad base of business knowledge, understanding, and skills. Areas of study include the fields of economics, accounting, marketing, finance, global business and human resources.

In this program one may take some business courses in the first year! The required university and business courses can be synchronized to provide a more career focused curriculum. This blending of business and general education courses enhances and reinforces the educational experience.

The advanced business electives allow students to focus in a specific functional area or broaden their education across several areas of business. Successful graduates obtaining the BBA degree are well prepared to pursue a wide variety of business careers.

The **Bachelor of Business Administration degree program** prepares the undergraduate for managerial and administrative positions across a vast array of organizations. These include regional, national, and international private sector enterprises across numerous industries; responsible positions for non-profit organizations; positions in the public sector including government organizations at the local, state, and federal level and many others. The business undergraduate is prepared to pursue employment as a business generalist or in a more specialized field such as accounting, economics, finance, human resources or marketing.

**Bachelor of Business Administration Degree Plan**

Please go to the following links to view the Bachelor of Business Administration Degree Plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Business Administration
- List of University Courses

**Minor in Business Administration**

18 semester credit hours

Students desiring a minor field in Business Administration must complete the following six courses.

- Accounting 2301 .................................................................3
- Economics 2301 and 2302 ..................................................6
- Finance 3340 .................................................................3
- Management 3360 .........................................................3
- Marketing 3370 ...............................................................3

**Total 18**

**Accounting Concentration**

18 Semester Credit Hours

- Accounting 3330 .................................................................3
- Accounting 3331 .................................................................3
- Accounting 3332 .................................................................3
Accounting 4330 ......................................................................................................................... 3
Accounting 4332 .......................................................................................................................... 3
Accounting 4333 .......................................................................................................................... 3

Total 18

The balance of the hours in the accounting concentration are almost identical to those required for the BBA degree and as with the BBA, the accounting concentration requires a total of at least 120 semester credit hours.

Scholarships in Business Administration

Department of Business Administration Scholarships - The Department of Business Administration is grateful to its benefactors who make it possible for us to offer scholarships to Business Administration majors. These are:

Jason Wesley Morgan Memorial Scholarship - $1,000 scholarship for a full-time undergraduate student majoring in Business Administration. Applicant must be a junior or senior and be in good academic and disciplinary standing. Preference will be given to graduates of Alpine High School.

West Texas National Bank in Alpine Business Administration Scholarship - $1,000 scholarship for full-time undergraduate students majoring in Business Administration. Qualifications include unconditional admittance, a composite score of at least 20 on the ACT or the equivalent SAT score. Continuing students must maintain at least a 3.0 GPA.

R.E. “Dick” Morrow and Bill Moss Memorial Scholarship - $500-$2000 scholarship for a full-time undergraduate student majoring in Business Administration. First priority is given to employees and children of employees of Valley Distributors and Permian Distributors. Recipient must be a graduate of a high school within a specified trade area. Must maintain at least a 2.5 GPA.

Business Administration Excellence Fund - This is a special scholarship awarded on a case by case basis considering student need, program progress, and academic standing. Recipients must be full-time undergraduate students majoring in Business Administration.

Business Administration International Fund - Competitive scholarship awarded to graduate and undergraduate business majors. Qualifications include unconditional admittance and good academic standing. Continuing undergraduate students must maintain at least a 2.75 GPA. Graduate students must maintain a 3.0 GPA.

GRADUATE PROGRAMS IN BUSINESS ADMINISTRATION

The Master of Business Administration degree is recognized by industry and government as one of the best credentials for success in management. It is offered for those students who are interested in preparing themselves for positions of responsibility in management or who have attained a management position and are seeking to enhance their understanding of the latest concepts, tools, and techniques of management and administration. The department offers three graduate MBA degree options. One option is a one year full-time program offered in class at the Alpine campus. A second option is a part-time two year online program offered primarily on an asynchronous basis. A third option, which is available only to international students, is currently inactive.

Regardless of option, the MBA professors combine their industry experience, academic theory and concepts as well as insight gained from their own research to offer the graduate student insight from both an academic as well as a business practitioner’s perspective. The MBA curriculum includes content from economics, finance, marketing, management, accounting,
strategy and global business. The Department of Business Administration MBA program attracts people from diverse cultures and often leverages these differences into learning opportunities. Through these programs, relationships with faculty, students, and alumni are formed that provide lasting professional and personal bonds.

Both the Alpine-based and the online MBA programs impart the latest organizational knowledge and perspectives. Students learn to recognize and define changes critical to organizations regionally, nationally, and globally.

Background or “leveling work” may be required as deemed necessary by the MBA advisor with approval from the department chair and the Dean. Leveling work requirements may include: Accounting 2301 and/or 2302; Economics 2301 and/or 2302; Finance 3340; Marketing 3370; Management 3360; and General Business Administration 3352.

Master of Business Administration
One Year Full-Time, Alpine
(36 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 5307</td>
<td>3</td>
</tr>
<tr>
<td>Economics 5301 and 5303</td>
<td>6</td>
</tr>
<tr>
<td>Economics 5302 or 5304</td>
<td>3</td>
</tr>
<tr>
<td>Finance 5306</td>
<td>3</td>
</tr>
<tr>
<td>General Business Administration 5301, 5304, 5309</td>
<td>9</td>
</tr>
<tr>
<td>Management 5304 and 5312</td>
<td>6</td>
</tr>
<tr>
<td>Marketing 5303 and 5305</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

The one year full time Master of Business Administration (MBA) degree program is designed to prepare individuals to deal with most aspects of the complex and competitive world of organizations. The one-year program is offered on the Alpine campus in a classroom setting.

Master of Business Administration
Two Year Online MBA
(36 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accounting 5307</td>
<td>3</td>
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<tr>
<td>Economics 5301 and 5303</td>
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<td>6</td>
</tr>
<tr>
<td>Marketing 5303 and 5305</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
</tr>
</tbody>
</table>

The two-year Online MBA program is delivered using Blackboard and various synchronous tools as necessary. As noted, this program is an attractive option to those already in the workforce and/or who have time constraints.
Program Description
Sul Ross State University was created in 1920 as a state normal college for the primary purpose of preparing teachers for the public schools of West Texas. Our continuing mission in the Department of Education is to develop life-long learners who are reflective practitioners of their craft. Our vision includes preparing high quality educators.

You can choose a degree program that leads to teacher certification in Early Childhood-Grade 6, Grade 4-8, Grade 7-12, or All-Level EC-12. Information regarding these areas is listed in this section. The Undergraduate Teacher Education Program includes field-based work in K-12 schools.

Graduate programs include general education, counselor education, school administration, reading specialist, and educational diagnostician. Degree options and certification programs are described under Graduate Programs in Education within this section.

Scholarships
Alonzo G. Basquez and Mary Urias Scholarship. Awarded to an undergraduate or graduate student. Undergraduate must be seeking Teacher Certification and have a 2.5 GPA. A graduate student must be seeking a Master's degree in Education.

Elisabeth Prude Longbotham Scholarship. Awarded to an undergraduate student who has been admitted to the teacher education program and has a 3.0 GPA.

Richard & Bernadine Gibson Scholarship. Awarded to an undergraduate fully admitted freshman. Continuing students: 3.0 GPA. First preference will be given to graduates of a Reeves, Andrews or Martin County high schools or whose legal residence is within Reeves, Andrews or Martin County.

Delta Kappa Gamma Student Teacher Scholarship. Awarded to an undergraduate
student who is a senior scheduled to complete student teaching.

**Metha Sprinkle/Valley Johnson Scholarship.** Awarded to elementary education seniors who meet all requirements for teacher certification.

**Patsy H. Webb Educational Endowment.** Awarded to elementary education seniors who have met all requirements for teacher education and have a 3.0 GPA.

**McEachern Scholarship.** Awarded to juniors or seniors who have been admitted to the teacher education program and have a 3.0 GPA. Based on financial need.

**Mary Evelyn Highsmith Memorial Scholarship.** Awarded to a graduate student in teacher education who is certified and teaching.

**Graham/Aldridge Counselor Education Scholarship.** Awarded to a graduate student majoring in Counselor Education.

**James Ace Amos Memorial Scholarship** Awarded to an undergraduate student who has been admitted to the teacher education program and has a 3.0 grade point average.

**Matthew Todd Coleman Memorial Scholarship Endowment.** Awarded to a student who has been fully admitted to the teacher education program. Preference will be given to students who are Special Education majors.

**John E. & Elizabeth Moorman Palmer Scholarship Endowment.** Must be an undergraduate or graduate student enrolled in a program leading to a teaching certificate or a master's degree. Undergraduates must have an overall grade point average of 2.75. Graduates must have a grade point average of 3.0.

**Lydia Dittmar Rawlings Carpenter Memorial Scholarship.** Awarded to an Interdisciplinary Studies major seeking teacher certification who is in good standing and who meets grade point average requirements of scholarship criteria.

Educational certification programs are frequently being revised by the State Board of Education. As this transition occurs, changes might be made in course offerings, content, and sequence. It is important to check with an advisor in the Education Department each semester for updated information. Be aware TExES exams are a requirement for certification.

### INTERDISCIPLINARY STUDIES PROGRAMS

Please see an advisor in the Education Department for specific requirements. TExES exams are required for certification.

Areas of Specialization EC-Grade 6:
- Generalist

Areas of Specialization Grade 4-8:
- English/Language Arts & Reading
- Mathematics
- Science
- Social Studies
## Major and Teaching Fields in Grades 6, 7 & 8-12

These are approved certification areas. Please see an advisor in that department for specific requirements. TExES exams are required for certification.

<table>
<thead>
<tr>
<th>Major</th>
<th>Teaching Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ag Science &amp; Tech 6-12</td>
<td>Mathematics 7-12</td>
</tr>
<tr>
<td>Business Education 6-12</td>
<td>Physical Science 6-12</td>
</tr>
<tr>
<td>Computer Science 8-12</td>
<td>Social Studies 7-12</td>
</tr>
<tr>
<td>English/Language Arts/Reading 7-12</td>
<td>Science 7-12</td>
</tr>
<tr>
<td>History 7-12</td>
<td>Speech 7-12</td>
</tr>
<tr>
<td>Life Science 7-12</td>
<td>Technology Education 6-12</td>
</tr>
</tbody>
</table>

## All-Level Teaching Fields

Please see an advisor in the Education Department for specific requirements. TExES exams are required for certification.

<table>
<thead>
<tr>
<th>Major</th>
<th>Teaching Field</th>
</tr>
</thead>
<tbody>
<tr>
<td>Art EC-12</td>
<td>Physical Education EC-12</td>
</tr>
<tr>
<td>LOTE Spanish EC-12</td>
<td>Theatre EC-12</td>
</tr>
<tr>
<td>Music EC-12</td>
<td></td>
</tr>
</tbody>
</table>

## Bachelor of Science

**Interdisciplinary Studies: 121 hours**

**Early Childhood - Grade 6 Core Subjects**

<table>
<thead>
<tr>
<th>List of University Courses</th>
</tr>
</thead>
</table>

### Core Curriculum

- **Communication:** ENG 1301 & 1302
- **Component Area – Speech Communication:** COMM 1303 or Theatre 2304; Literature: ENG 2341, 2322, 2323, 2327, 2328, 2331
- **Mathematics:** 1314 or 1342
- **Creative Arts:** Art 1301; FA 1315; IT 1304; MUS 1303, 1308; THEA 1310
- **Life & Physical Science:** BIOL 1311 and 1313
- **Social Science:** ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2302
- **American History:** HIST 1301 & 1302
- **Political Science:** PS 2305 & 2306
- **Language, Philosophy & Culture:** MAS 2301, PHIL 1301 or WS 2301

### Bachelor of Science Requirements

- **Core Curriculum Life & Physical Science Labs:** BIOL 1111 & 1113
- **Additional Mathematics Course (See Academic Content Area Below):**
- **Additional Life & Physical Science Course (See Academic Content Area Below):**
- **Additional Life & Physical Science Lab (See Academic Content Area Below):**

### University Requirement

- **First Year Seminar SRSU 1101**

### Academic Content Area

- **Early Childhood - Grade 6 Core Subjects Specialization:**
  - MATH 2310 & 2311 (Additional Mathematics Course)
  - BIOL 2405 or 2406 (Additional Life & Physical Science Course + Lab)
  - GEOL 3302
  - ENG 3311 & ENG 3312
  - HIST 2309
  - HIST 2302
  - PE 2303

### Hours

- **Total Hours:** 121
Bachelor of Science  
(Interdisciplinary Studies: 121 hours)  
(Grades 4-8 English Language Arts & Reading)  

**Education Content Area**  
ED 3307, 3308, 3309, 3312, 3314, 4306, 4313 and 4315 .......................................................... 24  

**Professional Education**  
ED 3300, ED 3301, ED 3302, ED 3303, ED 4314, ED 4322 and ED 4601 ..................................................... 24  
Consult with Advisor in Education (MAB 305) .................................................................................. Total 121

**Bachelor of Science**  
(Grades 4-8 English Language Arts & Reading)

**Core Curriculum**  
Communication: ENG 1301 & 1302 .................................................................................. 6  
Component Area – Speech Communication: COMM 1303 or Theatre 2304; Literature: ENG 2341, 2322, 2323, 2327, 2328, 2331 .......................................................... 6  
Mathematics: 1314 or 1342 .................................................................................. 3  
Creative Arts: Art 1301; FA 1315; IT 1304; MUS 1303, 1308; THEA 1310 .......................................................... 3  
Life & Physical Science: BIOL 1311 & 1313 .................................................................................. 6  
Social Science: ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2302 ............... 3  
American History: HIST 1301 & 1302 .................................................................................. 6  
Political Science: PS 2305 & 2306 .................................................................................. 6  
Language, Philosophy & Culture: MAS 2301, PHIL 1301 or WS 2301 .......................................................... 3  

**Bachelor of Science Requirements**  
Core Curriculum Life & Physical Science Labs: BIOL 1111 & 1113 ............................................. 2  
Additional Mathematics Course (See Academic Content Area Below) ................................................. n/a  
Additional Life & Physical Science Course (See Academic Content Area Below) .......................... n/a  
Additional Life & Physical Science Lab (See Academic Content Area Below) .......................... n/a  

**University Requirement**  
First Year Seminar SRSU 1101 .................................................................................. 1  

**Academic Content Area**  
Grades 4-8 English Language Arts & Reading Specialization:  
MATH 2310 & 2311 (Additional Mathematics Course) .......................................................... 6  
BIOL 2405 or 2406 (Additional Life & Physical Science Course + Lab) .................................................. 4  
GEOL 3302 .................................................................................. 3  
GEOG 3301 .................................................................................. 3  
HIST 2309 .................................................................................. 3  
ENG 2327 or 2328 .................................................................................. 3  
ENG 2341, 3303, 3311 & 3312 .................................................................................. 12  
Upper Level ENG Literature .................................................................................. 3  

**Education Content Area**  
ED 3307, 3314, 4306, 4313, & 4315 .................................................................................. 15  

**Professional Education**  
ED 3300, ED 3301, ED 3302, ED 3303, ED 4314, ED 4322 and ED 4602 ..................................................... 24  
Consult with Advisor in Education (MAB 305) .................................................................................. Total 121
Communication: ENG 1301 & 1302 .......................................................... 6
Component Area – Speech Communication: COMM 1303 or Theatre 2304; Literature: ENG
2341, 2322, 2323, 2327, 2328, 2331 ................................................................. 6
Mathematics: 1314 ..................................................................................... 3
Creative Arts: Art 1301; FA 1315; IT 1304; MUS 1303, 1308; THEA 1310 ............... 3
Life & Physical Science: BIOL 1311 & 1313 .............................................. 6
Social Science: ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2302 .... 3
American History: HIST 1301 & 1302 ....................................................... 6
Political Science: PS 2305 & 2306 ................................................................. 6
Language, Philosophy & Culture: MAS 2301, PHIL 1301 or WS 2301 ...................... 3

**Bachelor of Science Requirements** .................................................................. 2

Core Curriculum Life & Physical Science Labs: BIOL 1111 & 1113 ......................... 2
Additional Mathematics Course (See Academic Content Area Below) .................. n/a
Additional Life & Physical Science Course (See Academic Content Area Below) ....... n/a
Additional Life & Physical Science Lab (See Academic Content Area Below) ......... n/a

**University Requirement** .................................................................................. 1
First Year Seminar SRSU 1101 ............................................................................ 1

**Academic Content Area** .................................................................................. 42
Grades 4-8 MathematicsSpecialization:
  BIOL 2405 or 2406 (Additional Life & Physical Science Course + Lab) .......... 4
  GEOL 3302 .................................................................................................. 3
  HIST 2302 .................................................................................................... 3
  HIST 2309 .................................................................................................... 3
  MATH 1316 (Additional Mathematics Course) .............................................. 3
  MATH 2310, 2311, 2413, 2414, 3301, 3320, 3340, 3350 .................................. 26

**Education Content Area** .................................................................................... 9
ED 3307, 4306, 4313 ........................................................................................ 9

**Professional Education** .................................................................................... 24
ED 3300, ED 3301, ED 3302, ED 3303, ED 4314, ED 4322 and ED 4602 ................. 24
Consult with Advisor in Education (MAB 305) ................................................... Total 121

**Bachelor of Science**  
(Interdisciplinary Studies: 121 hours)  
(Grades 4-8 Science)

List of University Courses

**Hours**

**Core Curriculum** .......................................................................................... 42
Communication: ENG 1301 & 1302 .................................................................. 6
Component Area – Speech Communication: COMM 1303 or Theatre 2304; Literature: ENG
2341, 2322, 2323, 2327, 2328, 2331 ................................................................ 6
Mathematics: 1314 or 1342 .............................................................................. 3
Creative Arts: Art 1301; FA 1315; IT 1304; MUS 1303, 1308; THEA 1310 ............... 3
Life & Physical Science: BIOL 1311 & 1313 ..................................................... 6
Social Science: ANTH 1301; ECO 2301, 2302; GEOG 1302, 2302; PSY 1302; SOC 2302 .... 3
American History: HIST 1301 & 1302 ............................................................. 6
Political Science: PS 2305 & 2306 .................................................................... 6
Language, Philosophy & Culture: MAS 2301, PHIL 1301 or WS 2301 ...................... 3

**Bachelor of Science Requirements** .................................................................. 2
Core Curriculum Life & Physical Science Labs: BIOL 1111 & 1113 ......................... 2
Additional Mathematics Course (See Academic Content Area Below) .................. n/a
Additional Life & Physical Science Course (See Academic Content Area Below) ....... n/a
Additional Life & Physical Science Lab (See Academic Content Area Below) ..................n/a

**University Requirement**
First Year Seminar SRSU 1101 ................................................................. 1

**Academic Content Area** ........................................................................... 43

Grades 4-8 Science Specialization:

- MATH 2310 & 2311 .................................................................................. 6
- ENG 3312 .................................................................................................. 3
- HIST 2309 .................................................................................................. 3
- HIST 2302 .................................................................................................. 3
- CHEM 1301 & 1111 (Additional Life & Physical Science Course + Lab) ........... 4
- GEOL 3301 & 3302 ..................................................................................... 6
- BIOL 2401, 2402, 3301, 3306, and 4406 ..................................................... 18

**Education Content Area** .......................................................................... 9

- ED 3307, 4306, 4313 .................................................................................. 9

**Professional Education** ........................................................................... 24

- ED 3300, ED 3301, ED 3302, ED 3303, ED 4314, ED 4322 and ED 4602 ........ 24
- Consult with Advisor in Education (MAB 305) ........................................ Total 120

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**Bachelor of Science**
(Interdisciplinary Studies: 121 hours)
(Grades 4-8 Social Studies)

**List of University Courses**

**Core Curriculum** ....................................................................................... 42

- Communication: ENG 1301 & 1302 ....................................................... 6
- Component Area – Speech Communication: COMM 1303 or Theatre 2304; Literature: ENG 2341, 2322, 2323, 2327, 2328, 2331 ................................................. 6
- Mathematics: 1314 or 1342 .................................................................... 3
- Creative Arts: Art 1301; FA 1315; IT 1304; MUS 1303, 1308; THEA 1310 ........ 3
- Life & Physical Science: BIOL 1311 & 1313 ......................................... 6
- Social Science: ECO 2302 ...................................................................... 3
- American History: HIST 1301 & 1302 ................................................... 6
- Political Science: PS 2305 & 2306 ......................................................... 6
- Multicultural: ED 2311 ........................................................................ 3
- Language, Philosophy & Culture: MAS 2301, PHIL 1301 or WS 2301 .... 3

**Bachelor of Science Requirements** ......................................................... 9

- Core Curriculum Life & Physical Science Labs: BIOL 1111 & 1113 ...... 2
- Additional Mathematics Course (See Academic Content Area Below) ........ n/a
- Additional Life & Physical Science Course (See Academic Content Area Below) .................. n/a
- Additional Life & Physical Science Lab (See Academic Content Area Below) ........ n/a

**University Requirement**
First Year Seminar SRSU 1101 ................................................................. 1

**Academic Content Area** .......................................................................... 28

Grades 4-8 Social Studies Specialization:

- MATH 2310 & 2311 (Additional Mathematics Course) ....................... 6
- BIOL 2405 or 2406 (Additional Life & Physical Science Course + Lab) .... 4
- GEOL 3302 .............................................................................................. 3
- ENG 3312 ............................................................................................... 3
- GEOG 1302 ............................................................................................. 9
- HIST 2309, 3300, 3311, and 4305 ......................................................... 12
- PS 3303, 3308 ........................................................................................ 6

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**Index**
Minor in Education

Specifically designed for those students who are not interested in pursuing Texas Teacher Certification, the minor in Education provides the completing student with solid foundation of educational theory & practice to prepare them for employment in a non-public school based educational setting.

ED 3307, 3308, 3309, 4306, and 6 sch Non-Block ED courses..............................................................18

Coursework does not fulfill requirements for Texas Teacher Certification and does not transfer to the Post-Baccalaureate Initial Certification Program.

TEACHER EDUCATION PROGRAM

Sul Ross offers a variety of certification programs at the following teaching levels:
- Early Childhood through Grade 6
- Grades 4 through 8
- Grades 6/7 & 8 through 12
- All Level (Early Childhood through Grade 12)

Students interested in becoming certified teachers in Texas may apply to the program midway through their junior year (after at least 75 semester credit hours college coursework).

Admission Requirements:
- Minimum of 75 semester credit hours applicable to degree
- Cumulative grade point average (GPA) of 2.75 or better
- Completion of 9 of the 12 hours of required English courses with an overall GPA of 2.5 or better
- No incomplete grades or grades lower than a “C” in teaching field(s) or areas of specialization. Overall GPA in teaching field(s) or areas of specialization must be 2.5 or better.
- No incomplete grades or grades lower than a “C” in education courses required for certification. Overall GPA in education courses must be 2.5 or better.

Basic Skills:

Test requirements (one of the following):
- **THEA**: Reading 250+; Writing 220/6+; Math 230+
- **ACT**: Reading 23+; Writing 17+; Math 18+; Composite 21+
- **SAT**: Reading 450+; Math 450+; Composite 900+

*If SAT scores are used, the THEA or ACT writing score or a grade of “B” or better in English 1301 or 1302 may be used to satisfy the writing component.*

Grade requirements in lieu of testing (grade “B” or better in the following):
- **Reading**: English 2341 or any sophomore or advanced literature course
- **Writing**: English 1301 or 1302
- **Math**: Math 1314, 1316, 1331, 1342 or 2413
Oral & Written Communication Skills: A grade of a “C” or higher is required.

Oral Communications: COMM 1311 or Theatre 2304

Written Communications: Six of the nine required credit hours of English

Certification in Texas requires the following:

1. A bachelor’s degree
2. A major in the chosen teaching field or at least 24 semester credit hours (12 of which are junior/senior/advanced hours) in the chosen teaching field.
3. Completion of education coursework in professional development (Pedagogy and Professional Responsibilities—PPR).
4. Teacher applicants must pass the State certification exam(s) for
   a. content [or teaching field(s)] and
   b. Pedagogy and Professional Responsibilities (PPR)
5. Completion of one semester of student teaching in the chosen teaching field(s).

The PPR component of teacher education is delivered in three semesters (or blocks) of coursework:

Block I
   ED 4314 Reading Skills for Content Subjects
   ED 3302 Developmental and Learning Theories

Block II
   ED 3301 Curriculum & Instruction
   ED 3303 Methods & Materials

Block III
   ED 3300 Principles of Education
   ED 4322 Classroom Management
   ED 4601, 4602, 4603 or 4605 Student Teaching

TEACHING FIELDS/CERTIFICATION PROGRAMS

Early Childhood through Grade 6 (Bachelor’s degree in Interdisciplinary Studies)
   Generalist

Grades 4 through 8 (Bachelor’s degree in Interdisciplinary Studies)
   English/Language Arts/Reading
   Mathematics
   Science
   Social Studies

Grades 8-12 (Bachelor’s degree with a major in the chosen teaching field)
   Ag Science & Tech 6-12
   Business Education 6-12
   Computer Science 8-12
   English, Language Arts & Reading 7-12
   History 7-12
   Life Science 7-12
   Mathematics 7-12
   Physical Science 6-12
   Social Studies 7-12
   Science 7-12
   Speech 7-12
   Technology Education 6-12

All Level (Early Childhood through Grade 12) (Bachelor’s degree with a major in the chosen teaching field)
   Art EC-12
   LOTE Spanish EC-12
   Music EC-12
   Physical Education EC-12
   Theatre EC-12
APPROVAL FOR STUDENT TEACHING

1. Must be fully admitted to Teacher Education Program.
2. Must have submitted an Application to Student Teach by posted deadline.
3. Must have completed 90 semester hours or more toward degree.
4. Must have an overall grade point average of at least 2.75 on a 4.0 scale.
5. Must have passed TExES Content exam.
6. Must demonstrate sound physical health, sound mental health, and acceptable moral character. (The Teacher Education Council may request a student to take a physical examination and/or psychological tests or inventories.) Shall be of good moral character and emotionally suited for working with children.
7. State requirements include a criminal background inquiry before placement in public schools.
8. Must have completed 12 semester hours of professional education with a minimum grade point average of 2.5 on a 4.0 scale, with no grade lower than a C. Must be approved to student teach by the Coordinator of Field Experience.

TEACHER CERTIFICATION THROUGH THE POST BACCALAUREATE INITIAL CERTIFICATION (PBICP)

This program is designed for individuals who have a degree and wish to become certified teachers in Texas. The SRSU Post Baccalaureate Initial Certification Program was approved as an alternative route to teacher certification by the State Board for Educator Certification in the spring of 2003 and meets the No Child Left Behind (NCLB) requirements of "highly qualified teacher." Candidates who possess a four-year baccalaureate degree from an accredited college/university with a major (or at least 24 semester credit hours/12 upper division semester credit hours) may apply for the SRSU alternative Post Baccalaureate Initial Certification Program. The SRSU Post Baccalaureate Initial Certification Program may be amended at any time to meet the needs of the program as necessary or to comply with local, state or federal guidelines/laws.

Application forms may be obtained from the Education Office (MAB 305) or on the SRSU Education website.

*Before acceptance to the PBICP, the Pre Admission Content Test (PACT) for the certification field sought must be passed.

Applicants must:
- Hold a baccalaureate degree from an accredited four-year university
- Send official transcripts of ALL college/university work to the Graduate Admissions Office
- Have at least an overall of last 60 sch GPA of 2.75 or higher
- Complete an application to both Sul Ross State University and the PBICP

Admission requirements for PBICP:
- Complete the SRSU Post Baccalaureate Initial Certification application form and meet all requirements indicated
- Pay PBICP application fee (Sul Ross graduate: $25, non Sul Ross graduate: $50), which includes one deficiency plan; additional deficiency plans are $20 each.
- Have an overall/cumulative GPA of 2.75 or better on a 4.0 scale
- Pass Pre Admission Content Test (PACT) for desired content area
- Complete 30 clock-hours of classroom observation (PBICP Coordinator for more information)
It is important to check with an advisor in the major field each semester for updated information.

GRADUATE PROGRAMS IN EDUCATION

At the graduate level the primary objective of the Department of Education is to enable you to further your study in your chosen field of specialization. Master’s programs lead to certification in counselor education, diagnostician, reading specialist, principal and superintendent. You may also choose a general master’s degree with options available for areas of specialization and certification. The master’s degree and certification programs require a grade point average of 3.0 or higher on a 4.0 scale with no grade lower than a “C.” For information pertaining to a specific certification, see the coordinator, director, or advisor of that program. The number of semester credit hours (SCH) will depend on the specialization and certification sought. **Either a Master’s Comprehensive Examination or successful presentation of a Program Portfolio (Electronic) must be completed in the last semester of required coursework, whichever is required by the specific program.** It is the responsibility of the student to apply for the comprehensive exam/portfolio presentation. Always consult with your advisor.

MASTER OF EDUCATION WITH MAJOR IN EDUCATIONAL LEADERSHIP

List of University Courses

Requirements for Master of Education with Principal Certification

The Master of Education in Educational Leadership with principal certification is a 30-hour program with successful presentation of a program portfolio (electronic) and a state certification examination. This program is designed for individuals who do not hold a Master of Education degree or other master’s degree, and may be taken entirely online. To receive the M.Ed. with certification, the student must complete each of the following:

**Required Course Work: (30 sch)**
- ED 5307 Graduate Research
- ** ED 5302 The Principalship
- * ED 5330 Introduction to School Administration
- ED 5316 Diversity in Public Education
- ED 5319 School Law
- ED 6315 Design and Implementation of the Instructional Program
- ED 6320 School Support Services
- ED 7304 Leadership in Educational Administration
- ED 7309 State and Federal Programs in Public Schools
- ** ED 7313 Practicum in School Administration

* Must be taken within the first 6 semester credit hours
** Must be taken with the last 6 semester credit hours

**Additional Program/Certification Requirements**

1. Hold a valid Texas teaching certificate or the equivalent.
2. Have a minimum of two years teaching in T.E.A. accredited school
3. Complete all coursework in a six-year period.
4. Purchase and pass Certify Teacher Test Prep & Review software.
5. Participate in an approved TExES review.
6. Obtain and provide to the Program Coordinator an AEL and T-TESS Certificate obtained
7. Pass the TExES Principal Examination (see advisor for approval requirements).
8. Apply for certification and pay appropriate fees.
9. Successfully present Electronic Portfolio

With the approval of the Graduate Advisor, a maximum of twelve (12) hours of equivalent course work may be substituted or transferred from an accredited institution for the prescribed courses. All coursework for the master's degree must be completed within a six-year period. All coursework for the principal certification must be completed within ten years.

REQUIREMENTS FOR PRINCIPAL (CERTIFICATE ONLY)

List of University Courses

Students who possess a Master's degree from an accredited institution who only seek certification as a principal must complete these course requirements:

1. Complete a prescribed twenty-four (24) semester credit hours of course work as shown below:
   ED 5319 School Law
   ** ED 5302 The Principalship
   * ED 5330 Introduction to School Administration
   ED 6315 Design and Implementation of the Instructional Program
   ED 6320 School Support Services
   ED 7304 Educational Leadership for Principals
   ED 7309 State and Federal Programs in Public Schools
   ** ED 7313 Practicum in School Administration

* Must be taken in the first 12 semester credit hours

Additional Program/Certification Requirements

1. Hold a Master's degree from an accredited institution.
2. Hold a valid Texas provisional teaching certificate or evidence of equivalent preparation.
3. Have a minimum of two years teaching in a TEA accredited school.
4. Complete all coursework in a ten (10) year period.
5. Purchase Certify Teacher Principal Test Preparation & Review software.
6. Participate in an approved TExES review.
7. Obtain and provide to the Program Coordinator an AEL and T-TESS Certificate obtained from an approved ESC or other institution.
8. Pass the Principal TExES (68) Examination (see advisor for approval requirements).
9. Apply for certification and pay appropriate fees.
10. Successfully present a Comprehensive Program (Electronic) Portfolio.

With approval of the Graduate Advisor, graduate courses taken at Sul Ross State University may be applied to the Principal Certification program. With the approval of the Graduate Advisor, a maximum of twelve (12) hours of equivalent course work may be substituted or transferred from an accredited institution.

REQUIREMENTS FOR SUPERINTENDENT CERTIFICATE

List of University Courses

Students who possess a Master’s degree from an accredited institution who only seek certification as a Superintendent must complete these requirements.

1. Hold the equivalent of a valid Mid-Management or principal certificate.
2. Serve for at least two years in a Texas Education Agency accredited school.
3. Consult with Graduate Advisor.
4. Purchase and pass Certify Teacher Superintendent Preparation and Review material software.
5. Participate in an approved TExES review.
6. Pass the Superintendent TExES Examination (195) (see advisor for approval requirements).
7. Apply for certification and pay appropriate state fees.
8. Complete the prescribed 15 hours of course work consisting of these courses:
   - ED 7306 Superintendent Leadership
   - ED 7308 The Superintendency
   - ED 7321 Superintendent/School Board Relations
   - ED 7322 Superintendent Finance Issues
   - ED 7311 Practicum in Superintendency I

All courses for superintendent certification must be completed at Sul Ross State University within a ten (10) year period. No transfer courses are permitted. With approval of the graduate advisor, a maximum of six (6) hours of course work may be substituted from graduate programs at Sul Ross State University. Students must successfully complete 6 semester credit hours each semester and the 3 sch, semester-long practicum during the second, and final, semester. ED 7306 and ED 7308 are taught in the Fall semester and ED 7321 and ED 7322 are taught in the spring semester. We do not currently offer superintendent certification courses in the summer sessions.

MASTER OF EDUCATION WITH A MAJOR AS AN EDUCATIONAL DIAGNOSTICIAN

List of University Courses

A master's degree in Educational Diagnostician requires 30 semester hours in education for the handicapped, psychoeducational and diagnostic assessment, and resource areas. All coursework requires approval of the major advisor and must be completed within 6 years.

COURSE REQUIREMENTS
   - ED 5306 Assessment of Individual Intelligence
   + ED 5307 Graduate Research
   - ED 5312 Advanced Survey, Exceptional Children
   - ED 5320 Advanced Methodology for Exceptional Children
   - ED 5321 Foundations of Special Education Law
   - ED 5322 Behavior Management OR ED 5325 Advanced Education Remediation
   + ED 5323 Appraisal of Educational Disabilities
   - ED 6308 Advanced Human Growth & Development
   + ED 6314 Diagnosis and Remediation of Reading Disabilities
   + ED 7318 Practicum in Special Education

# Required for degree; must be taken at Sul Ross within first 12 hours
+ Must be taken at Sul Ross State University - Alpine campus

With the approval of the Graduate Advisor, a maximum of six hours of equivalent course work may be substituted or transferred from an accredited institution.

For recommendation of certification, the applicant must:
   1. complete the 30 SCH Diagnostician program, along with the practicum;
   2. hold a valid Texas teaching certificate;
3. complete a minimum of two years teaching in a T.E.A. accredited school;
4. pass TExES Educational Diagnostician (153) examination (see advisor for approval requirements).

REQUIREMENTS FOR EDUCATIONAL DIAGNOSTICIAN (CERTIFICATION ONLY)

List of University Courses

Students who possess a Master’s degree from an accredited institution who only seek certification as an educational diagnostician must complete these requirements:
1. Have a Master’s degree from an accredited institution of higher education or an equivalent degree approved by the Graduate Advisor
2. Hold a valid Texas teaching certificate or equivalent
3. Consult with Graduate Advisor and file a certification plan
4. Complete the required 21 SCH hours of course work as shown below:

COURSE REQUIREMENTS
+ ED 5306 Assessment of Individual Intelligence
+ ED 5312 Advanced Survey, Exceptional Children
+ ED 5320 Advanced Methodology for Exceptional Children
+ ED 5321 Foundations of Special Education Law
+ ED 5322 Behavior Management or ED 5325 Advanced Educational Remediation
+ ED 5323 Appraisal of Educational Disabilities
+ ED 6314 Diagnosis and Remediation of Reading Disabilities
+ ED 7318 Practicum in Special Education
+ Must be taken at Sul Ross State University - Alpine campus

Course substitutions or transfers for the certification only option are not allowed.

For recommendation of certification, the applicant must:
1. complete the 21 SCH Diagnostician program, along with the 160 clock hour practicum;
2. hold a valid Texas teaching certificate;
3. complete a minimum of two years as Teacher of Record in a T.E.A. accredited school;
4. pass TExES Educational Diagnostician (153) examination (see advisor for approval requirements).
5. Apply for certification and pay appropriate state fees.

MASTER OF EDUCATION WITH A MAJOR IN COUNSELOR EDUCATION

List of University Courses

A master’s degree in Counselor Education requires 36 semester hours from the Core courses. All course work requires approval of the major advisor and must be completed within 6 years. Students enrolled in the graduate level counseling program may be expected to meet with the Counseling faculty at any point during the program in order to evaluate progress.

Core (36 Hours)
* ED 5307 Graduate Research
* ED 5313 Career Development and Life Planning
* ED 5314 Personality and Counseling Theories
ED 5315  Assessment in Counseling
* ED 6308  Advanced Human Growth and Development
ED 6344  Counseling in a Multicultural Society
ED 6346  Ethical and Legal Issues in Counseling
# ED 7301  Clinical Practice in Counseling
ED 7302  Management of Guidance Counseling and Human Service Programs
* ED 7303  Techniques of Counseling
ED 7315  Group Processes in Counseling
# ED 7316A  Practicum in Guidance and Counseling
(\textit{Must be taken at SRSU})
ED 7317  Internship in Guidance and Counseling
(\textit{Restricted to probationary certification candidates})

* Must be taken at Sul Ross within the first 12 hours.
* #Must be taken in the final semester of degree coursework.

Students must consult with advisors in counseling before enrolling each semester.

**REQUIRED FOR SCHOOL COUNSELOR CERTIFICATION**

(36 Hours from the Core)

List of University Courses

1. Complete the 36 sch School Counselor program;
2. have a master's degree;
3. have a minimum of two years teaching in a T.E.A. accredited school; and
4. pass the TExES examination (#152 School Counselor).

Courses required for Licensed Professional Counselor (LPC) (36 credit hours from the Core plus 24 credit hours from these courses) All course work requires approval of the major advisor.

ED 5322  Behavior Management
ED 6341  Psychopathology
ED 6342  Addictive Disorders
ED 6345  Family Counseling
ED 6347  Introduction to Play Therapy
ED 7316B  Practicum in Guidance and Counseling
ED 7320  Professional Issues and Ethics in Counseling
ED 7323  Emotional Intelligence

Practicum is required.

Students interested in LPC licensure must contact the Texas State Board of Examiners of Professional Counselors in Austin, Texas for requirements.

**MASTER OF EDUCATION WITH MAJOR AS A READING SPECIALIST – ONLINE DELIVERY**

List of University Courses

Master of Education Reading Specialist degree requires 30 semester hours. All coursework requires approval of the major advisor and must be completed in a six-year period.

**Course Requirements**

* ED 5307  Graduate Research
ED 5308  Foundations of Reading
ED 6316  Diversity in Public Education
ED 6308  Advanced Human Growth and Development
ED 6311  Emergent Literacy and Language Development
ED 6313  Teaching Reading in the Content Areas
ED 6314  Diagnosis and Correction of Reading Disabilities
ED 6317  Organization and Supervision of Reading Programs
ED 6318  Literacy through Literature
ED 7312  Practicum in Reading

*  Must be taken within the first 12 hours.

Students must successfully defend a Comprehensive Program Electronic Portfolio

For certification the applicant must:
1.  complete the 30 SCH Reading Specialist program;
2.  hold a valid Texas teaching certificate;
3.  hold a master's degree;
4.  complete a minimum of two years teaching in a TEA accredited school;
5.  purchase and pass Certify Teacher Preparation Software for Educator Certification, Reading Specialist 151;
6.  apply for certification and pay appropriate state fees;
7.  pass TExES Reading Specialist (151) examination (see advisor for approval requirements).

Certification in Other States:  Please consult your state certification specialist.

READING SPECIALIST CERTIFICATION PLAN

Students who possess a Master of Education degree from an accredited institution and only seek certification as a reading specialist must complete 21 SCH of course work shown below:

ED 5308  Foundations of Reading
ED 6311  Emergent Literacy and Language Development
ED 6313  Teaching Reading in the Content Areas
ED 6314  Diagnosis and Correction of Reading Disabilities
ED 6317  Organization and Supervision of Reading Programs
ED 6318  Literacy Through Literature
ED 7312  Practicum in Reading

For certification the applicant must:
1.  complete the 21 SCH Reading Specialist course work;
2.  hold a valid Texas teaching certificate or equivalent;
3.  hold a master's degree;
4.  complete a minimum of two years of classroom teaching;
5.  purchase and pass Certify Teacher Preparation Software for Educator Certification (Exam 151);
6.  apply for certification and pay appropriate state fees;
7.  pass TExES Reading Specialist (151) examination (see advisor for approval requirements).

Certification in Other States:  Please consult your state certification specialist (see advisor for approval requirements).
MASTER OF EDUCATION – GENERAL

List of University Courses

A master's degree in Education General requires 30 semester credit hours (SCH) from Resource & Electives and Area of Specialization. All coursework requires approval of the major advisor and must be completed within a six-year period.

Course Requirements

- ED 5305 Technology in the Educational Setting
- ED 5307 Graduate Research
- ED 5317 History, Philosophy and Trends in Education

And one of the following:

- ED 5310 Organization and Structure of Public School Curriculum
- ED 5311 Improvement of Instruction in Public Schools
- ED 5316 Diversity in Public Education
- ED 6308 Advanced Human Growth & Development
- ED 6315 Design and Implementation of the Instructional Program

*Must be taken within the first 12 hours.

Plus 18 SCH from the Area of Specialization with advisor approval. Total 30 SCH.

MASTER OF EDUCATION – GENERAL WITH ALTERNATIVE CERTIFICATION

List of University Courses

A master's degree in Education-General with Alternative Certification requires 30 semester credit hours (SCH) and is obtained in conjunction with teacher certification through the Post Baccalaureate Initial Certification Program (PBICP). Eighteen semester credit hours from the PBICP are used to fulfill the education requirements, leaving ED 4307 and an additional 9 semester credit hours are utilized for the Area of Specialization. Although not a degree requirement, students are highly encouraged to complete another 9 sch of graduate coursework in the area of specialization, for a total of 18 sch in the specialization field. All coursework requires approval of the major advisor and must be completed within 6 years.

Course Requirements

* ED 5307 Graduate Research
- ED 5305 Technology in the Educational Setting
- ED 5310 Organization and Structure of Public School Curriculum
- ED 5322 Behavior Management
- ED 5360 Professional Roles and Responsibilities
- ED 5361 Teaching Diverse Learners
- ED 6313 Teaching Reading in the Content Areas

18 sch +9 sch of graduate level specialization courses

*Must be taken within the first 12 hours, unless completing certification requirements for PBICP, then must be taken immediately after the completion of PBICP coursework.
Program Description
The Homeland Security and Criminal Justice degree programs are designed to meet the needs of students pursuing a career in several areas of the criminal justice system. Students can choose a Bachelor of Science degree in Criminal Justice or a Bachelor of Science degree in Homeland Security which will qualify graduates for employment in many public service professions. Opportunities currently exist for men and women in law enforcement, courts, and corrections agencies at the federal, state, and local levels of government. The jobs include state highway patrol, municipal police, sheriffs’ departments, U.S. Customs and Border Patrol, adult and juvenile probation, parole, prisons, treatment centers, and Homeland Security. Other areas of interest where opportunities exist are victim and witness assistance programs, state parks and wildlife agencies, the National Park Service, Alcoholic Beverage Commission, emergency management and private industry.

Transfer students should be aware that the Sul Ross State University Department of Homeland Security and Criminal Justice will accept all common (CRIJ) courses for which the student has earned a “C” or better. Students should be aware that courses transferred in from two-year institutions (junior and community colleges) cannot count toward the University requirements for total upper-level hours. These two-year institution courses will not count as upper-level, even if they had a 3300 or 4300 number.

Sul Ross State University also houses the H. Joaquin Jackson Law Enforcement Academy. Cadets in the academy who are also students at Sul Ross State University may earn college credits for select Criminal Justice courses while attending the academy. These credits only apply to cadets enrolled in the SRSU academy. Further, except as required by law, the Department will not award or accept credit for any law enforcement or correctional (In-Service Occupational) training.

Homeland Security and Criminal Justice majors are both required to complete a total of 120 semester credit hours, including 36 hours of Criminal Justice. Details of these requirements are listed below.

To graduate with a major in Criminal Justice, students must obtain a passing score on the Criminal Justice Senior Exam which is required for CJ 4309, Senior Seminar. For the Homeland Security degree, students must obtain a passing score on the Homeland Security Exam which is required for CJ 4331 Advanced Topics in Homeland Security. No student will be allowed to substitute any transfer course for CJ 4309 or CJ 4331.

Scholarships
The Homeland Security and Criminal Justice Department encourages students to apply for
scholarship opportunities including the following:

**The James B. Gillett Memorial Scholarship** - Funds are available for a junior or senior level Criminal Justice major with a 3.0 GPA, good academic and disciplinary standing. Three letters of recommendation and a 500-word essay are also required.

**The Joe Hicks Memorial Scholarship** - Funds are available for a Criminal Justice undergraduate student with a 2.5 GPA, no criminal convictions and high moral character.

**Other scholarships may also be available for Homeland Security and Criminal Justice Students.** Check the HSCJ department web site regularly at [www.sulross.edu/hscj](http://www.sulross.edu/hscj) for the latest details.

**Application Deadline is March 1 of each year.** See the Financial Assistance Office for an application.

### Bachelor of Science - Criminal Justice Degree Plan

Please go to the following links to view the Criminal Justice degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Criminal Justice](#)
- [List of University Courses](#)

### Bachelor of Science – Homeland Security Degree Plan

Please go to the following links to view the Criminal Justice degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Homeland Security](#)
- [List of University Courses](#)

### Minor in Criminal Justice

Students wishing to minor in Criminal Justice must take CJ 1301, Introduction to Criminal Justice, CJ 4304, Criminology, and 12 additional hours of CJ courses including at least 6 hours of upper division (3000 or 4000 level) CJ courses. For these 12 hours, students should consult with a Homeland Security and Criminal Justice faculty member.

### GRADUATE PROGRAM IN CRIMINAL JUSTICE (CJ)

The Master of Science degree with a major in Criminal Justice is offered to serve the needs of several different groups of students: (1) pre- and in-service criminal justice personnel seeking a career-enhancing education; (2) those interested in teaching or research in the profession or higher education; and (3) those interested in preparing for a doctoral degree.

The degree program may be tailored to meet the needs of individual students. This program is a 36 semester credit hour (SCH) degree. In addition to general courses, there are specialized courses for those interested in law enforcement, corrections or professional field activity and research. A large number of electives are available from political science graduate courses for those interested in general public administration or political science perspectives. Graduate level electives are also available from other disciplines with the prior approval of the Graduate Coordinator.
GRADUATE PROGRAM IN HOMELAND SECURITY (HS)

The Master of Science degree with a major in Homeland Security serves the needs of students who are (1) pre- and in-service criminal justice personnel seeking a career-enhancing education; (2) those interested in teaching or research in the profession or higher education; and (3) those seeking positions in government service in the many agencies under the Homeland Security umbrella.

The degree program may be tailored to meet the needs of individual students. This program is a 36 semester credit hours SCH non-thesis degree. A specialized set of courses has been designed to give the student a well-rounded education in all areas of Homeland Security including crisis management, terrorism, weapons of mass destruction, and immigration issues. A large number of electives are also available from political science graduate courses for those interested in general public administration or political science perspectives. Graduate level electives are also available from other disciplines with the prior approval of the Graduate Coordinator.

Admission Requirements

In addition to the university-wide requirements for admission to a Master's program council in this catalog, there are special requirements for this program. While holding an undergraduate degree in Criminal Justice is not required for admission, background familiarity with the field and additional basic skills are highly recommended.

Students pursuing a second master's degree must present the same background as undergraduates, and might be able to have a maximum of 12 SCH of graduate work from the completed degree program credited toward this degree. This will occur only after full admission to this program has been granted by the Director of Admissions and the Chair of the Criminal Justice Department.

For information on graduate assistantships, or other matters please contact:
Lorie Rubenser, Ph.D., Graduate Coordinator
Homeland Security and Criminal Justice Department
SRSU Box C-12
Alpine, TX 79832
rubenser@sulross.edu
(432) 837-8166
(432) 837-8273 – fax

Master of Science in Criminal Justice

In addition to meeting the university-wide requirements for all Master's degree programs found in this catalog, all students must (1) complete the required core (12 SCH); (2) complete an appropriate number of electives, and (3) successfully complete the comprehensive examination.

I. Required Core. Students must complete the following 12 SCH core:
   CJ 5315 Seminar in Courts and Judiciary
   CJ 5318 Seminar in Criminal Justice Theories
   CJ 5325 Graduate Seminar
   CJ 5334 Methods of Social Research

II. Electives: In addition to the 12 SCH required core, students must complete 24 hours of graduate level Criminal Justice electives for a total of 36 SCH.
   Required Core.................................................................................................................. 12 SCH
   Graduate Level Criminal Justice Electives....................................................................... 24 SCH
Outside electives: With prior approval from the graduate Coordinator, students may select electives from other departments in order to fulfill the outside elective requirement.

A maximum of 12 SCH credit hours from any other university or department at Sul Ross State University will be applied to the graduate degree requirements. Existing transfer credits will be evaluated at the time of admission. Students enrolled in the Master of Science in Criminal Justice program are required to gain written approval from the Graduate Coordinator prior to enrollment in any courses or programs at other universities if the student wishes to transfer these credits to their degree plan. All transfer credits accepted for the degree plan must have a grade of B or better.

No student will be permitted to substitute any transfer course for CJ 5325. Substitutions for CJ 5318 or 5334 are not generally approved; however, a student may present a syllabus and course description for review by the Graduate Coordinator.

**Master of Science in Homeland Security**

In addition to meeting the university-wide requirements for all Master’s degree programs found in this catalog, all students must (1) complete the required core (12 SCH); (2) complete 12 SCH from the set of designated electives; (3) complete 12 SCH of other electives, and (4) successfully complete the comprehensive examination.

I. **Required Core. 12 SCH:**
   - CJ 5323 Homeland Security
   - CJ 5327 Graduate Seminar in Homeland Security
   - CJ 5334 Methods of Social Research
   - CJ 5340 Policy Making in CJ

II. **Designated Electives. 12 SCH:**
    Choose 12 SCH from the following:
    - CJ 5322 Immigration Issues
    - CJ 5328 Seminar on Transnational Crimes
    - CJ 5329 Seminar in Emergency Management and Disaster Preparedness
    - CJ 5330 Emerging Issues in Homeland Security
    - CJ 5336 Seminar on Domestic Terrorism
    - CJ 5337 Seminar on International Terrorism
    - CJ 5360 Seminar in Cybercrime
    - CJ 5361 Seminar in Criminal Profiling
    - CJ 5362 Criminology of Cybercrime
    - CJ 5363 Cybercrime Law and Policy
    - CJ 5364 Seminar in Cyber Warfare
    - CJ 5365 Seminar in Cybercrime Investigation

III. **Other Electives. 12 SCH:**
     Students will select 12 SCH of electives from graduate level courses in Criminal Justice or Political Science/Public Administration, or may select courses in other subjects with approval of the Graduate Coordinator. A maximum of 12 SCH credit hours from any other university or department at Sul Ross State University will be applied to the graduate degree requirements. Existing transfer credits will be evaluated at the time of admission. Students enrolled in the Master of Science in Criminal Justice program are required to gain written approval from the Graduate Coordinator prior to enrollment in any courses or programs at other universities if the student wishes to transfer these credits to their degree plan. All transfer credits accepted for the degree plan must have a grade of B or better.
No student will be permitted to substitute any transfer course for CJ 5327. Substitutions for CJ 5323 or 5334 are not generally approved; however, a student may present a syllabus and course description for review by the Graduate Coordinator.

**Other Graduate Program Requirements**

**Comprehensive Exam**

All graduate students must pass a comprehensive exam at the end of their graduate studies. Comprehensive exams are designed to demonstrate how well the student has integrated the knowledge gathered throughout their studies in the master's program. While the questions come from specific areas, they generally reflect broader issues than what a student will find in a single class.

Students may attempt the comprehensive exams only if they have been admitted to candidacy and only during the last semester of their graduate studies. The student will be permitted access to the practice exams throughout the last semester of study and will take the actual exam at some point during the last 3 weeks of the semester – to be scheduled through the Graduate Coordinator.

Exams will consist of 300 multiple choice questions divided into the 3 core subject areas (100 questions per area) represented by the required core courses on the degree plan. Students must score a minimum of 75% on each of the 3 sections to pass. This score is not cumulative.

For the CJ or CJ/PA degrees, the comprehensive exams will cover Theory, Research Methods and Courts/Legal subjects. For the HS or HS/PA degrees, the comprehensive exams will cover Homeland Security, Research Methods and Policy subjects.

If a student does not pass all the sections of the Comprehensive Exam the first time, they must retake the failed section(s) of the exam a second time, at a time to be scheduled through the Graduate Coordinator. A student who fails their second attempt on any section of the comprehensive exam may petition (must show significant cause) the Graduate Coordinator for a third attempt. The student can expect one of 3 outcomes from their petition:

1. Student will be required to take remedial course work – to be determined in consultation with the CJ faculty – before taking the exam again.
2. Student will be allowed to take the exam a third time with no other requirements.
3. Student will not be allowed to take the exam again and will be removed from the program.

Students who do not take the comprehensive exams during their last semester of study will not be permitted to graduate until this exam is taken and passed. Any student sitting out a semester (not enrolling in courses for their program of study) will be required to apply to the university for readmission to the program. Readmission will require taking at least one graduate level course, to be chosen in consultation with the Graduate Coordinator, during the semester for which the student is readmitted. The student must complete this course with a grade of B or better and complete the comprehensive exams during this semester in order to graduate.

For further information on graduate admissions, comprehensive examinations and other admissions and graduation requirements see "Academic Regulations for Master's Degree Programs" in this catalog and the Homeland Security and *Criminal Justice Graduate Handbook*. 
DUAL DEGREE PROGRAM (CJ/PA)

The Homeland Security and Criminal Justice and Political Science Departments also offer the student a dual graduate degree in Criminal Justice and Public Administration. Upon completion of a fifty-four-hour curriculum, the student will be awarded both an M.S. degree in Criminal Justice and an M.A. degree in Public Administration.

The following courses are required for this course of study:
- CJ 5301 Overview and Administration of the Criminal Justice System
- PS 5307 Scope and Methods of Social Science or CJ 5334, Methods of Social Research
- CJ 5315 Seminar in Courts and Judiciary
- CJ 5318 Seminar in Criminal Justice Theory
- CJ 5325 Graduate Seminar
- PS 5303 Public Administration Survey
- PS 5310 Public Budgeting and Finance
- PS 5311 Intergovernmental Relations
- PS 5313 Public Policy Analysis

Students will also take at least two of the following:
- PS 5315 Local Government Administration
- PS 5316 Special Topics in Public Administration
- PS 5317 Seminar in US Government

Students will also take 21 additional hours of electives from Criminal Justice and Public Administration. These electives should be determined through consultation with an advisor. Nine of the hours may be from a related or support field with approval from advisor.

*Students in the dual degree program will complete comprehensive exams in both degree fields

DUAL DEGREE PROGRAM (HS/PA)

The Homeland Security and Criminal Justice and Political Science Departments also offer the student a dual graduate degree in Homeland Security and Public Administration. Upon completion of a fifty-four-hour curriculum, the student will be awarded both an M.S. degree in Homeland Security and an M.A. degree in Public Administration.

The following courses are required for this course of study:
- PS 5307 Scope and Methods of Social Science or CJ 5334, Methods of Social Research
- CJ 5323 Homeland Security
- CJ 5327 Graduate Seminar in Homeland Security
- CJ 5340 Policy Making in CJ
- PS 5302 International Relations and Public Policy
- PS 5303 Public Administration Survey
- PS 5310 Public Budgeting and Finance
- PS 5311 Intergovernmental Relations
- PS 5313 Public Policy Analysis

Students will also take at least two of the following from the Public Administration Courses:
- PS 5315 Local Government Administration
- PS 5316 Special Topics in Public Administration
- PS 5317 Seminar in US Government

Students will also take at least three of the following from the Homeland Security Courses:
Students will also take 12 additional hours of electives from Criminal Justice and Public Administration. These electives should be determined through consultation with an advisor. Students may take additional courses from the lists above as these elective hours if they wish. Nine of the hours may be from a related or support field with approval from advisor.

* Students in either dual degree program will complete comprehensive exams in both degree fields.

THE JOAQUIN JACKSON LAW ENFORCEMENT ACADEMY

College of Education and Professional Studies
Office: Morelock Building, 106
Phone: (432) 837-8704
Fax: (432) 837-8133
Website: [http://www.sulross.edu/law-enforcement-academy](http://www.sulross.edu/law-enforcement-academy)

Clariza Pina, M.S., M.P.A. Training Coordinator

Program Description
The Sul Ross State University Law Enforcement Academy serves law enforcement and corrections personnel in West Texas. It is the mission of the law Enforcement Academy to provide the highest quality training to area agencies and police and corrections cadets at the lowest possible cost.

The purpose of the Sul Ross State University Law Enforcement Academy’s Basic Peace Officer course, a 789 clock-hour course of study, is to prepare prospective law enforcement officers for the TCOLE Certification Exam. The academy also offers TCOLE in-service courses at both intermediate and advanced levels for the purpose of enhancing the peace officers’ level of proficiency and meeting training requirements.

Academic Credits
Cadets enrolling in the Law Enforcement Academy at Sul Ross State University may also qualify to earn college credits while attending. In order to qualify, cadets in the current academy must also be students at the university. They must be college ready (not in need of remedial work) and must be at a stage in their education where they qualify to take Junior and Senior level college courses. Freshmen do not qualify.

These credits will not be retroactively applied to cadets from academies prior to the 2015 session.

Students may enroll in the following courses while attending the SRSU Academy:
- CJ 1320 Police Academy I
Admission Requirements- Basic Peace Officer Program

To be admitted, a prospective student must:

- Be a U.S. citizen.
- Be 20.5 years of age (18 w/60 college hours or 2 yrs. active duty).
- Must have High School Diploma or GED.
- Never had a class A misdemeanor or felony conviction.
- No conviction of Class B misdemeanor in the past 10 years.
- Not currently be under indictment for any violation.
- Have never been convicted of any level of family Violence.
- Not be prohibited by Federal or State law from possessing firearms or ammunition.
- Complete a SRSU Law Enforcement Academy Application for Admission.
- Submit a completed Criminal History check form (TCOLE C-1 Form).
- Be physically sound for the performance of duty appropriate to the type of license sought. Submit Physician, psychological and Drug Screening results (TCOLE L-2 and L-3 forms).

DEPARTMENT OF INDUSTRIAL TECHNOLOGY

College of Education and Professional Studies
Office: Industrial Technology Building, 101
Phone: (432)837-8200
E-mail: cestepp@sulross.edu
Chair: Christopher Estepp, Ph. D
Instructor: J. Scott Wassermann, M.S.

Program Description
The Bachelor of Science Degree in Industrial Technology degree is designed to be a student centered education experience, capable of providing students with the ability to focus on a specific discipline, or to gain a broad range of skills and experiences. Students will develop knowledge and skill in many technological areas; including drafting and design, wood and metal working, computer aided design, architecture, construction, as well as renewable energy technologies, energy efficient solar building design and construction, research methods and contemporary technological problems facing society. This background will be useful in many fields of endeavor. This program will equip students with lifelong learning skills which allow them to adapt to changing work environments, think critically, and solve technical problems using sound engineering, social, and technological skills.

The Industrial Technology program is designed to serve several purposes and meet a variety of needs. Among these are: (1) to prepare students for leadership roles and careers in a variety of industries; (2) to prepare students for teaching careers in Technology Education; (3) to provide students majoring in other disciplines an opportunity to supplement and enrich their chosen fields; (4) to provide advanced study and skill enhancement in several specific technological areas of industry; (5) to prepare students for further education in the field of Industrial Technology. The
philosophy of the Department of Industrial Technology coincides with and supports the philosophy of the University in providing opportunities for a teaching-learning environment in which the student may acquire the knowledge, experiences, and skills necessary for a professional, technical, and liberal education.

Career Opportunities
Industrial Technology courses provide for entry skill level work in industry within the technological areas of manufacturing, construction, communication, transportation, power and energy. Courses also provide preparation in Supervision/Management and Industrial Training. Courses can be combined with Education Certification providing for a career in teaching Technology Education in Middle School/Junior High and High School. When combined with work experience after graduation, students can pursue a career as an instructor in some post-secondary institutions within their specific skill area of experience.

Features
The department is one of only a few remaining programs that continues to teach students in more than just the theory of industrial processes. With fully functioning laboratories in metals, foundry, woods, welding, small engine, drafting, CAD, photography, plastics, CNC, and CIM areas, students are able to acquire skill in addition to knowledge in many of the industrial process they will encounter after they earn their degree. Student lab assistants, hired by the department, allow the facilities to be open extended hours so there is ample opportunity to develop skills to whatever level a student may desire.

Scholarships
The Industrial Technology department has several scholarships available ranging in awards from $200/year to $1000/year. Scholarships offered by the Industrial Technology Department are:

Mr. & Mrs. Jim Cauble Scholarship
Jack C. Crawford Memorial Scholarship
Karen Lyn Graham Memorial Scholarship
W. C. "Bill" Leavitt Excellence Fund
Loyd Oden Memorial Scholarship
Victor J. Smith Memorial Scholarship

Contact the department for scholarship requirements and availability.

Bachelor of Science – Industrial Technology Degree Plan
Please go to the following links to view the Industrial Technology degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- Industrial Technology
- List of University Courses

DEPARTMENT OF KINESIOLOGY AND HUMAN PERFORMANCE
College of Education and Professional Studies
Graves Pierce, 202A
Office: (432) 837-8213
Fax: (432) 837-8234
E-mail:jhector@sulross.edu

Chair and Associate Professor: Jim Hector, Ed.D.
Kinesiology and Human Performance at Sul Ross State University provides professional training with a broad application. It prepares students for several careers and educational endeavors, including public school teaching and coaching, pre-physical therapy, pre-athletic training, cardiac rehabilitation, personal training, strength and conditioning specialist, fitness and wellness management, sport nutrition, health promotion, and several other related areas that could lead into graduate school.

The Graves-Pierce Complex is connected to the Pete Gallegos Center. The Complex houses facilities for recreation, wellness and intramurals including: an indoor swimming pool, two collegiate size gymnasiums, an aerobics/dance room, a wellness room, a free weight room, racquetball courts, a sauna and a whirlpool. The Kinesiology classrooms are also in the complex. There are also tennis courts, a football stadium, an all-weather track, baseball fields, softball fields and intramural fields for soccer, golf and archery.

The following scholarships are awarded to outstanding students in Kinesiology. The students must apply for the scholarships before March 1st each spring. The scholarships are awarded for one year, divided into two equal semesters.

**W. H. Perryman Scholarships**
**Dan Bustamante Memorial Scholarship**
**Joe Don Looney Memorial Scholarships**
**James Cleveland and James Victor Oatman Memorial Scholarships**
**David Sanchez Memorial Scholarship**
**Estavan Martinez Memorial Scholarship**
**Norm Cash Scholarship**

**Kinesiology and Human Performance Minor**

PE 1301, PE 1306, KES 3305, PE 3307, PE 4301, KES 4362, and 5 SCH advanced electives in either Kinesiology or Physical Education

**Bachelor of Science - Kinesiology and Human Performance Degree Plan**

Please go to the following links to view the Kinesiology and Sports Science degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Kinesiology and Human Performance](#)
- [List of University Courses](#)

**Suggested Course Sequence for Bachelor of Science in Kinesiology and Human Performance (Teacher-Certification K-12)**

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE 1301, 1306</td>
<td>6</td>
</tr>
<tr>
<td>Communication English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Component Area Option</td>
<td>6</td>
</tr>
<tr>
<td>Math 1314</td>
<td>3</td>
</tr>
<tr>
<td>Life and Physical Science</td>
<td>4</td>
</tr>
<tr>
<td>Creative Arts</td>
<td>3</td>
</tr>
</tbody>
</table>
First Year Seminar ................................................................. 1
Social Science ........................................................................ 3

**Total 32**

**Sophomore Year**
Language, Philosophy & Culture .................................................. 3
History 1301, 1302 ................................................................... 6
Political Science 2305, 2306 ....................................................... 6
Life and Physical Science ........................................................... 4
Science Requirement ................................................................ 4
Math 1342 ............................................................................. 3
KES 2303 and emphasis ............................................................ 6

**Total 32**

**Junior Year**
PE 3305, KES 3305 ................................................................. 6
KES emphasis ..................................................................... 15
ED 3302 and ED 4314 ............................................................ 6

**Total 27**

**Senior Year**
ED 3301, ED 3303, ED 3300, ED 4322, and ED 4603 .................. 18
KES 3307, PE 4301, KES 4313 and PE 4362 ......................... 12

**Total 30**

Grand Total 121

**Suggested Course Sequence for Bachelor of Science in Kinesiology and Human Performance (Non-Licensure)**

**Freshman Year Hours**
PE 1301, 1306 .................................................................... 6
Communication English 1301, 1302 ......................................... 6
Component Area Option ......................................................... 6
Math 1314 ........................................................................... 3
Life and Physical Science ....................................................... 4
Creative Arts .................................................................... 3
First Year Seminar .............................................................. 1
Social Science .................................................................... 3

**Total 32**

**Sophomore Year**
Language, Philosophy & Culture ............................................... 3
History 1301, 1302 ................................................................ 6
Political Science 2305, 2306 .................................................. 6
Life and Physical Science ....................................................... 4
Science Requirement .............................................................. 4
Math 1342 .......................................................................... 3
KES 2303 and minor ............................................................ 6

**Total 32**

**Junior Year**
PE 3305, KES 3306 ............................................................... 6
KES emphasis ..................................................................... 15
Minor courses ................................................................... 6

**Total 28**

**Senior Year**
Minor and Electives ............................................................... 18
A total of 120 semester hours are required to graduate; 36 hours (12 courses) of those must be numbered 3000 level or higher. A grade lower than a “C” will not be accepted in the major field.

**BACHELOR OF SCIENCE IN KINESIOLOGY AND HUMAN PERFORMANCE MAJOR WITH ALL LEVEL PHYSICAL EDUCATION TEACHER CERTIFICATION: 121 HRS**

Students who wish to teach Physical Education EC-12 should follow this degree plan and consult with their major advisor and the Education Department to take the Education courses required for Teacher Certification. The professional Teacher Certification program can be altered by the State at any time. Therefore, it is the student’s responsibility to stay up to date on any changes to the certification requirements.

Students may be admitted to the Teacher Education Program and begin Education classes when the following requirements have been met:

a. Completed a minimum of 75 semester credit hours
b. Minimum overall G.P.A. of 2.75
c. Completed a minimum of 12 semester credit hours in Kinesiology
d. Minimum Kinesiology G.P.A. of 2.5
e. Meet minimum requirements for Texas Success Initiative in: Reading, Writing & Mathematics. Requirements may be met through ACT, SAT or THEA exams OR through grades in lieu of testing
f. Completed COMM 1311 or THEA 2304 with a “C” or higher
g. Completed 9 semester credit hours of English with a “C” or higher

Complete information on the Teacher Education Program may be obtained from the Sul Ross State University Department of Education. Contact the Education Department at (432) 837-8170 or see the information available on the department website at [www.sulross.edu/section/205/department-education](http://www.sulross.edu/section/205/department-education).

### Bachelor of Science - Kinesiology and Human Performance with All-Level Physical Education Teacher Certification Degree Plan

Please go to the following links to view the Kinesiology and Human Performance with All-Level Physical Education Teacher Certification degree plan and to see the full list course descriptions. All of the university courses are also included at the end of the catalog.

- [Kinesiology and Human Performance – All Level Physical Education Teacher Certification](#)
- [List of University Courses](#)

### PRE-PHYSICAL THERAPY

Students interested in applying for admission to Physical Therapy School may major in any undergraduate field. However, there are required courses (prerequisites) for the pre-physical therapy student to consider taking as part of their chosen degree plan. Some Texas schools offer master’s degrees in physical therapy. Information and specific prerequisite course work for each physical therapy school can be obtained from your Pre-Physical Therapy advisor. It is important to note that schools that offer physical therapy programs do not have a standardized prerequisite curriculum and that each sets its own entrance requirements. Students are advised to contact the
physical therapy school of choice for the most up-to-date information on entrance requirements to ensure that the courses taken at Sul Ross State University will be accepted. Recommended courses for pre physical therapy students include: Anatomy/Physiology, Biology, Chemistry, Mathematics, Physics and Statistics.

**HEALTH AND HUMAN PERFORMANCE MASTERS OF SCIENCE**

Program Coordinator: Christopher Herrera, Ph.D.

Office: (432) 837-8375

E-mail: christopher.herrera@sulross.edu

Graduate study is offered through the Department of Kinesiology and Human Performance leading to the Master of Science in Health and Human Performance degree.

The Master of Science in Health and Human Performance is a thirty-three (33) hour fast track graduate program to accommodate interested individuals with the desire to work in health care.

These courses must be selected with the advice and approval of their Graduate Advisor in Physical Education. Courses are eight weeks with two courses recommended per eight-week session and four courses per semester. The program is concluded with a nine-hour Practicum. No more than twelve (12) hours of graduate transfer work may be counted on the degree.

**VOCATIONAL NURSING PROGRAM**

*Under Review by University*

Vocational Nursing Program
College of Professional Studies
Office: Ferguson, 106
Phone: (432)837-8171
Fax: (432) 837-8677
E-mail: kwright@sulross.edu

Clinical Instructor: Kristin Wright, RN

**Program Description**

The vocational nursing program prepares students to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN) for licensure as a Licensed Vocational Nurse (LVN). Approved by the Texas Board of Nursing, the program is administered through the College of Professional Studies. Articulation agreements are in place to facilitate advancement to registered nurse at other schools of nursing.

Requirements for admission are: high school diploma or G.E.D.; satisfactory scores on pre-entrance examinations; application for admission to the program; three work/academic references; evidence of good health; interview; and Biology 2404 -Human Anatomy and Physiology I or Biology 2405 Human Anatomy and Physiology II or Biology 2403 Survey of Human Anatomy and Physiology and minimum 2.0 GPA on all college course work. For further information, prospective students may contact the Director of Vocational Nursing at Box C-58, SRSU or 432-837-8171.

**Scholarships**

*Roxana Holland Donnell Memorial Nursing Excellence Scholarships.*

Good academic and disciplinary standing.
Pilot Club Scholarship for LVN Student. Good academic standing. Deadline; November 30 of each year. Application available at the Vocational Nursing Department.

Big Bend Regional Medical Center Hospital Auxiliary Scholarship. This scholarship is designed for LVN students who exhibit need, school community involvement and academic achievement. Application available at Vocational Nursing Department. Submit three letters of reference (one personal, one professional and one business). Write a paragraph explaining why you wish to enter a health-care field and your need for assistance. In the event that you are unable to complete your LVN requirements, we request that you refund the scholarship in order to give another candidate the opportunity to use the scholarship.

Keith & Janette Morrow Memorial Nursing Scholarship. Must be resident of Brewster, Presidio, or Jeff Davis Counties in Texas. Must be a full-time undergraduate student in good academic and disciplinary standing at university majoring in a nursing program at university. Beginning freshmen must be unconditionally admitted to university. Returning students must be making normal progress toward a degree and have an overall grade point average of at least 3.0.

Edith Richardson, RN Memorial Nursing Scholarship. Must be a nursing major. Preference will be given to graduates of Alpine, Marfa, and Ft. Davis High Schools. Beginning freshmen and transfer students must be unconditionally admitted to university and be enrolled full-time during period of award. Returning students must be making normal progress toward a nursing certificate or degree, maintain an overall grade point of at least 3.0, and be enrolled full-time during period of award.

Marathon Primary Care Services Scholarship. Requirements: Good academic and disciplinary standing. Prefer residents of Brewster, Jeff Davis or Presidio Counties.

The following is the required sequence of courses for students majoring in Vocational Nursing.

Semester I (Spring)

- VNSG 1405 Health Science ................................................. 4
- VNSG 1360 Clinical - Practical Nurse 1 .................................. 3
- VNSG 1227 Essentials of Medication Administration .................. 2
- VNSG 1500 Nursing in Health and Illness I .................................. 5
- VNSG 1502 Applied Nursing Skills I ........................................... 5

Total 19

Semester II (Summer)

- VNSG 1461 Clinical - Practical Nurse II ..................................... 4
- VNSG 1306 Maternal/Newborn Nursing ........................................ 3
- VNSG 1509 Nursing in Health and Illness II ................................. 5

Total 12

Semester III (Fall)

- VNSG 1219 Professional Development ....................................... 2
- VNSG 1238 Mental Illness ......................................................... 2
- VNSG 1407 Pediatric Nursing ..................................................... 4
- VNSG 1410 Nursing in Health and Illness III ................................. 4
- VNSG 2331 Advanced Nursing Skills .......................................... 3
- VNSG 1460 Clinical — Practical Nurse III ..................................... 4

Total 19

Grand Total 50
THE FACULTY

Carolyn Barrientes
Assistant Professor of Theatre
B.A 1987, University of Texas At Austin; M.F.A., 2000, University of Iowa

Anirban Bhattacharjee
Assistant Professor of Physics and Astronomy
Bachelor of Technology, 2004, Visveswaraihn Technological University; M.S., 2010, Ph.D., 2014, University of Wyoming

Jamie A. Boyd
Assistant Professor of Animal Science
B.S., 2000, Berry College; M.S., 2006, Ph.D., 2009, University of Georgia

Rosemary Briseño
Assistant Professor of English
B.A., 1997, University of Texas at Austin; M.A., 2000, Sul Ross State University; Ph.D., 2008, Washington State University

Angela Brown
Assistant Professor of Mathematics
A.S., 2000, Lee College; B.S., 2003, Sam Houston State University;
M.S., 2006, Sam Houston State University; Ph.D., 2012, University of Texas at Arlington

Jim D. Case
Executive Vice President and Provost for Academic Affairs and Professor of Political Science

Sandra S. Chambers
Lecturer in Mathematics and Assistant Athletic Director
B.S., 1986, M.Ed., 1997; Sul Ross State University

Kendra DeHart
Assistant Professor of History
B.A., 2007, Southwestern University; M.A., 2013, Texas State University
(Ph.D. Candidate at Texas Christian University since 2013)

James W. Downing
Dean of the College of Arts and Sciences and Professor of Psychology

Avram C. Dumitrescu
Assistant Professor of Arts Gaming and Communication
B.A., 1999, University of Ulster at Belfast; M.A., 2004, University of Ulster at Belfast

Scott A. Ericsson
Professor of Animal Science
B.S., 1983, Colorado State University; B.A., 1985, San Francisco State University; M.S., 1987, Ph.D., 1991, University of Nevada, Reno

Christopher M. Estepp
Chair and Associate Professor of Animal Science
B.S., 1997, Texas A&M University; M.Ed., 2006, Texas A&M University; Ph.D., 2012, University of Florida

Carol H. Fairlie
Professor of Art
B.F.A., 1990, Texas Woman's University; M.F.A., 1993, University of North Texas

Karrin Ford
Associate Professor of Music
B.M., 1974, Nebraska Wesleyan University; M.M., 1878, Ph.D., 1991, University of Nebraska
Theron Francis
Assistant Professor of English
B.A., 1987, Northern Michigan University; M.A., 1994, Northern Arizona University; Ph.D., 2007, Purdue University

Donald Callen Freed
Professor of Music
B.M., 1974, Nebraska Wesleyan University; M.M., 1978, Ph.D., 1991, University of Nebraska

Eric T. Funasaki
Assistant Professor of Mathematics
B.S., 1990, Harvey Mudd College; M.S., 1992, University of Washington; Ph.D., 1997, University of Tennessee, Knoxville

Christopher Garcia
Lecturer in Reading

Thea F. Glenn
Lecturer in Computer Science
B.S., 2000, Saint Leo University; M.S., 2008, Strayer University

Ilda N. Gonzalez
Lecturer in Spanish
B.A., 1973, Sul Ross State University; M.A., 2001, University of Texas at San Antonio

Crystal Graham
Assistant Professor of Biology
B.A., 2007; Ph.D., 2012, University of Sydney

Sean P. Graham
Assistant Professor of Biology
B.A., 2000, M.S., 2006, Georgia State University; Ph.D., 2010, Auburn University

William C. Green
Interim Chair of the Department of Business Administration and Professor of Marketing
B.S., 1973, M.B.A., 1975, California State University (Bakersfield); Ph.D., 1985, University of Houston

Bibiana M. Gutierrez
Assistant Professor of Psychology

Alex M. Hardison
Lecturer in Mathematics
B.S., 2013, Sul Ross State University

Louis A. Harveson
Professor of Natural Resource Management and Director of Borderlands Research Institute for Natural Resource Management
B.S., 1991, Texas Tech University; M.S., 1995, Ph.D., 1997, Texas A&M University - Kingsville

Patricia M. Harveson
Professor of Natural Resource Management
B.S., 1992, Tarleton State University; M.S., 1996, Texas A&M Kingsville; Ph.D., 2006, Texas A&M University

James N. Hector
Chair and Associate Professor of the Department of Kinesiology and Human Performance
B.S., 1978, University of Texas at Austin; M.Ed., 1980, Sul Ross State University; Ed.D., East Texas State University

Christopher Herrera
Associate Professor of the Department of Kinesiology and Human Performance
B.S., 2002, Ohio State University; M.A., 2006, University of Houston-Clear Lake; Ph.D, 2010
University of Sydney

**Sharon L. Hileman**  
Dean of College of Graduate Studies and Professor of English  
B.A., 1969, M.A., 1971, San Jose State University; Ph.D., 1985, University of New Mexico

**Robert J. Hunter**  
Associate Professor of Homeland Security and Criminal Justice  

**Kristofer D. Jorgenson**  
Professor of Mathematics  
B.M., 1985, M.Ed., 1991, Southwest Texas State University-San Marcos; Ph.D., 1999, New Mexico State University

**Jessie Kelsch**  
Lecturer in Geology  
B.S., 1996, University of Arizona; M.S., 2000, University of New Mexico

**Robert J. Kinucan**  
Associate Provost of Research, Dean of College of Agricultural and Natural Resource Sciences and Professor of Natural Resource Management  
B.S., 1981, University of Idaho; M.S., 1983, University of Wyoming; Ph.D., 1987, Texas A&M University

**Ryan Luna**  
Assistant Professor of Natural Resource Management  
B.S., 2001, Texas Tech University; M.S., 2008, University of Texas at San Antonio; Ph.D., 2013, Texas State University

**Pamela C. Marett**  
Professor of Business Administration  
B.A., 1972, Michigan State University; M.A., 1977, Clemson University; Ph.D., 1982, University of Tennessee

**Linda S. McAnally**  
Lecturer in Business Administration  

**Jennifer McCormack**  
Assistant Professor of Geography and Behavioral Sciences  
B.A., 2000, University of Arizona, M.A., 2004, University of Texas-Austin, Ph.D., 2014 University of Arizona

**Elizabeth A. Measures**  
Professor of Geology  
B.S., 1982, M.S., 1984, Sul Ross State University; Ph.D., 1992, University of Idaho

**Bobby S. Mesker**  
Lecturer in Kinesiology, Head Baseball Coach, and Athletic Director  

**Ryan O'Shaughnessy**  
Assistant Professor of Agricultural Business  

**Laura R. Payne**  
Chair of Languages and Literature and Professor of English  

**Ian Peddie**  
Associate Professor of English  
B.A., 1992 University of Bradford; M.A., 1994, Illinois State University; M.A., 1998, University of
Rochester; Ph.D., 2002 University of Rochester

**Lana C. Potts**  
Lecturer of Fine Arts  
B.A., 1981, University of Texas at Austin; M.A.T., 1996, Trinity University; J.D., 1984, Columbia University, NYC

**Galen Privitt**  
Associate Professor of Education  
B.S., 1977, Lubbock Christian University; M.Ed., 1992, University of Texas Pan American; Ed.D., 2006, University of Texas at Austin

**Jeanne Qvarnstrom**  
Associate Professor of Education and Assistant Vice President for Institutional Effectiveness  
B.S., 1970, Iowa State University; M.A., 1975, California State University, Hayward; Ed.D., 1986, University of the Pacific

**Billy Jack Ray**  
Instructor of Kinesiology and Human Performance  

**Clarence J. Richardson**  
Lecturer and Assistant Football Coach  

**Francine R. Richter**  
Associate Professor of English  

**Christopher M. Ritzi**  
Chair of Biology, Geology and Physical Sciences and Professor of Biology  
B.A., 1996, Texas A&M University; M.S., 1999, Sul Ross State University; Ph.D., 2004, Indiana State University

**Diana Rodriguez**  
Instructor of Education  

**Dona W. Roman**  
Professor of Theatre  

**Lorie L. Rubenser**  
Professor of Homeland Security and Criminal Justice  
B.A., 1994, Central Washington University; M.S., 1996, Arizona State University; Ph.D., 2000, University of Nebraska, Omaha

**Esther L. Rumsey**  
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B.S., 1977, Willamette University; M.A., 1979, University of Northern Colorado; Ph.D., 2001, Rutgers University

**Mark S. Saka**  
Professor of History  

**Rebecca A. Schlosser**  
Associate Professor of Education  
B.A., 1976, University of Denver; J.D., 1983, University of Houston; M.Ed., 2003; Ed.D., 2006, Sam Houston State University

**Bret Scott**  
Assistant Professor of Communication  
Hamin Shabazz  
Dean, College of Education and Professional Studies and Professor of Homeland Security and Criminal Justice  
B.A., 1997, Widener University; M.P.A., 2001, University of Michigan; Ph.D., 2006, University of Baltimore  

Glenn Short  
Lecturer in Education  

Rebecca K. Splan  
Associate Professor of Animal Science  
B.S., 1994, Michigan State University; M.S., 1996, Ph.D., 1999 University of Nebraska - Lincoln  

Susan Spring  
Lecturer in English  

Kathy K. Stein  
Director of the Academic Center for Excellence and Associate Professor of English  

Gregory Tegarden  
Lecturer in Studio Art  
B.S., 2004, Sul Ross State University; M.F.A., 2011, Texas A&M University Corpus Christi  

Martin K. Terry  
Professor of Biology  

Alicia Trotman  
Assistant Professor of Psychology  
B.A., 2004, Pace University; 2012, Ph.D., Michigan State University  

Barbara Tucker  
Chair and Professor of Education  
B.S.W., 1993, Moorhead State University; M.Ed., 1997, Sul Ross State University; Ph.D., 2012, Capella University  

Kevin M. Urbanczyk  
Professor of Geology  

Julie M. Vega  
Lecturer in English  

Joseph G. Velasco  
Associate Professor of Communication  
B.A., 2001, University of New Mexico; M.A., 2005, Texas A&M - Corpus Christi; Ph.D., 2011, University of Denver  

Tiffany Vincent  
Chair of Behavioral and Social Sciences and Assistant Professor of Political Science  
B.S., 2003 West Texas A&M University; M.S., 2006, Ph.D., 2013 Texas Tech University  

Liza P. Ware  
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Nancy M. Antrim, Ph.D.  Professor of English and Linguistics
Ira Y. Blanton, Jr., Ph.D.  Associate Professor of English
Robert L. Bowden, M.Ed.  Associate Professor Emeritus of Industrial Technology
Ellen M. Boyd, M.A.  Associate Professor Emeritus of Music
George L. Bradley, Ph.D.  Professor Emeritus of Communication and Theatre
Terry C. Carson, Ph.D.  Professor Emeritus of Business Administration at Rio Grande College
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J. David Corbin, Ph.D.  Professor of Physics
Melanie A. Croy, Ph.D.  Professor of Education and Dean, College of Professional Studies
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Samuel E. Davis, Ed.D.  Professor Emeritus of Music
Roy E. Dodson, Ed.D.  Professor Emeritus of Art
Earl H. Elam, Ph.D.  Professor Emeritus of History
Martin Estrada, M.S.  Lecturer in Farrier Technology
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Roger H. Grant, Ph.D.  Professor of Physical Education
Barbara A. Hazlewood, Ph.D.  Professor Emeritus of Political Science
Clifford L. Hirsch, Ph.D.  Professor of Psychology
James G. Houston, Ph.D.  Professor Emeritus of Chemistry
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Ann K. Johnson, Ph.D.  Lecturer in History and Women's Studies
Raymond G. Kessler, J.D.  Professor of Criminal Justice
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Phyllis Musgrove, Ed.D.  Professor of Education
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Sue Pannell, Ed. D.  Professor Emeritus of Education at Rio Grande College
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Avinash K. Rangra, Ph.D.  Professor of Chemistry
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Nelson C. Sager, Ph.D. Professor Emeritus of English
Chester E. Sample, Ph.D. Professor of Physical Education
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Gregory M. Schwab, M.F.A. Professor of Theatre
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Beverly G. Six, Ph.D. Professor of Languages and Literature
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Mary Ann Weinacht, Ed.D. Professor Emeritus of Education
Paul R. Weyerts, D.V.M., Ph.D. Professor Emeritus of Range Animal Science
Jack W. Whisenhunt, Ed.D. Associate Professor of Business Administration
James L. Whitford-Stark, Ph.D. Professor of Geology
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Ben Wilson, Jr., Ed.D. Professor Emeritus of Education at Rio Grande College
T. Rex Wilson, Ph.D. Professor Emeritus of Music
James A. Wood, Ed.D. Professor of Education at Rio Grande College
Paul A. Wright, Ph.D. Professor of Geography and Sociology
Darwin R. Yoder, D.V.M. Professor of Animal Science-Veterinary Technology
UNDERGRADUATE AND GRADUATE COURSES IN
ALPHABETICAL ORDER BY COURSE NAME
This includes the course description only. Please refer to the catalog for additional
course details as it pertains to your program.

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Texas Common Course Numbering System
The prefix and numbers in parentheses immediately after the Sul Ross course prefix and
number represent the course equivalent in the Texas Common Course Numbering System.

Course Numbering System
The four-digit numbering system is based on the following criteria: The level of the courses is
identified by the first digit as follows: freshman, 1; sophomore, 2; junior, 3; senior, 4; and
graduate, 5-7. The semester credit hour is identified by the second digit. University and/or
departmental codes are identified by the last two digits. Course titles in the academic programs
section of this catalog are followed by two numbers in parentheses. The first number refers to
the number of lecture contact hours per week; the second refers to the number of laboratory
contact hours per week. For example, (3-2) indicates three contact hours of lecture and two
contact hours of laboratory each week. Lecture contact hours are the hours per week students
are required to spend in contact with faculty in a lecture setting, e.g., class, conference,
seminar, individual instruction, private lesson, thesis or dissertation discussion, or independent
study. Laboratory contact hours are the number of hours per week that students are required
to spend in contact with faculty in an experiential situation, e.g., laboratory clinical, practicum,
internship, or student teaching.

**ACCOUNTING (ACC)**

**ACC 2301 (ACCT 2301) Principles of Accounting I (3-0).** Accounting concepts and their
application in transaction analysis and financial statement preparation; analysis of financial
statements; and asset and equity accounting in proprietorships, partnerships, and corporations.

**ACC 2302 (ACCT 2302) Principles of Accounting II (3-0).** Accounting concepts and their
application in transaction analysis and financial statement preparation; analysis of financial
statements; and asset and equity accounting in proprietorships, partnerships, and corporation.
Introduction to cost behavior, budgeting, responsibility accounting, cost control, and production
costing. Prerequisite: ACC 2301

**ACC 3330 Intermediate Accounting I (3-0).** Concepts, principles, and practices of
accounting with emphasis on determination of income and financial position of business
corporations. Prerequisites: ACC 2301 and ACC 2302

**ACC 3331 Intermediate Accounting II (3-0).** Continuation of Intermediate Accounting I.
Prerequisite: ACC 3330

**ACC 3332 Cost Accounting (3-0).** Cost accounting fundamentals, product costing, planning
and control; job order and process costing, budgeting, standard cost, profit-cost volume
relationships, and inventory control. Prerequisite: ACC 2302

**ACC 3333 Financial Statement Analysis (3-0).** This course provides an integrated
approach to accounting. Concepts and issues in all functional areas of accounting are
presented. Topics include budget and cost control, accounting data in planning, and policy
formulation. Prerequisite: ACC 2302.

**ACC 3334 Governments and Not-for-Profit Accounting (3-0).** In this course, students study
the concepts and techniques of fund accounting, and financial reporting for government and not-
for-profit agencies including state and local governments, universities, hospitals, and other
public sector organizations. Prerequisite: ACC 3331 with a “B” or higher.

**ACC 4330 Principles of Taxation (3-0).** Principles of taxation with emphasis upon federal
income tax as it applies to individuals. Prerequisite: ACC 2302

**ACC 4332 Advanced Accounting (3-0).** Complex financial accounting problems, including
consolidated statements, not-for-profit accounting, partnerships and multinational accounting.
(Various) Prerequisite: ACC 3331

**ACC 4333 Auditing Principles (3-0).** Principles and problems of auditing financial records
with emphasis on procedures; working papers; reports; and the duties and responsibilities of
the junior and senior accountants in audits. Prerequisite: ACC 3331.

**ACC 4334 Accounting Information Systems (3-0).** Use of the computer in the processing of
business transactions, analysis of accounting information and in auditing. (Various)
Prerequisites: ACC 3331 and 4333

**ACC 4336 Ethics for Accountants (3-0).** This course explores business ethical issues and ethical decision-making for the accounting professional. It examines a guidance system, rules, ethical expectations, and ethical pitfalls of the accounting professional.

**ACC 4350 Advanced Readings and Research in Accounting (3-0).** Selected seminar topics in accounting. Prerequisites: ACC 3330, ACC 3331.

**ACC 5307 Accounting for Management (3-0).** Topics include budget and cost control, accounting data in planning, and policy formulation.

**ADMINISTRATIVE SYSTEMS & TECHNOLOGY (AST)**

**AST 1101 Personal Financial Literacy (1-0).** The topics to be covered will include, but are not limited to, budgeting, managing debt and credit, saving and investing, preventing identity theft, and retirement planning.

**AST 1305 (BCIS 1305) Business Computer Applications (3-1).** Computer technology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet. (WECM: POFI 1301)

**AST 1383 Word Processing Production & Advanced Keyboarding (3-0).** Word processing software features are covered throughout the course. Creating and editing correspondence, reports, merging, and graphics allow students to complete word processing projects. Students will use keyboarding software to improve keyboarding skills. E-mail and Internet are used. Prerequisite: AST1382 or demonstrated keyboarding skill. (WECM: POFI 2401 or POFT 2401)

**AST 2311 Independent Study in AST (3-0).** Independent study and research on a designated topic. May be repeated for credit.

**AST 2331 Desktop Publishing (3-0).** The design and development of printed documents such as brochures, newsletters, forms, and more will be covered. Students will integrate technology generated graphics and animations to create electronic documents. Industry-standard software will be used.

**AST 2380 Administrative Procedures (3-0).** Emphasis is placed on administrative procedures, including records management, reprographics, personal finance, and priority setting. Improvement of productivity through the use of office tools, software, and procedures is covered. (WECM: POFT 1309 or POFT 1409)

**AST 2381 Legal & Medical Administrative Systems (3-0).** Procedures and application of skills needed in the legal and medical office are covered. Terminology, office management principles, and software relevant to the legal and medical office are studied.

**AST 3311 Independent Study in AST (3-0).** Independent study and research on a designated topic. May be repeated for credit.
**AST 3380 Administrative Support Supervision (3-0).** Planning and implementation strategies for administrative support development are covered. Topics include supervision of administrative support personnel and management of the workplace. Ergonomics and technology issues are stressed. Students research and report on course-related information related to major business industry, government, and educational entities.

**AST 3381 Social Media Concepts & Applications (3-0).** Students will apply the concepts of social media, including blogs, podcasts, wikis, RSS feeds, voice recognition, and social networking to business, academic, and personal needs. Students will evaluate, create, and participate in social media applications.

**AST 3383 Multimedia Applications (3-0).** Principles of multimedia design and production using industry-standard photo editing software tools and equipment are used to create media for interactive training and instruction.

**AST 3384 Practicum and Internship in AST (3-0).** Students apply knowledge & training in an actual work environment, completing approximately 120 clock hours in a business setting. Workplace supervisors and the instructor evaluate student performance on the job. Prerequisites: Permission of instructor or completion of minimum 12 SCH in business technology or business administration courses.

**AST 3385 Training & Development (3-0).** Techniques for the design and implementation of professional and staff development programs in any industry or educational environment are covered. Emphasis is placed on developing interactive methods of training, including the use of games and technology. Teacher certification students will learn techniques for teaching business and work-based education courses.

**AST 4350 Special Topics in AST (3-0).** This course will be offered covering a variety of current topics related to administrative systems and business technology. This course may be repeated for credit.

**AGRICULTURAL BUSINESS (AGB)**

**AGB 2302 Agricultural Economics (3-0).** Orientation to the application of economic theory to agribusiness management. Microeconomic principles pertaining to the production and marketing of agricultural products.

**AGB 3302 Agricultural Marketing (3-0).** An overview of the nature and structure of agricultural product markets in the U.S.; agricultural product prices, price determination and price discovery processes; use of commodity futures as a marketing tool.

**AGB 3304 Range Use Economics (3-0).** This course covers all facets of the economics of rangeland management, including grazing management, supplemental feeding and other inputs, balancing multiple species use, and calculating the benefits of range improvement and opportunity costs associated with rangeland use.

**AGB 3310 Special Topics (3-0).** Selected topics in the field of agricultural business. Topics selected according to student interest and need. May be repeated as topics vary.

**AGB 4301 Sustainability & Diversity in Ranch Business (3-0).** This course introduces and develops the idea of sustainability and diversity within the framework of a ranching business. Emphasis will be placed on how sustainability practices and diversity within business can
mediate market risks and increase overall income and long term rangeland and economic health.

AGB 4303 Agri-Business Management (3-0). Agriculture production as a business. Types of legal organization for farms and ranches, as well as businesses involved in the processing, wholesaling, and retailing of agricultural products. Principles of business management applied to the agri-business with emphasis on factors affecting profits, choice of enterprises, and the efficient use natural, financial and human resources.

AGB 4308 Natural Resource and Environmental Economics (3-0). Topics covered will include: an overview of the modern environmental movement, economic impacts of law and regulation including planning, zoning and farm policy, the economics of pollution and recycling, private property and free market conservation with an emphasis on the economic impacts and influences on farm, ranch, and agribusiness decision making processes.

AGB 4311 Problems in Agricultural Business (3-0). Individualized instruction in all facets of agricultural business. This course is developed to meet specific needs of individual students. May be repeated with approval of NRM chair.

AGB 4315 Farm and Ranch Records and Accounting (3-0). A review of the principles of accounting as they apply to the modern farm or ranch. Fundamentals of cost and managerial accounting applied directly to agricultural production at the farm and ranch level: product costing, planning, control, standards and budgeting, and profit-cost volume relationships. This course will emphasize the use and applications of spread sheet programs. Prerequisite: ACC 2301.

AGB 4316 International Development of Agriculture (3-0). Degradation of the environment, explosive population growth, poverty, hunger, and the associated political unrest continuously threaten world peace. These are perhaps the most critical problems of today as well as the foreseeable future. This course is an interdisciplinary approach to the role of agricultural development in solving these problems within the economic growth process. It focuses on neoclassical economic theory but stresses the importance of modifying that theory to fit the specific regional/cultural situation.

ANIMAL SCIENCE (ANSC) Back to Top

ANSC 1101 Freshman Seminar (1-0). Seminar course designed to introduce students to faculty, facilities, and programs in ANRS and introduce students to study skills essential to a successful career. Offered fall and spring.

ANSC 1202 Laboratory Animal Management (2-0). An introduction into types care, management and legislative regulations pertaining to laboratory animals. Offered fall.

ANSC 1304 Pharmacology (3-0). A study of pharmaceuticals and biologicals and their application to the field of veterinary medicine. Classification of drug types, safety and ethics involved in common dispensing. Proper preparations of solutions will be stressed. Offered spring. Prerequisites: CHEM 1311/1111

ANSC 1419 (AGRI 1419) Introductory Animal Science (3-2). An introduction to the contributory role of animals to human well-being, with emphasis on fundamental concepts of animal physiology, nutrition, reproduction, growth, lactation, genetics, behavior, and management. The historical and economic structure of global and domestic livestock industries
is also presented. Offered fall and spring.

**ANSC 2301 Exotic Game Animal Management (3-0).** This course introduces and overviews the many facets of the exotic game ranch industry. Beginning with the history of exotic wildlife industry in the United States, this introductory course will discuss the exotic wildlife’s current career opportunities; its development, and its current economic impact. Students will gain familiarity with the different breeds of non-indigenous game animals and their husbandry. Leaders from within the exotic industry will speak on these topics.

**ANSC 2302 Exotic Game Animal Management II (2-2).** This course will introduce and expand on health needs of exotic game and wildlife. Information about diseases and syndromes affecting exotic an indigenous wildlife species will be taught by a member of the veterinary community. Special focus will highlight zoonotic diseases, regulated diseases and preventable diseases. Instruction will utilize lab procedures including field necropsy and immunization and treatment techniques. Additionally familiarity with the regulations and provisions in the regards to animal health and the movement of animals will be taught in the course.

**ANSC 2303 Horsemanship I (1-4).** Students will learn the inherited behaviors, learned behaviors and psychological aspects of behavior modifications used in training horses. Emphasis will be placed on equine handling, grooming, basic training techniques, riding equipment, and safety. Students will learn how to perform basic ground work and basic riding maneuvers on an assigned school or personal project horse. Fall odd years.

**ANSC 2304 Agricultural Education in Secondary Schools (3-0).** An analysis of evolving concepts and philosophies of agricultural education programs with emphasis upon history, legislation, and principles underlying organization and practice.

**ANSC 2305 Meat Animal and Carcass Evaluation (2-2).** Evaluation of carcasses and wholesale cuts of beef, pork and lamb, factors influencing grades, yields and values in cattle, sheep, and swine. Offered fall.

**ANSC 2306 Companion Animal Management (3-0).** A study of the breeds, management, genetics, reproduction, nutrition and diseases of major classes of companion animals.

**ANSC 2307 Equine Conformation and Biomechanics (3-0).** This course is designed to provide students with a core skillset in critical assessment of horses for breeding and athletic performance. Fundamentals and advanced principles of equine evaluation and presented, with an emphasis on current research in the subject area.

**ANSC 2308 Horsemanship II (1-4).** Emphasis will be placed on application of actual training young horses and teaching advanced maneuvers to older horses. Students will learn how to utilize advanced training practices and applications to enhance the training and performance of horses.

**ANSC 2311 Problems in Animal Science (3-0).** Individualized instruction in all facets of Animal Science. Course development to meet specific needs of individual students. May be repeated with approval of ANSC Chair. Offered all semesters.

**ANSC 2312 Current Issues in Agriculture (3-0).** This course is designed to educate students about major issues in agriculture, life sciences, and natural resource sciences and to expose students to a variety of methods used to effectively communicate, inform, and influence
decisions about these issues.

**ANSC 2313 Principles of Agricultural Leadership (3-0).** A study in basic vocational education including the following essential elements including concepts and skills relating to self-awareness, academics to vocational education, study habits, productive work habits, attitudes and employability skills, consumer management, occupational awareness and career decision making and associated with diverse human relations and personality development. Vocational Education history and parliamentary procedure will also be included.

**ANSC 2315 Equine Exercise Physiology (3-0).** An exploration of physiological and environmental factors associated with equine athletic performance. The course will cover adaptation of the respiratory, cardiovascular, musculoskeletal, thermoregulatory, and support systems to training and exercise. Common athletic injuries encountered in conditioning programs will also be discussed. Prerequisite: ANSC 1419.

**ANSC 2401 Advanced Farrier Training (3-2).** Advanced course in Equine Footcare including: contemporary aspects of hot forging handmade shoes for all uses. It will include contemporary and evolving technologies in shoe and tool making.

**ANSC 2406 Meat Science (3-2).** A course designed to teach the basic physical and chemical components of meat tissues, as well as, quantitative and qualitative attributes of meat and meat products, including processing, manufacturing, distribution, and preservation principles of meat production.

**ANSC 3201 Advanced Live Animal Evaluation (1-2).** Characteristics of the different types of livestock; methods used and procedure followed in competitive judging; recommended procedure in selecting animals for purchase; methods used in score card judging, giving oral reasons for the placing of animals judged in classes; coaching livestock judging teams. Prerequisites: ANSC 2201 or Permission of instructor

**ANSC 3301 Clinical Pathology (2-2).** Routine clinical examination and basic fundamentals of blood analysis, blood chemistry, urinalysis. Included in this course will be a review of the principles and practices of blood sampling, total and different counts, coagulation, sedimentation, and hemoglobin determination. Offered fall. Prerequisites: CHEM 1311 and CHEM 1111

**ANSC 3302 Swine Production and Management (2-2).** The course will include study and research in approved production practices for swine. Breeding, feeding, and management will constitute the body of the course with practical phases applied through laboratory experiences. Offered alternate odd years, spring only.

**ANSC 3304 Wildgame Hospitality, Conservation and Ethics (2-2).** This course includes introduction to the different aspects of the hospitality component of game ranches and agritourism facilities. The different types of exotic animal conservation efforts are reviewed in addition to the current topics affecting these industries.

**ANSC 3305 Horse Production and Management (3-0).** Principles of scientific horse production and application of horse management skills. Topics covered include nutrition, reproduction, health and disease, genetics and selection, and economic aspects of equine enterprises.
ANSC 3306 Exotic Game Animal Behavior (2-2). This course will cover capture, handling and restraint of exotic game animals. Behavior of different species will be emphasized in regards to their handling. Capture techniques involving traps, nets and chemical immobilization will be taught and demonstrated in the laboratory portion of this course, both in the classroom and out in the field. An overview of the confined deer breeding industry will be presented including pen design, handling, herd health and working facilities. Field trips to several game ranches will be incorporated into the semester including instruction from veterinarians specializing in immobilization and treatment of exotic game species.

ANSC 3308 Agricultural Statistics (3-0). Major emphasis is placed upon design, analysis and interpretation of agricultural and biological experimental data. Information presented in this course will include statistical concepts and models, simple tests of significance, analysis of variance, mean separation procedures, and linear regression-correlation analysis. Offered fall and spring. Prerequisite: Math 1314, 1332, 1342 or permission of instructor.

ANSC 3309 Sheep and Goat Production and Management (2-2). This course will include study of accepted practices in sheep and goat production and management. To be included are: breeding, feeding, and management. Laboratory exercises will be an important portion of the course. Offered alternate years; offered spring only.

ANSC 3310 Special Topics (3-0). Selected topics in the field of Animal Science. Topic selected according to student interest and need. May be repeated as topics vary. Offered all semesters.

ANSC 3311 Anatomy & Physiology of Domestic Animals (3-0). An Introduction to basic anatomy and physiology, focusing on domestic animals. Topics will range from cell biology through organ systems and include both anatomy and physiology within the systems and total body interaction. Prerequisite: ANSC 1419

ANSC 3315 Applied Animal Behavior and Welfare (3-0). Transdisciplinary study of animal behavior as it relates to the management and well-being of domestic livestock and captive animal species. Special emphasis on human-animal interactions, assessment and standards, and facility design. Prerequisite: ANSC 1419.

ANSC 3318 Teaching Methods in Agricultural Education (2-2). Instructional methodology course that focuses on the selection and use of teaching strategies, methods/approaches, and techniques; evaluating learning; and managing learning environments for teaching agricultural subjects in formal educational settings.

ANSC 3319 Program Planning in Agricultural Education (3-0). Principles and practices used in designing courses of instruction for effective teaching and total program development.

ANSC 3320 Teaching in Agricultural Lab Settings (3-0). This course is designed to introduce pre-service agricultural education teachers to laboratory integration into the agricultural education curriculum at the secondary level. Emphasis will be placed on skill acquisition, developing knowledge of laboratory components in agriscience, laboratory utilization, facilitating student learning in the laboratory setting, appropriate teaching methods and techniques, curriculum applications, and classroom resources. Course content will be presented during the semester-long course and travel to off-campus sites will be required.

ANSC 3321 Curriculum Planning in Agricultural Education (3-0). This course is designed to
help students plan, develop, and assess agricultural education curricula in accordance with current standards.

**ANSC 3402 Beef Cattle Production and Management (3-2).** The course will be divided into the areas of history, breeding, feeding, and management of beef cattle. Range laboratory exercises will be an integral part of the course. Offered fall only.

**ANSC 3405 Parasitology (3-2).** A study of the biology, morphology, and ecology of parasitic organisms as they relate to various host-parasite relationships and diseases in animals and man. The diagnosis, pathology, treatment and prevention of parasitism will be discussed. Post mortem examinations and treatment of animals will be performed in lab as available. Prerequisites: General Zoology or equivalent.

**ANSC 3407 Sausage Manufacturing (3-2).** The manufacturing of processed meats. Product formulation, curing, smoking, sanitation, and quality control. Offered spring.

**ANSC 3411 Livestock Slaughter Inspection (3-2).** The content of this course deals with federal and state regulations pertaining to livestock slaughter for human consumption. Laboratory training will be given to promote proficiency in meat inspection procedure. Offered alternate years; offered spring only.

**ANSC 3416 Livestock and Wildlife Nutritional Management (3-2).** Provide a thorough understanding of feeds and nutrients, their classifications and an introduction to how animals digest and absorb nutrients. Animal species will be discussed individually and how rations vary and are formulated depending on stage of life or production. Both computer and hand diet formulation will be practiced. Prerequisite: 1419

**ANSC 4300 Meat Technology (2-2).** The basic characteristics of meat and products as they relate to quality are stressed. Product identification, economy, nutritive value, preservation, and utilization are studied. Offered spring only, alternate (even) years.

**ANSC 4302 Management Procedures in the Meat Industry (2-2).** An in-depth study of business management practices conducted in the Meat Industry. The computer-based course will focus on specialized aspects of the business. Ethics and acceptable business practices will also be reviewed.

**ANSC 4304 Reproductive Physiology (3-0).** Study of anatomical and physiological process of reproduction in domestic animals and wildlife. Offered fall.

**ANSC 4305 Agricultural Genetics (3-0).** Quantitative genetic principles applied to mating and selection of domestic livestock, wildlife, and range plants. The course integrates Mendelian principles with biomedical and statistical probability techniques for proper application to breeding, selection, inbreeding, line breeding, and pedigree information for progressive animal and plant breeding. The influences of gene frequency, heritability, and genetic relationships on the gene pool of populations is integrated into this course. The course includes application of the Hardy-Weinberg law and statistical correlation and regression as applied to selection of superior genetic lines of plants and animals. Offered fall only.

**ANSC 4306 Animal Heath and Diseases (3-0).** Introduction to the basic principles of epidemiology with special reference to the pathogenesis of diseases in the animal population; description of the role of the animal scientist, veterinarian and farm manager in the control of
diseases.

**ANSC 4307 Reproductive Techniques (2-2).** Evaluation and application of various techniques to control and determine reproductive functions in livestock. Techniques covered will include semen collection and freezing, in vitro fertilization, embryo freezing and transfer; palpation; and ultrasonography.

**ANSC 4308 Animal Nutrition (3-0).** Physiology and chemistry of digestion, absorption and metabolism of nutrients by animals will be discussed, including requirements, utilization, and the effects of deficiencies and toxicities. Prerequisites: ANSC 1419, CHEM 1311, 1312, 4307, or permission of instructor.

**ANSC 4310 Artificial Insemination of Farm Animals (2-2).** History, importance and implications of artificial insemination; advantages and limitations of its use in farm animals. Various methods of collection are studied; evaluation of semen, dilution and storage of semen and techniques of insemination are covered. Offered summer only.

**ANSC 4311 Problems in Animal Science (3-0).** Individualized instruction in all facets of Animal Science. Course developed to meet specific needs of individual students. May be repeated with approval of ANSC Chair. Offered all semesters. Prerequisite: Approval of ANSC chair.

**ANSC 4314 Andrology (3-0).** Study of male reproductive biology, diseases of the male genital organs, and male infertility. Special emphasis is on endocrinology, spermatogenesis, semen analysis, fertilization, contraception, and cryopreservation.

**ANSC 4315 Endocrinology (3-0).** A study of the Physiology and regulation of endocrine secretions. Course emphasizes neuroendocrine, reproductive, growth and metabolic aspects of endocrinology. Examples are selected from livestock and humans.

**ANSC 4316 Embryology (3-0).** Study of the development of embryos from conception to birth in livestock species.

**ANSC 4317 Senior Capstone (3-0).** This course provides senior animal science students with an opportunity to reflect upon the animal science course of study and to synthesize the material learned throughout their coursework. This course prepares students to enter the workforce.

**ANSC 5303 Special Topics (3-0).** Advanced studies in current agricultural and natural resource sciences research. Topics assigned according to the experience, interest, and needs of the individual student. Registration approval by the ANSC chair. May be repeated under different subject matter titles.

**ANSC 5304 Research (0-6).** Advanced studies in current agricultural research in animal production. Problems assigned according to the experience, interest, and needs of the individual student. Registration approval by the ANSC chair. One enrollment required of each non-thesis students for assigned research paper. May be repeated for credit.

**ANSC 5308 Principles of Teaching Adult Learners (3-0).** This course covers a broad range of topics in the field of adult education. The purpose is to further the development of adult educators; therefore, the course focuses on theories, methods, and issues in adult education.
ANSC 5312 Biostatistical Analysis I (2-2). An introduction to statistical concepts and models applied to agricultural and biological systems. The course introduces the scientific method, inferential theory, data types, descriptive statistics, goodness of fit, contingency tables, the normal distribution and one- and two-sample hypothesis testing. Emphasis will be placed on data analysis and interpretation using computer statistical applications. Offered Fall.

ANSC 5313 Biostatistical Analysis II (2-2). An advanced course in statistical concepts and models applied to agricultural and biological systems. The course will cover experimental designs, paired-sample hypotheses, multisample hypotheses (ANOVA), multiple comparisons, factorial and nested ANOVA, data transformations, liner regression, and correlation, multiple regression and correlation, polynomial regression and the binomial distribution. Emphasis will be placed on data analysis and interpretation using computer statistical applications. Offered Spring. Prerequisite: ANSC 5312 or permission of instructor.

ANSC 5314 Advanced Endocrinology (3-0). Structure and function of endocrine glands and how their secretions regulate biochemical reactions, integrate tissue and organ systems, and control behavior.

ANSC 5315 Advanced Reproductive Techniques (3-0). Detailed study of the various techniques to control and determine reproductive functions in domestic and nondomestic species. Techniques covered will include semen collection, evaluation and freezing; super ovulation, oocyte-embryo collection, in vitro oocyte maturation, sperm capacitation, in vitro fertilization, embryo culture, embryo micromanipulation, embryo freezing and transfer; and ultrasonography.

ANSC 5316 Project Research (1 to 9-0). Research for thesis project. Prerequisite: Master of Science students that have been admitted to candidacy. May be repeated.

ANSC 5317 Implementing Change (3-0). This course examines the processes by which professional change agents influence the introduction, adoption, and diffusion of technological changes.

ANSC 5320 Animal Industries (3-0). An in-depth study of business management practices conducted in the Animal Industry. This course will focus on specialized business aspects of business in the animal industry.

ANSC 5321 Animal Science Business Planning (3-0). This course lays out the basic theory of microeconomics with numerous examples from the food and agricultural industries, while the coverage of macroeconomics emphasizes real world applications rather than pure theory.

ANSC 5322 Statistics for the Animal Sciences (3-0). This course emphasizes statistical literacy, use of real data and technology, statistical conceptual understanding and active learning.

ANSC 5323 Research Literature (3-0). This course guides the student, step-by-step, from the selection of a problem, through the process of conducting authentic research, to the preparation of completed report, with practical suggestions based on a solid theoretical framework.

ANSC 5324 Animal Physiology (3-0). The course is designed to expand upon the basic
principles of anatomy and physiology of farm animals, emphasizing ruminant and equine digestive physiology. Individual systems will be discussed as well as topics from current scientific discussions and publications.

**ANSC 5325 Agricultural Genetics and Biotechnology (3-0).** This course provides a student with solid grounding in core genetics and biotechnology concepts, as well as information on cutting-edge science and technology and their applications in real-world agriculture, medicine, and health care.

**ANSC 5326 Animal Reproduction (3-0).** Study of the anatomical, cellular and physiological mechanisms that control the endocrine and reproductive systems of domestic animals and wildlife.

**ANSC 5327 Animal Nutrition (3-0).** This course is designed to continue the nutrition education with an emphasis on biochemical pathways and metabolic control of nutrient partitioning. Glycolysis, TCA cycle, Urea cycle, Gluconeogenesis, and additional metabolic pathways will be discussed as well as nutrient metabolism and ruminant specific metabolism related to VFAs.

**ANSC 5328 Meat Production (3-0).** The course will investigate live animal, meat products, and formulation of recipes for processed meats and sausage products of domestic meat production.

**ANSC 5329 Animal Breeding (3-0).** Advanced topics in breeding animal selection using scenario-based techniques and animal data to optimize production systems. Breeding plans of all livestock species including rotational and terminal crosses and the use of crossbreeding advantages of heterosis and breed complementarity. Additionally, heritability estimates and economically important traits will be focused on.

**ANSC 5403 Special Topics (4-0).** Advanced studies in current agricultural and natural resource sciences research. Topics assigned according to the experience, interest, and needs of the individual student. Registration approval by the ANSC chair. May be repeated under different subject matter titles.

**ANSC 6301 Thesis Proposal (0-6).** Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee.

**ANSC 6302 Thesis Defense (0-6).** The student will enroll in this course each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made. Satisfactory completion of this course will result in the completed thesis presented to the Graduate Committee, accepted by the ANRS dean, and filed in the Office of the Executive Vice President and Provost for Academic Affairs.

**ANTHROPOLOGY (ANTH)**

**ANTH 1301 (ANTH 1301) Cultural Anthropology (3-0).** A survey of the study of cultural anthropology, including the nature of culture in space and time, human subsistence and settlement, social and political organization, ritual and religion, and linguistics. The course will include an overview of the adaptations of human populations to arid regions.

**ANTH 1302 (ANTH 1302) Introduction to Archeology (3-0).** An introduction to the history, development, techniques, and underlying principles of archeological sciences. The focus of
the class is on archeological methodology and theory as practiced within a framework or interdisciplinary research, and as viewed from both scientific and humanistic perspectives.

**ANTH 2301 Archeology of Texas and Northern Mexico (3-0).** An introduction to Native American prehistory from 10,000 B.C. through early contact with Spanish entradas during the sixteenth and seventeenth centuries A.D. in Texas and north-central Mexico. The course will explore basic archeological theory, data collection, and analytical techniques used in the reconstruction of life ways of nomadic, semi-sedentary, and sedentary human populations through time.

**ANTH 2302 Environmental and Cultural Diversity (3-0).** This course examines the dynamic interplay between environment and culture among prehistoric, historic, and contemporary peoples on a global basis. Ethnographic studies are used to facilitate comparative analysis of cultures in both similar and widely differing environmental settings, from Arctic tundra to shifting sands of the Sahara. Emphasis is on the study of present-day "simple" societies, and includes evaluation of the use of analogy in reconstructing life ways of extinct cultures.

**ANTH 2303 Readings and Research (3-0).** Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

**ANTH 3301 Laboratory Techniques in Archeology (3-0).** Provides practical experience on the conceptualization, design, and conducting of archeological projects, with emphases on techniques of laboratory analysis, data quantification, analogy, and the interpretation of findings.

**ANTH 3601 Summer Archeological Field School (0-6).** An intensive six-week summer field course that provides hands-on training for students in archeological field and analytical techniques, including site survey and recording, instrument mapping, site testing and evaluation, controlled excavation, and field laboratory techniques: Location to be announced. Prerequisite: Anthropology 2301 or consent of instructor.

**ANTH 4308 Readings and Research in Anthropology (3-0).** Selected readings on research projects to be offered as individual study to meet student needs. May be repeated once for credit with departmental approval.

**ANTH 4311 Special Topics in Anthropology (3-0).** Special courses on topics not included in the regular curriculum. May be repeated for credit with departmental approval.

**ART (ART)**

**ART 1301 (ARTS 1301) Art Appreciation (3-0).** An introductory course leading to an understanding of the Visual Arts.

**ART 1303 (ARTS 1303) Art History I (3-0).** A survey of the art and architecture of the Western World from prehistoric times through the Gothic Period.

**ART 1304 (ARTS 1304) Art History II (3-0).** A survey of the art and architecture of the Western World from the Early Renaissance to the contemporary period. Qualifies for general education credit.

**ART 1311 (ARTS 1311) Design I (2-4).** An introduction to the fundamentals of two-dimensional
ART 1312 (ARTS 1312) Design II (2-4). Three-dimensional design and color theory. (May be taken before Design I)

ART 1316 (ARTS 1316) Drawing I (2-4). An introduction to drawing fundamentals with stress upon observations and techniques involving various drawing media.

ART 1317 (ARTS 1317) Drawing II (2-4). Continuation of drawing skills and techniques as begun in Drawing I (1316) with emphasis on compositional skills. Prerequisite: ART 1316.

ART 2304 Independent Study in Art (2-4). Independent investigation into an art subject area: i.e. in only one area such as painting, drawing, sculpture, design, ceramics, printmaking, jewelry, fibers or art education. May be repeated for different subject areas.

ART 2311 Alternative Methods of Photography (2-4). A survey of nontraditional photographic printing process such as Van Dyke Brown, Cyanotype, Solarization and Texture Screens. Prerequisite: IT 2304.

ART 2313 (ARTS 2313) Design Communications I (2-4). An introduction to the basic processes and techniques of advertising art.

ART 2316 (ARTS 2316) Painting I (2-4). Exploring opaque painting media (oil or acrylic) with emphasis on color and composition.

ART 2323 (ARTS 2323) Life Drawing I (3-2). Advanced drawing class that involves drawing fundamentals in relationship to the human form with stress on observation and human anatomy. May be taken for up to nine hours of credit. Each semester of work is progressively more advanced than the previous semester. Prerequisite: ART 1316.

ART 2326 (ARTS 2326) Sculpture I (2-4). Exploratory studies in the principles, materials, and techniques of sculpture. (ARTS 2326)

ART 2346 (ARTS 2346) Ceramics I (2-4). An introduction to basic ceramic processes, including wheel throwing, hand building, glazing and firing.

ART 2347 (ARTS 2347) Ceramics II (2-4). A further exploration of intermediate ceramic processes, including wheel throwing, glazing and kiln firing. Prerequisite: ART 2346.

ART 2366 (ARTS) Watercolor I (2-4). Exploring transparent painting media (watercolor or tempera) with emphasis on methods and techniques.

ART 3301 Art Studio Concentration (2-4). First level of advanced investigation into a studio art subject area; i.e., drawing and painting, ceramics, sculpture, printmaking, and in exceptional cases, art education or design and advertising art. The course may be repeated for credit up to three times in an area of specialization. Student will need to discuss their artistic background with the instructor.

ART 3302 Printmaking (2-4). An introduction to the basic printmaking processes including calligraphic, intaglio, stencil, and relief.
ART 3303 Art Theory and Practice for Children and Adolescents (2-2). This course is a survey and analysis of the theories and practices of teaching art to children and adolescents. Topics include artistic development, art programming content, philosophies, methodologies, objectives, and assessment with a survey of advanced methods related to the understanding of aesthetics achievement in the secondary art programs. This course is required for area education majors.

ART 3304 Fused and Slumped Glass (2-4). This course is an introduction to fused and slumped glass experienced through artistic means. Students will learn glass studio practice, safety, glass cutting techniques, kiln operation and maintenance.

ART 3306 Seminar in Art (3-0). A discussion of subjects such as resume and portfolio development, art careers, art marketing and sales, and other areas which are of interest and importance to all art students. (Required for art majors—preferably taken in junior year.)

ART 3307 Women in Art (3-0). Art history class tracing the overlooked area of women in art.

ART 3308 Contemporary Art History (3-0). A survey of painting, sculpture, architecture, and other arts from Post-Impressionist to Contemporary Period.

ART 3309 Crafts (2-2). An introduction to art theories and methods governing the teaching of craft activities in the classroom. Required for Art Education majors.

ART 3310 Special Topics (3-0). Topics to be selected from history and literature of art, art in the general culture, techniques of teaching art in the public schools, or other topics in the field of art. (May be repeated for credit when topic varies.)

ART 3312 Rock Art (1-3). Art history class tracing the indigenous art of American Indians in this area.

ART 3313 European Art and Architecture (3-0). A "hands-on" investigation of the artistic and architectural styles and historically significant works of art in European cultures. The course meets the multicultural requirements.

ART 3314 Latin American Art Survey (3-0). A survey of painting, sculpture, architecture and other arts from pre-Columbian times through the present day of Latin America.

ART 3316 Extruded Ceramics (3-3). An exploration to the use of the ceramic extruder as a ceramic design tool. Students will learn to make and use dies to create ceramic extrusions to be used as design elements in finished work. Prerequisite: Ceramics I or permission of the instructor.

ART 3317 Handmade Ceramic Tile (3-3). An exploration in the designing, making and decorating of handmade ceramic tile. Students will design and create tiles using the slab method as well as the hand pressed method to create a body of original tile that can be used in table tops, counter tops or any other tile application. Prerequisite: Ceramics I, Design I or permission of the instructor.

ART 3318 Pinhole Photography (2-4). An introduction to the pinhole photography experience through artistic means. Students will design and build a pinhole camera and create a portfolio of finished pinhole photographs.
ART 3319 Advanced Photography: Special Topics (2-4). A course dealing with topics in the study of photography such as darkroom, techniques, printing processes, and photographic processes. May be repeated when topics vary. Prerequisite: IT 2304.

ART 3320 Ancient and Medieval Art (3-0). A survey of the art and architecture of the Ancient and/or Medieval periods. This course may focus on a particular subject or topic of an Ancient or Medieval art, including but not limited to Ancient Near Eastern, Egyptian, Greco-Roman, Early Christian, Byzantine, Islamic, Romanesque or Gothic Art. May be repeated for credit as the topic varies.

ART 3321 Renaissance Art (3-0). A survey of the art and architecture of the Renaissance. This course may focus on a particular subject or topic of Renaissance Art, including, but not limited to, Early Renaissance, Italian Renaissance and Northern Renaissance Art. May be repeated for credit as the topic varies.

ART 3322 Baroque Art (3-0). A survey of the art and architecture of the Baroque Period. This course may focus on a particular subject or topic of Baroque Art, including, but not limited to Spanish, French, Italian and Dutch Baroque Art. May be repeated for credit as the topic varies.

ART 3323 18th and 19th Century Art (3-0). A survey of the art and architecture of the 18th and 19th centuries. This course may focus on a particular subject or topic of art of the 18th and 19th centuries, including but not limited to, the Rococo, Neoclassicism, the Art of the Academy, Romanticism, French Realism and Impressionism. May be repeated for credit as the topic varies.

ART 3326 Jewelry (1-4). Basic techniques in working with the process for creating jewelry, hollowware, and small sculpture.

ART 4301 Advanced Studio Concentration I (2-4). Advanced studio art specialization in subject area; i.e., drawing and painting, ceramics, sculpture, printmaking, and in exceptional cases, art education or design and advertising art. These classes develop formal competence in the technical mastery of materials. Comprehensive compositional and formal skills, expressive characteristics in the visualization of ideas and innovative formal considerations. Prerequisite: ART 3301.

ART 4302 Advanced Studio Concentration II (2-4). Advanced investigation into a studio art subject area; i.e., drawing and painting, ceramics, sculpture, printmaking, and in exceptional cases, art education or design and advertising art. These classes develop formal competence in the technical mastery of materials, comprehensive compositional and formal skills, expressive characteristics in the visualization of ideas and innovative formal considerations. A formal proposal for the development of a senior capstone exhibition is developed in this class before the student enters exhibition. The course may be repeated for credit two times in an area of specialization. Prerequisite: ART 4301 and written proposal.

ART 4303 Capstone Exhibition (2-4). Students will complete the project proposed in the last semester of ART 4302. This course is to be taken as the final course for the Bachelor of Arts, and students may receive an I until the exhibition is completed. Prerequisite: 12 hours of studio specialization.
**ART 5301 Curriculum Enrichment (1-4).** Seminar in the problems unique to university teaching problems. Students meet as a group to do peer review and professional practices and also work independently with a selected instructor in a class specific to their discipline. Prerequisite: must have passed undergraduate class in same area of specialization or permission of instructor.

**ART 5303 Individual Research Problems (1-4).** Designed for students who are prepared to do research within a visual arts specialization area. The course may be repeated for credit up to four times with number designate for area of specialization. Prerequisites: must have passed upper level undergraduate class in the same area of specialization.

**ART 5304 Graduate Art Studio I (2-4).** Designed for students who are prepared to do work in any visual arts areas of specialization. The course may be repeated for credit up to four times with letter number designate for area of specialization. Prerequisite: Must have passed upper level class in same area of specialization.

**ART 5305 Master’s Exhibition (2-4).** Students will complete the project proposed in the last semester of ART 5304. This course is to be taken as the final course for the Master of Arts, and students may receive an I until the exhibition is completed. Prerequisite: 12 hours of 5304 in a studio specialization

**ART 5306 Art History (3-0).** Study of the visual arts of the world. The course may be repeated for credit where topic varies.

**ART 5307 Contemporary Art History (3-0).** A survey of the visual arts of the world with emphasis on the development of architecture, sculpture, painting and the minor arts in the Twentieth Century.

**ART 6301 Thesis Proposal (0-6).** Satisfactory completion of this class will result in an acceptable proposal for an art research thesis presented to the graduate committee. A student will normally register for this course after the second semester of graduate work in art history. The student should only enroll in this class when the committee members are available to work with them and the library or other research facilities are available for their use.

**ART 6302 Thesis Defense (0-6).** The student will enroll in this course each semester or summer term when the committee members are available to work with them and the library or other research facilities are available for their use. Satisfactory completion of this course will result in the completed thesis presented to the committee, accepted by the Dean of the College of Arts and Sciences and filed in the office of the Provost and Vice President for Academic and Student Affairs.

**ART COMPUTER (ARTC)**

**ARTC 2331 Introduction to Animation (3-3).** This course will introduce students to traditional animation techniques by using Toon 21 Boom’s Animate software and by studying notable historic examples of animation. Basic animation principles will be taught via presentations and reinforced through many practical exercises.

**ARTC 3332 Advanced Two-Dimensional Imaging (3-3).** This is a course in advanced digital imaging, including creation of original digital matte painting, illustration, and photo manipulation for print, gaming, and art applications. Students will work in a variety of industry-standard programs, including Photoshop and illustrator. Prerequisite: ARTC 2331.
ARTC 3334 Introduction to Maya (3-3). This course introduces students to the techniques and concepts used to create 3-dimensional graphics using Autodesk’s Maya. Students will learn how to build, light, and animate 3-dimensional objects for use in gaming and animation.

ARTC 3340 Advanced Animation (3-3). This course is a further study of frame-by-frame animation where students continue to develop their skills through examples and projects. Prerequisite: ARTC 2331.

ARTC 4303 Advanced Maya (3-3). This course is the further study of Maya to create 3-dimensional graphics. Students will refine the creation, lighting, texture, and animation of their 3-D objects. Prerequisite: ARTC 3334.

ASTRONOMY (ASTR)
ASTR 1103 (ASTR 1103) Stars and Galaxies Laboratory (0-2). Laboratory includes instruction in the university planetarium as well as telescopic observations.

ASTR 1104 (ASTR 1104) Solar System Laboratory (0-2). Laboratory includes observations of the night sky and solar objects with various university telescope systems.

ASTR 1303 (ASTR 1303) Stars and Galaxies (3-0). A descriptive, non-mathematical course that deals mainly with stellar and galactic astronomy, but begins with a brief survey of the solar system. Emphasis is on the study of properties of stars, star clusters, nebulae, interstellar gas and dust, the Milky Way galaxy, and exterior galaxies.

ASTR 1304 (ASTR 1304) Solar System (3-0). A descriptive, non-mathematical course that deals mainly with the solar system and its components. Emphasis is on the study of the celestial sphere, the history of astronomy, motions in the heavens, and the survey of planets.

BIOLOGY (BIOL)
BIOL 1101 Freshman Seminar (1-0). Seminar course designed to introduce students to the faculty, facilities, and programs within the Biological, Geological, and Physical Sciences. Course is also intended to introduce students to the essential study skills and techniques needed for a successful career in the sciences.

BIOL 1111 (BIOL 1111) General Botany Lab (0-2). Laboratory activities will reinforce fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi.

BIOL 1113 (BIOL 1113) General Zoology Lab (0-2). Laboratory activities will reinforce fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology.

BIOL 1301 Medical Terminology (3-0). This course is intended to introduce students to the importance of the medical terminology in order to properly use it in a medical environment. This goal will be addressed through an examination of the terminology of the human body, starting with the general terms and then specializing on the various systems of the body, including the integument, muscular, skeletal, cardiovascular, digestive, endocrine, lymphatic, respiratory, reproductive, and urinary. Combined with on-line resources, students will acquire
an understanding of how medical terms should be used, pronounced, and the meaning behind these terms.

**BIOL 1311 (BIOL 1311) General Botany (3-0).** A general survey of the plant kingdom which considers the fundamentals of biological facts, laws, and principles as they apply to plants. Structure and functions of the organs of representative plants will be considered.

**BIOL 1313 (BIOL 1313) General Zoology (3-0).** A general survey of the animal kingdom which considers the fundamentals of biological facts, laws, and principles as they apply to animals. The structure and functions of the organs and systems of representative animals will be covered.

**BIOL 2100 Independent Study/Research (0-3).** Independent study or research of a topic in biology with supervision by a biology faculty member. This course may be repeated if topic varies. Prerequisite: General Botany or General Zoology, or consent of instructor.

**BIOL 2200 Independent Study/Research (0-6).** Independent study or research of a topic in biology with supervision by a biology faculty member. This course may be repeated if topic varies. Prerequisite: General Botany or General Zoology, or consent of instructor.

**BIOL 2300 Independent Study/Research (0-9).** Independent study or research of a topic in biology with supervision by a biology faculty member. This course may be repeated if topic varies. Prerequisite: General Botany or General Zoology, or consent of instructor.

**BIOL 2320 Special Topics (3-0).** A course offering selected topics in biology. This course may be repeated if topic varies. Prerequisite: General Botany or General Zoology, or consent of instructor.

**BIOL 2401 (BIOL 2401) Anatomy and Physiology I (3-2).** Study of the structure and function of the integumentary, skeletal, muscular, and nervous systems. Also focuses on basic cellular physiology and how it applies to various systems of the body. This course will involve the dissection of mammalian material. Course is intended for pre-nursing, pre-medical, pre-optometry, pre-veterinary, other pre-health professionals, and biology majors. Prerequisite: General Zoology.

**BIOL 2402 (BIOL 2402) Anatomy and Physiology II (3-2).** Study of the structure and function of the cardiovascular, respiratory, and digestive, urinary, immune, endocrine, and reproductive systems. This course will involve the dissection of mammalian material. Course is intended for pre-nursing, pre-medical, pre-optometry, pre-veterinary, other pre-health professionals, and biology majors. Prerequisite: General Zoology and Human Anatomy and Physiology I or by permission of instructor.

**BIOL 2404 (BIOL 2404) Anatomy and Physiology (3-2).** Basic structure and function of human systems, including: skeletal, muscular, cardiovascular, respiratory, nervous, digestive, and urinary systems. Laboratory emphasis on anatomy and lecture emphasis on physiology. Recommended for Kinesiology and pre-vocational nursing students. This course will not count toward credit in a Biology major or minor. Prerequisite: General Zoology or permission of instructor.

**BIOL 2405 Plants and People (3-2).** A survey of plants and plant products that have major uses in human life. Such uses include food, fiber, medicines, religious sacraments, poisons,
stimulants, inebriants, oils, perfumes, dyes, spices, and beverages. Examples from Trans-Pecos Texas will be discussed, including forages, toxic plants and invasive species. Prerequisite: General Botany or equivalent.

**Biol 2406 (Biol 2406) Environmental Biology (3-2).** An introduction to the biological effect of the human activities on the environment. This course emphasizes water, soil, and air pollution as well as other current ecological concerns. The course serves as one of the introductory courses in environmental science. The laboratory will focus on the EPA Standards Method used in field and laboratory analysis of environmental samples. Prerequisite: Consent of instructor.

**Biol 2420 Special Topics with Laboratory (3-2).** This is a course offering selected topics in biology with laboratory. It may be repeated if topic varies. Prerequisite: General Botany or General Zoology or permission of instructor.

**Biol 2421 (Biol 2421) Microbiology for Science Majors (3-2).** Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. Laboratory activities will reinforce principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. This course is designed for biology majors and minors, pre-nursing, pre-dental, and pre-veterinary students. Prerequisite: Chemistry 1311 and 1111, either Biology 1311 and 1111 or Biology 1313 and 1113.

**Biol 3301 Human Nutrition (3-0).** Scientific principles of human nutrition. Emphasis on nutrients, metabolism, and factors affecting utilization in the human body throughout the life cycle. Includes influence of food selection on health and evaluation of diets.

**Biol 3302 Unseen Life on Earth (3-0).** A lecture course examining microbial functions and how microorganisms affect everything from medicine to environmental issues to global politics. Students gain an enhanced appreciation of the field of microbiology by studying the work of scientists and other experts in the field. Prerequisite: General Botany or General Zoology.

**Biol 3303 Sciences in Cinema and Television (3-0).** A lecture course examining the scientific content or lack thereof in classic and current films. Films with a scientific theme will be viewed and the merits of the scientific content will be discussed. Students will gain an understanding and appreciation of how science is portrayed to the viewing public by the film and television industries and can be used as a persuasive tool for political maneuvering. Prerequisite: General Botany or General Zoology.

**Biol 3305 Women in Science (3-0).** Explores the roles and contributions that past and present women have made within the sciences, including: chemistry, earth and physical sciences, biology, and natural resource management.

**Biol 3306 Genetics (3-0).** A comprehensive introduction to four main areas of modern genetics: Mendelian genetics, cytogenesis, molecular genetics, and population genetics. The historical and philosophical basis for these areas will be dealt with using plant and animal studies. Prerequisite: General Botany or General Zoology or equivalent.

**Biol 3307 Animal Behavior (3-0).** The study of feeding, defense, animal orientation, instinctive behavior, learning, communication, social, and sexual behavior with emphasis on evolutionary and ecological relationships. Prerequisite: General Zoology or equivalent.
**BIOL 3403 Parasitology (3-2).** A study of the biology, morphology, and ecology of parasitic organisms as they relate to various host-parasite relationships and diseases in animals and man. The diagnosis, pathology, treatment and prevention of parasitism will be discussed. Postmortem examinations and treatment of animals will be performed in labs as available. Prerequisite: General Zoology or equivalent.

**BIOL 3405 Agrostology (3-2).** The classification, phylogeny, natural history, and literature of the important range grasses of the Trans-Pecos region of Texas. Collection and field trips. Prerequisite: General Botany or equivalent.

**BIOL 3408 Invertebrate Zoology (3-2).** The study of the life history, morphology, taxonomy, phylogeny, and ecology of invertebrate organisms. Prerequisite: General Zoology or equivalent.

**BIOL 3601 General Entomology (4-4).** A comprehensive introduction to the field of entomology, including functional anatomy, physiology, behavior, ecology, and control of insects. Laboratory section emphasizes taxonomy. Collection of insects is required. Prerequisites: General Zoology or equivalent.

**BIOL 3602 Plant Taxonomy (4-4).** The taxonomic study of vascular plants, emphasizing the flowering plants of Trans-Pecos Texas. Included are traditional aspects of plant classification, phylogeny, herbarium techniques, collections, and field trips. Usually offered only in summer. Prerequisite: General Botany or equivalent.

**BIOL 4101 Biology Senior Review (1-0).** Pertinent topics in biology. Required for all majors and in order to be eligible for teaching certification. To be taken during last long semester before graduation. Prerequisite: Completion of, or current enrollment in, all required departmental courses (e.g., Genetics and Cell Biology).

**BIOL 4102 Individual Studies (1-0).** Individual study of selected topics in biological literature or Field Biology.

**BIOL 4202 Individual Studies (2-0).** Individual study of selected topics in biological literature or Field Biology.

**BIOL 4300 Individual Studies (3-0).** Independent study of selected topics in Biology.

**BIOL 4301 Cell Biology (3-0).** A study of the particulate morphology and basic physiology of the cell and cell organelles, including basic facts, concepts, and problems in modern cellular biology. Prerequisite: General Botany and General Zoology or equivalent.

**BIOL 4302 Recreational Diseases (3-0).** A lecture course examining the infections and infectious agents we may contact in leisure activities during exposure to vacation climates, pets, recreational activities, and exotic cuisine. Prerequisite: Introduction to Microbiology or permission of instructor.

**BIOL 4305 Special Topics (3-0).** A course dealing with selected and timely topics in biology such as Animal Physiology, Co-evolution, Aquatic Plants, or many other potential subjects. May be repeated when topic varies. Prerequisite: General Botany and General Zoology or equivalent.
BIOL 4307 Capstone Research (3-0). A capstone research project – undergraduate thesis designed to culminate the undergraduate experience in the Biology program. Course is designed to have students coordinate research activities with a mentor, conduct a study, write up results in a publishable format according to the appropriate discipline, and present findings to a scientific audience. Prerequisite, if any: Biology major of Junior or Senior classification.

BIOL 4401 Molecular Biotechnology (2-4). Molecular biotechnology applies the principles of recombinant DNA technology (genetic engineering, gene cloning) to the development of agricultural and commercial products. The methods of recombinant DNA technology, molecular diagnostic systems, cloning and development of genetically modified organisms (GMO) will be discussed. Ethical issues surrounding these techniques will be addressed. Animal, plant, bacteria, and examples will be discussed. Laboratory will focus on DNA purification virus techniques, gene cloning and amplification, and DNA analysis using RFLP and PCR techniques. Prerequisite: Microbiology and General Chemistry.

BIOL 4402 Ichthology (3-2). The systematic, phylogeny, natural history, and economic importance of the fishes of the world with emphasis on those found in the fresh and salt waters of Texas. This course also serves as an introduction to Vertebrate Zoology. Prerequisite: General Zoology or equivalent.

BIOL 4403 Herpetology (3-2). The systematic, natural history, and phylogeny of the amphibians and reptiles with emphasis on those found in the American Southwest. Prerequisite: General Zoology or equivalent.

BIOL 4404 Ornithology (3-2). The systematic, phylogeny, natural history and field study of birds with emphasis on those found in the Trans-Pecos region of Texas. Prerequisite: General Zoology or equivalent.

BIOL 4405 Plant Physiology (3-2). The study of the life processes of plants and the physical and chemical phenomena of plant cells, and their relationship to the environment. Studies of photosynthesis, transportation, translocation, nitrogen fixation, and hormones will be included with emphasis on vascular plants. Prerequisite: General Botany.

BIOL 4406 Principles of Ecology (3-2). A study of the interrelationships of plants and animals with the environment. To include, but not limited to, energy flow, community and ecosystem development, ecological classification, nutrient cycling, sampling and censusing techniques, limiting factors, predator-prey relationships, and aspects of speciation. Prerequisite: General Botany or General Zoology or equivalent.

BIOL 4408 Morphology of the Vascular Plants (3-2). The study of the vascular plants, including life cycles, life histories, and consideration of evolutionary trends. Field trip. Prerequisite: General Botany or equivalent.

BIOL 4409 Mammalogy (3-2). The systematic, natural history, phylogeny, and economic relations of mammals of the world with particular emphasis on mammals native to the Trans-Pecos region of Texas. Museum technique and field work will be stressed. Prerequisite: 12 hours in Biology, including General Zoology or equivalent.

BIOL 4410 Medical and Veterinary Entomology (3-2). A comprehensive introduction to the insects and other arthropods of medical and veterinary importance. Lectures emphasize life-cycles, transmission of disease, and control practices. Laboratory studies emphasize taxonomy.
and techniques. Prerequisite: General Zoology or General Entomology or equivalent.

**BIOL 4411 Microbial Ecology (3-2).** A study of the ecological roles of microorganisms. Examples from freshwater, marine, terrestrial and other ecosystems will be used to illustrate the activities and importance of microorganisms in these habitats. Prerequisite: Introduction to Microbiology recommended.

**BIOL 4412 Medical/Veterinary Microbiology (3-2).** A comprehensive introduction to the microbiology of pathogenic organisms in the medical and veterinary microbiology, the immune response and pathogenesis, principles of laboratory diagnosis, bacteriology, virology, mycology, and parasitology. Laboratory will focus on specimen collection and diagnostic methods. Prerequisite: Introduction to Microbiology or consent of instructor.

**BIOL 4413 Collections Management (3-2).** Learn the techniques and skills required to operate, curate, and manage a variety of biological collections. This will include proper handling, preservation, organization, and accessioning techniques for both zoological and botanical materials. The legal side of collection maintenance will be covered, in addition to practical applications of museums in research. Prerequisite: General Botany or General Zoology.

**BIOL 4420 Special Topics with Laboratory (3-2).** A course offering selected topics in biology with laboratory. This course may be repeated if topic varies. Prerequisite: General Botany or General Zoology, or by permission of instructor.

**BIOL 4601 Desert Ecology (4-4).** A course dealing with the biology of North American deserts, primarily the Chihuahuan Desert. Offered in summer session, several field trips including multi-day. Prerequisite: General Botany and General Zoology or permission of instructor.

**BIOL 4607 Special Topics Field Studies (4-4).** A course offering selected topics in Biology that consist of field work. This course may be repeated if topic varies. Prerequisite: General Botany or General Zoology, or by permission of the instructor.

**BIOL 5100 Individual Studies (1-0).** Independent study of selected topics in biology.

**BIOL 5101 Graduate Seminar (1-0).** Discussion of pertinent topics in biology, with emphasis changing depending upon instructor.

**BIOL 5200 Individual Studies (2-0).** Independent study of selected topics in biology.

**BIOL 5301 Cacti and Succulents of the Southwest (2-2).** A study of the life cycles, life histories, and environment with special attention to survival and adaption of the cacti and succulents of the Southwest and in particular those in the Trans-Pecos region.

**BIOL 5302 Molecular Techniques (1-4).** Primarily a laboratory course designed to provide skills in the purification, amplification, restriction endonuclease analysis, and sequencing of DNA. Prerequisite: Concurrent enrollment in Biology 5315.

**BIOL 5305 Techniques of Scientific Research (3-0).** Style and format in manuscript, proposal and thesis preparation. Materials and methods of scientific investigation and science education. Orientation to graduate level and professional studies. Required in first semester or at first opportunity thereafter.
**BIOL 5307 Special Topics (3-0).** A course dealing with selected and timely topics in biology. May be repeated when topic varies.

**BIOL 5310 Applied Entomology (3-0).** Introduction to principles and theories of insect control strategies. Includes concepts of chemical, cultural, and physical controls, and biological and integrated pest management. Prerequisite: General Entomology or equivalent.

**BIOL 5311 Evolution (3-0).** The study of the theory and current concepts of evolution, including: natural selection, gene flow, founder effect, and speciation.

**BIOL 5312 Graduate Research (0-9).** Qualified students may conduct individual research under the direction and supervision of the staff. May be repeated once when topic varies.

**BIOL 5314 Advanced Mammalogy (2-2).** Current issues and debates in the mammalogy literature pertaining to systematics, evolution, ecology, and population dynamics with emphasis on Southwestern United States.

**BIOL 5315 Molecular Biology (2-2).** A course covering the theory and principles of molecular biology. With an emphasis on vector development and use, students will learn laboratory skills in recombinant DNA technology using a prokaryotic system. Prerequisite: Concurrent enrollment in Biology 5302.

**BIOL 5316 Biostatistical Analysis I (2-2).** An introduction to statistical concepts and models applied to agricultural and biological systems. The course introduces the scientific method, inferential theory, data types, descriptive statistics, goodness of fit, contingency tables, the normal distribution and one- and two-sample hypothesis testing. Emphasis will be placed on data analysis and interpretation using computer statistical applications. Required for MS Thesis Plan I option. Offered Fall.

**BIOL 5317 Biostatistical Analysis II (2-2).** An advanced course in statistical concepts and models applied to agricultural and biological systems. The course will cover experimental designs, paired-sample hypotheses, multi-sample hypotheses (ANOVA), multiple comparisons, factorial and nested ANOVA, data transformations, linear regression and correlation, multiple regression and correlation, polynomial regression and the binomial distribution. Emphasis will be placed on data analysis and interpretation using computer statistical applications. Offered Spring.

**BIOL 5318 Toxic and Medicinal Plants (3-0).** A graduate-level survey of toxic and medicinal plants, including their identification & classification, clinical signs of intoxication, toxic principle, mechanism of action, and treatment (if any). Emphasis is on toxic plants of West Texas and major medicinal plants of historical significance.

**BIOL 5319 Composites and Legumes (3-0).** This course includes an in depth treatment of two of the most important plant families; the Compositae (Asteraceae) and the Leguminosae (Fabaceae), including a historical consideration of specialists in these families and their contributions to botany and current trends in the systematics, evolution, and biogeography of these groups of plants.

**BIOL 5403 Molecular and Classical Cytogenetics (2-4).** Chromosome structure, aberrations and evolution, the origin and significance from classical and molecular points of view.
Prerequisite: Permission of instructor.

**BIOL 5404 Systematics (3-2).** Study of classical and contemporary philosophy approaches, and techniques having to do with the analysis and understanding of evolutionary relationships. Examples from botanical or zoological literature may be emphasized depending upon instructor.

**BIOL 5406 Phytochemistry (3-2).** The study of chemical constituents of plants, including: flavonoids, alkaloids, terpenoids, isozymes, and cpDNA.

**BIOL 5407 Special Topics with Laboratory (3-2).** A course dealing with selected and timely topics in biology with laboratory. This course may be repeated if topic varies.

**BIOL 5601 Field Botany (3-6).** Studies of plants in their natural environments including aspects such as: taxonomy; morphology; ecology; biogeography; and/or phylogeny. Revolving emphasis (e.g., woody plants, monocots, or composites) and a flexible program according to demand. Offered in summer session, several field trips including multi-day.

**BIOL 5602 Field Zoology (3-6).** A course devoted primarily to acquainting the student with animal life in its natural habitat. Collecting, museum techniques, systematic and ecological implications will be stressed.

**BIOL 5603 Environmental Microbiology (3-6).** A course covering the principles and applications of microbiology in the natural environment of the desert southwest. The environmental impact of microorganisms, aspects of pollution, waste treatment, biodegradation of environmental contaminants, and nutrient cycling will be examined.

**BIOL 5604 Advanced Microbial Ecology (3-6).** A course studying pathogenic and non-pathogenic microorganisms in natural environments: diversity, distribution, energetic, and growth of heterotrophic and autotrophic microbes in oxic and anoxic habitats. Roles of microbial populations and communities in biogeochemical cycling, ecosystem functioning, landscapes, industrial, agricultural, and environmental applications will be investigated. The course will include lab, field-oriented exercises and field trips that teach an introduction to research methods. Advanced microscopic, culturing, molecular, and computational techniques will be used. Prerequisites: Introduction to Microbiology, General Chemistry I, and General Zoology or equivalent.

**BIOL 5607 Special Topics Graduate Field Studies (3-6).** A course offering selected topics in biology that consist of field work. This course may be repeated if topic varies.

**BIOL 6040 Thesis Research (0-18).** The student will enroll in this course after earning credit for BIOL 6301 (Thesis Prospectus), each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made. The course is variable for 1 to 9 credit hours, and may be repeated with approval of advisor. Credit hours earned may not be applied towards the 30 or 36 hours required for the degree. Prerequisites: Master of Science students that have been admitted to candidacy, including earned credit for Thesis Prospectus.

**BIOL 6301 Thesis Prospectus (0-6).** Satisfactory completion of this course requires an acceptable prospectus presented to the Graduate Committee. The student will normally register for this class no earlier than the second semester of graduate study. The prospectus is expected to be completed promptly, as this course may not be taken more than two long
semesters.

**BIOL 6302 Thesis Defense (0-6).** The student will enroll in this course at the time of the defense and after earning credit for BIOL 6301 (Thesis Prospectus). Satisfactory completion of this course will result in the completed thesis presented to the Graduate Committee, accepted by the Dean of the School, the Dean of the Graduate School, and filed in the Office of the Provost and Vice President for Academic Affairs. Prerequisite: BIOL 6301.

**CHEMISTRY (CHEM)**

**CHEM 1111 (CHEM 1111) General Chemistry I Lab (0-2).** This course consists of basic laboratory experiments such as recrystallization, crystal growing, redox reactions, metathesis reactions, basic organic chemistry, chromatography, and titrations to support the theoretical principles presented in CHEM 1311. This course introduces students to the scientific method, experimental design, data collection and analysis, and preparation of laboratory reports. Prerequisite: MATH 1314 or equivalent. Corequisite: CHEM 1311.

**CHEM 1112 (CHEM 1112) General Chemistry II Lab (0-2).** This course consists of laboratory experiments such as enthalpy of solutions, heat of reactions, polymerization, chemical kinetics, acid-base reactions, pH titrations, solubility products and qualitative analysis of ions to support the theoretical principles presented in CHEM 1312. Prerequisites: CHEM 1311 and CHEM 1111. Corequisite: CHEM 1312.

**CHEM 1311 (CHEM 1311) General Chemistry I (3-0).** Students will study matter, atomic theory, atomic structure, concept of moles, chemical units of concentration, concept of balanced chemical reaction equation, chemical bonding, and kinetic molecular theory of gases, periodic table of the elements, chemical bonding, drawing Lewis structures, molecular geometry and hybridization of atomic orbitals. Prerequisite: MATH 1314 or equivalent. Advanced placement in CHEM 1311 may be given on successful completion of advanced placement examination.

**CHEM 1312 (CHEM 1312) General Chemistry II (3-0).** Students will study colligative properties of solutions, chemical kinetics, chemical equilibrium, acid-base systems including the concept of pH, thermodynamics, energy relationships in chemistry reactions, detailed redox reactions and electrochemistry. Prerequisite: CHEM 1311 and CHEM 1111.

**CHEM 2401 (CHEM 2401) Analytical Chemistry I (2-4).** This course includes chemical equilibria, acid-base equilibria, buffers, solubility equilibria, and volumetric methods of analysis. Prerequisite: CHEM 1312 and CHEM 1112.

**CHEM 2402 Inorganic Chemistry I (3-3).** Student will undertake an in depth study of atomic structure, crystalline solid state, wave mechanical principles, chemical bonds, comparison of valence bond and molecular bond theories and inorganic nomenclature. Prerequisite: CHEM 2401.

**CHEM 3402 Forensic Chemistry (3-1).** This laboratory course is designed to introduce students interested in law enforcement professions to methodologies such as filtration, recrystallization, titration, pH determination, and chemical reactions. Students will use the optical microscope for testing pieces of evidence, develop and lift latent finger prints, perform micro-testing of drugs, and utilize a novel technique developed at SRSU for the preparation of hair fibers for SEM analysis.

**CHEM 3407 Organic Chemistry I (3-3).** This course is a thorough study of the chemistry of
aliphatic and aromatic hydrocarbons and their derivatives. Special emphasis on nomenclature, stereochemistry, reaction mechanisms and fundamental principles of organic chemistry. Nuclear magnetic spectroscopy and mass spectroscopy will be introduced. Prerequisites: CHEM 1312 and CHEM 1112 or permission of instructor.

CHEM 3408 Organic Chemistry II (3-3). The study of aromatic heterocyclic and unsaturated compounds. The chemistry of aldehydes, ketones, ethers, alcohols, carboxylic acids, amines and carbonyl reactions will be discussed in detail. Prerequisite: CHEM 3407.

CHEM 3409 Inorganic Chemistry II (3-3). Students will undertake an in depth study of organometallic chemistry, chemistry of main group elements and coordination compounds. Prerequisite: CHEM 2402.

CHEM 4300 Undergraduate Research (3-0). Individual research or studies on topics of general interest encouraged. May be repeated once for credit. (On demand)

CHEM 4301 Biochemistry I (3-0). Students will study the structure and function of amino acids, proteins, carbohydrates, lipids, nucleotides and nucleic acids. This course also introduces biological membranes, membrane transport, enzyme kinetics, enzyme regulation, DNA replication, transcription and RNA translation. Prerequisite: CHEM 3407.

CHEM 4302 Biochemistry II (3-0). Students will study major metabolic pathways of the cell: glycolysis, pentose phosphate pathway, gluconeogenesis, glycogen metabolism, citric acid cycle, electron transport, oxidative phosphorylation, photosynthesis, lipid, amino acid and nucleotide metabolism. Students will gain a greater understanding of the chemistry of key enzymes and coenzymes, genetic diseases related to metabolism and the mechanisms of enzyme regulation. Recombinant DNA and other genetic methods will also be included. Prerequisite: CHEM 4301

CHEM 4311 Special Topics (3-0). A course covering various topics in Chemistry. May be repeated for credit when topic varies.

CHEM 4401 Analytical Chemistry II (3-3). This course is an interdisciplinary approach to the theory, application and use of modern analytical equipment including a scanning electron microscope (SEM), an X-ray fluorescence (XRF) analyzer, an X-ray diffractometer (XRD), and Atomic Absorption (AA) spectrophotometer and an ion chromatography (IC) unit. Prerequisite: CHEM 2401.

CHEM 4402 Special Problems (3-3). Individual directed readings and conference on special topics in Chemistry. A lecture or seminar format may be used when sufficient interest exists in a topic.

CHEM 4406 Physical Chemistry I (3-3). Students will undertake an in-depth study of gaseous systems, thermodynamics, phase equilibria, colligative properties of solutions, and surface chemistry. Prerequisite: CHEM 2401, PHYS 2326 and PHYS 2126.

CHEM 4407 Physical Chemistry II (3-3). Students will undertake an in-depth study of statistical thermodynamics, molecular reaction dynamics, reaction kinetics, electrochemistry, and homogenous and heterogeneous equilibrium. Prerequisite: CHEM 4406.

CHEM 4509 Biochemistry I (5-0). The chemistry of the living cell. A thorough examination of
biomolecules, metabolic cycles and biosynthetic pathways. Prerequisites: CHEM 3407

COMMUNICATION (COMM)

COMM 1101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

COMM 1307 (COMM 1307) Introduction to Mass Communication (3-0). A survey and analysis of the history, regulations, scope, social implications, and problems of electronic mass media, including radio, television and news media.

COMM 1310 Fundamentals of Communication (3-0). Introductory communication course focusing on oral communication theory and skills needed by game and communication designers. Course emphasizes team work utilizing the SCRUM technique, interviewing, concept pitching and oral reports that would be found in the gaming and communication design industries.

COMM 1311 (SPCH 1311) Introduction to Speech Communication (3-0). Theory and practice of speech communication behavior in interpersonal, small group, and public communication situations.

COMM 1318 (SPCH 1318) Interpersonal Communication (3-0). An introductory course designed to raise student awareness of the complexity and power of the communication process in daily life; to provide students with personally relevant concepts of interpersonal communication; and to help students develop their interpersonal communication skills. Prerequisite: COMM 1311

COMM 1320 (SPCH 1321) Business and Professional Communication (3-0). This course focuses on multiple modes of communication in business, government, industrial, and not-for-profit or service organizations ranging from routine messages, memos, and email to letters and professional presentations. Course highlights persuasion as a key component of all business and professional messages. It will include an analysis of the organizational structures of the workplace as well as job-oriented interviewing from the standpoint of the employer and employees. Meets oral communication requirement.

COMM 1325 Introduction to Film Studies (3-0). This course focuses on viewing films as literature and promotes understanding the 'story within the story'. It serves as an introductory course in film theory and criticism with some global cinema perspectives.

COMM 1330 Introduction to Strategic Communication (3-0). This course will explore the history of public relations and strategic communications in American society with particular emphasis on print media, broadcasting, advertising, and the internet. Basic theories, concepts, and approaches to strategic communication will be introduced, as well as discussions of the professional and ethical demands on practitioners.

COMM 1335 Introduction to Communication Studies (3-0). An introductory survey of the discipline of communication studies and its major fields. Course will cover a broad range of communication concepts and their application, such as communication in the workplace, effectively using social media, and improving interpersonal relationships. New and prospective majors will be exposed to the four emphasis areas of the program and students will also be exposed to the career opportunities associated with communication studies.
COMM 2101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

COMM 2306 Basic Video Production (3-1). Theory and practice of video production and television station operation. Lab practice in studio operations, scriptwriting, fundamental production skills (cameras, microphone, lighting, editing, etc.), studio and field assignments. Includes one-hour production lab.

COMM 2307 (COMM 2303) Basic Radio (3-1). Theory and practice of audio production and radio station operation. Lab practice in studio operations, scriptwriting, fundamental production skills (microphone, recording, editing, etc.), studio and field assignments. Includes one-hour production lab.

COMM 2308 Web Page Design (1-2). A computer based course in which students learn to design, construct, and evaluate web pages. Will include the use of web page software.

COMM 2309 Communication and Sport (3-0). This course surveys several fields within the discipline of communication studies as they approach sport as a context. The course includes discussions of sport across a wide range of topics including gender, crisis communication, parent-child interactions, race and ethnicity, performing identity, commodification, sport fan cultures, and more. Prerequisite: COMM 1311

COMM 2333 (SPCH 2333) Discussion & Small Group Communication (3-0). Emphasis on effective group interaction in task-oriented situations. Course will focus on elements of small group structures and communication styles which influence the problem-solving process. Includes small group participation and analysis of group communication.

COMM 2335 Visual Communication (2-1). This course is an introduction to visual communication using perceptual, physiological, psychological, cultural and semiotic concepts. The course focuses on visual awareness and processing as key elements in effective communication. This course studies the principles, theories, and language of visual communication, emphasizing the evaluation and use of images, both mediated and face-to-face. Prerequisite: ENG 1301

COMM 3101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

COMM 3302 Broadcast News Gathering (3-1). Theory and practice of electronic journalism. Lab practice in writing and editing new copy, studio and field operations, reporting, preparation of newscasts and stories, studio and field assignments. Includes one-hour production lab.

COMM 3303 Radio Workshop (1-4). Application of basic audio skills in radio station setting. Students will produce individual and group projects/productions. Emphasis will be placed on the creative use of the audio medium. Prerequisite: Communication 2307 or instructor's permission. Course may be repeated for credit but not more than once for credit toward Communication major or minor.

COMM 3304 Critical Reasoning (3-0). This course is designed to provide an introduction
to ideas about rationality and criticism. Through the study of the practical reasoning process, students will learn how to articulate the stages through which actual arguments and discussions go. Class discussion and exercise assignments are used to explore the human transaction known as reasoning.

**COMM 3305 Mass Communication and Culture (3-0).** This course is designed to provide an introduction to the history and theories of mass communication for students majoring in communication and as a general education for students from other disciplines who seek to understand the processes and impact of mass communication. The history and cultural impact of individual media examined will include, print media, film, television, radio and news media.

**COMM 3307 Studies in Film (3-0).** Students will be exposed to classic methods of film analysis (e.g. historical, content, psychological, genre studies, liturgical, and cultural, et al.). Utilizing a combination of full length films and "film on film," students will gain an understanding of film and related mass media. Course may be repeated for credit when film topic changes (e.g. Women in Film; Minorities in Film; Family in Film; et al.).

**COMM 3308 Video Workshop (1-4).** This course is designed for students interested in applying basic television knowledge and skills to the production of individual and group video projects and productions. Emphasis will be placed on creative use of the video medium. Prerequisite: Communication 2306 or instructor's permission. Course may be repeated for credit but not more than once for credit toward Communication major or minor.

**COMM 3309 Family Communication (3-0).** The family unit is studied from a communication perspective, considering in-depth the communication processes within the family as well as the extent to which they affect and are affected by the interdependence of family members.

**COMM 3311 Gender Communication (3-0).** This course is designed to teach students how gender is socially constructed and sustained in cultural life. Students will be encouraged to expand their communication skills by utilizing styles historically associated with both genders, rather than a single gendered form of speech.

**COMM 3312 Advanced Web Page Workshop (0-3).** This course is designed for students interested in applying basic web page design knowledge and skills to the construction of individual and group projects. Emphasis will be placed on creative web page design and construction. Course meets university computer competency requirement. Prerequisite: COMM 2308 or instructor's permission. Course may be repeated for credit but not more than once for credit toward Communication major or minor.

**COMM 3313 Advanced Video Production (3-1).** Continued study of camera, lighting and sound techniques. Pre-production and post-production elements also included. Course will focus on producing program content to be aired on campus television station. Prerequisite: Communication 2306.

**COMM 3315 Organizational Communication (3-0).** This course provides an examination and exploration of applications of communication theories within the framework of an organization. Attention will be given to strategies for diagnosing communication problems and affecting change in communication behaviors through an analysis of organizational communication theories and methods and a study of organizational culture and communication patterns.
**COMM 3320 Principles of Public Relations (3-0).** A study of the principles and practices in the field of public relations with special emphasis on practical case study experiences. Prerequisite: CSAT 2323 Writing for Digital Media or COMM 1330 Intro to Strategic Communication

**COMM 4301 Persuasion (3-0).** This course focuses on our dual roles as producers and consumers of persuasive messages. Students will examine persuasion in a variety of texts and contexts, as well as examine persuasive elements in human interaction and behavior. Topics covered include characteristics such as expertise, trustworthiness, and likeability; the use of emotions such as fear and humor; and the sequencing of messages for maximum impact. The course explores how psychological theories about consistency, conformity, and reciprocity help us understand what is persuasive.

**COMM 4302 Communication Theory and Research (3-0).** This course covers a broad exploration of communication theory and research practices. The course introduces various theories of communication and research methods in and across communication contexts. Emphasis is placed on understanding human communication as a symbolic process that creates, maintains, and alters personal, social, and cultural identities.

**COMM 4303 Studies in Speech (3-0).** Directed individual study and practice in a selected area of speech. May be repeated for credit when topic varies.

**COMM 4304 Special Topics (3-0).** A course dealing with topics in speech communications. May be repeated for credit when topic varies.

**COMM 4305 Relational Communication (3-0).** This course examines social scientific research and theory on the role of communication in developing and maintaining interpersonal relationships. Nature of interpersonal communication, relationship change processes, interpersonal control through communication and personal communication networks.

**COMM 4307 Intercultural Communication (3-0).** An examination of the interpersonal dimensions of intercultural communication as it occurs in a variety of contexts. Topics include: international cultures, co-cultures, cultural contexts, verbal processes, nonverbal interaction, and ethical considerations for the future.

**COMM 4310 Senior Capstone (0-3).** The Senior Capstone is the culminating course in the Communication major sequence. Each Capstone is implemented by students with the help and encouragement of an academic advisor. Capstone experiences allow each student to demonstrate the capacity to bring information, skills, and ideas acquired from the major to bear on one significant project. It is aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired as communication majors as well as provide experiences for students to exhibit competent communication skills learned during their program of study in order to prepare for a career in communication.

**COMM 4315 Public Relations Campaigns (3-0).** A comprehensive study of case-method and campaign planning as they pertain to strategic communications in a modern society. Students learn the professional approach to the practice of strategic communication that includes all media print, electronic, Social Networking, and broadcast/radio and how to evaluate its creative strategy and media selection. Prerequisite: CSAT 2323

**COMM 5304 Speech Communication Workshop (1-4).** Advanced study and analysis of
speech communication performance areas. Course may be repeated for credit.

**COMM 5305 Individual Study in Speech Communication (3-0).** Individually guided research in speech communication. May be repeated for credit when topic varies.

**COMM 5307 Public Relations (3-0).** Graduate Public Relations is designed to acquaint public administrators and other professionals with the terms, theory and procedures associated with modern public relations efforts. Special emphasis will be placed on practical applications of PR techniques, including organizational analysis, resource preparation, and crisis management.

**COMM 5308 Nonverbal Communication (3-0).** The course is designated to provide student with an in-depth examination of the major theories, principles, and latest research findings regarding nonverbal communication and its role in the total communication process. Through assigned readings, class discussions, and research projects, this course will examine how different nonverbal communication codes function in interaction to influence the management of conversation, the impressions formed in interaction, the development and maintenance of relationships, and the process of social influence.

**COMM 5309 Organizational Communication (3-0).** This course provides the student with frameworks for thinking about how and why communication occurs at different levels of analysis in organizations, and how to recognize, analyze and improve different communication problems. Through assigned readings, class discussion, and research projects, this course will examine the nature of organizations communication; classical or organizational structure theories; behavioral and systems theories; sense-making theories; organizational climate and cultures and; information flow and communication networks.

**COMM 5310 Internet and Society (3-0).** Special courses on topics not included in the regular curriculum. May be repeated for credit with departmental approval.

**COMM 5311 Small Group Communication (3-0).** The aim of this course is to study the nature and dynamics of small groups focusing on communication research and theory as applied to the process of small group decision-making.

**COMM 5312 Oral Communication Course Development (3-0).** A course designed to prepare students to teach the basic communication course in higher education and other professional environments. The course covers course design, course evaluation, methodologies for skill development, and related topics. Provides theoretical and experiential knowledge about communication goals/objectives, teacher/student communication needs & expectations, reinforcement & feedback, climate & influence, and teacher/student communicator style, characteristics, and behavior.

**COMM 5313 Mass Communication Theory and Research (3-0).** This course is designed to explore the research and theory that attempt to explain the effect of mass communication on individuals and society. The course will primarily concentrate on the mass media of the last two centuries, considering how they have been shaped by society and how they have affected society by reviewing relevant theory and research.

**COMPUTER INFORMATION SYSTEMS (CIS)**

**CIS 3306 Special Topics (3-0).** A course designed for discussion of current issues and trends in computer information systems. May be repeated for credit as topics change.
CIS 3317 Electronic Commerce (3-0). Focuses on e-commerce from three perspectives: (1) customer-business; (2) business-business; and (3) intra-organization. The Internet, Intranet and Extranets, electronic data interchange (EDI), electronic payments systems, tax issues, and global policy will be investigated. Students will create or enhance a web page as part of the course requirements.

CIS 3320 Information Security and Disaster Recovery (3-0). Focuses on concepts and principles of system and data security. Issues covered include risks and vulnerabilities; policy formulation; controls and protection methods; database security; encryption; authentication technologies; host-based and network-based security issues; and issues of law and privacy. Discussions include firewall design and implementation; secure Internet and Intranet protocols; and techniques for responding to security breaches.

CIS 3323 Human and Computer Interaction (3-0). A course designed to introduce the student to the dynamic process of human-computer interactions. Key elements will focus on user interface, ease of use, speed, comfort level, and software design strategies.

CIS 3370 Systems Analysis and Design (3-0). Focuses on the overview of a systems development life cycles. Emphasis is on current system analysis, data flows, data structures, file design, input and output designs and program specifications. Discussion

COMPUTER SCIENCE (CS)

CS 1301 (COSC 1301) Introduction to Computing (2-2). A practical course designed to aid students in their further studies and their careers. This course covers the basics of microcomputer operating systems, electronic communications, word processing, and spreadsheets. Offered fall and spring.

CS 1309 (COSC 1309) Computer Science I (2-2). This course is a disciplined approach to problem-solving with structured techniques and representation of algorithms using pseudo-code and graphical tools. There will be discussions of methods for testing, evaluation, and documentation. Topics include data types; control structures; functions, structures, arrays, and file input/output; the mechanics of running, testing and debugging programs; introduction to programming; and introduction to the historical and social context of computing. Prerequisite: Students may concurrently enroll in Math 1314.

CS 1320 (COSC 1320) Computer Science II (2-2). Students are introduced to the fundamental concepts of object-oriented programming, including concepts and techniques of object-oriented programming. This course introduces students to objects, classes, constructors, methods, object inheritance, and polymorphism from a practical and hands-on approach. Prerequisite: CS 1309.

CS 2303 Individual Studies (3-0). Investigation of special topics in Computer Science, conducted on an individual basis. The course may be repeated with different topics.

CS 2305 Topics in Computer Languages (2-2). This course introduces the concepts of object-oriented design using a modern scripting programming language. The student will learn the syntax of the programming language and how to construct object classes. Programming applications will be drawn from a variety of commercial, technical, and scientific problem areas. Prerequisite: CS 1320


**CS 2306 Special Topics (3-0).** Discussion of selected topics in computer science suitable for lower division students. The course may be repeated with different topics. Offered when needed. Prerequisite: Permission of the instructor.

**CS 2315 (COSC 2315) Data Structures (2-2).** This course is a further application of programming techniques. Topics include Abstract Data Types (ADTs), linear data structures (arrays, stacks, queues, and lists), and non-linear data structures, including graphs, trees, heaps, has tables, dictionaries, and maps. Students will also be introduced to recursive algorithms and graph traversal techniques. Prerequisite: CS 1320.

**CS 2330 Introduction to Databases (3-0).** This course introduces the basics of database systems, as well as the modeling, design, and manipulation of relational databases. The students will gain the required knowledge to describe databases, their characteristics, functions, pros and cons. Topics include data modeling, databased design theory, data definition and manipulation languages, storage and indexing techniques, etc.

**CS 2360 LINUX (3-0).** This introduction to the LINUX operating system covers UNIX shell commands, shell programming, AWK programming, VI test editor, the SED editor, UNIX platforms, and X-Windows. Offered spring odd years. Prerequisite: CS 1309

**CS 3101 Departmental Seminar (1-0).** A forum for the presentation and discussion of results from various disciplines relating to Computer Science and Mathematics. Presentations will be made by visitors, faculty, and students. Students enrolled for credit in the departmental seminar will be expected to make at least one oral presentation during the semester. The course may be repeated during different semesters. (This course is a cross-listing of MATH 3101). Offered fall and spring. Prerequisite: Upper division standing.

**CS 3302 Computer Aided Instruction (2-2).** This course will cover the fundamental concepts of parallel programming, including GPUs to maximize performance of modern computer systems. It will include parallel programming models, GPU programming with CUDA, and cluster computer with MPI and other parallel environments. Prerequisite: Permission of the instructor.

**CS 3306 Special Topics (3-0).** Discussion of selected topics in computer science suitably for upper division students. The course may be repeated with different topics. Offered when needed. Prerequisite: Permission of the instructor.

**CS 3310 Computer Communications (3-0).** Course covers network systems, topology, media, the theoretical network, real-world networks, and configuration of networks. Offered fall even years. Prerequisite: CS 1320

**CS 3316 Operating Systems (3-0).** This course examines the important problems in operating system design and implementation. Operating systems provide an established, convenient, and efficient interface between user programs and the bare hardware of the computer on which they run. The operating system is responsible for sharing resources (e.g. disks, networks, and processors), providing common services needed by many different programs (e.g. file services, the ability to start or stop processes, and access to the printer), and protecting individual programs from interfering with one another. Prerequisites: CS 2315

**CS 3320 Object-Oriented Programming (3-0).** In this course, students are introduced to concepts and techniques of more advanced object-oriented programming and provides
additional exposure to using basic objects, classes, methods, inheritance, and polymorphism. Students will be introduced to property types, and method overloading. Students are also taught to appropriately use static classes, methods, and types when instance objects can be avoided. A brief comparison of object-oriented languages such as C++, Smalltalk and CLOS is included. Prerequisite: CS 2315.

CS 3331 Advanced Database Systems (3-0). Study of the concepts of database management systems. Topics include file structures, access methods, database modeling and design, structured query language (SQL), and high level language interfaces to database systems. Offered spring even years. Prerequisite: CS 2315

CS 4306 Individual Studies (3-0). Investigation of special topics in Computer Science, conducted on an individual basis. The course may be repeated for different topics. Offered when needed. Prerequisite: Permission of the instructor.

CS 4310 Senior Capstone I (3-0). The senior capstone is the culminating course in the CS concentration sequence. Each capstone is implemented by students with the help and encouragement of a faculty member. Capstone experiences allow each student to demonstrate the capacity to bring information, skills, and ideas acquired from the major to bear on one significant project.

CS 4311 Senior Capstone II (3-0). Continuation of Senior Capstone I Students complete a collaborative programming project and present a working product and business plan. Prerequisites: CS 4310

CS 4320 Software Engineering (2-2). This course emphasizes the software life cycle and the tools and models that have been developed to build large systems. Planning, estimating, and managing project development are discussed. Both the structured and the object-oriented paradigms will be covered. Offered fall even years. Prerequisite: CS 2315 or permission of the instructor.

CS 4340 Computer Architecture (2-2). Topics include combinational logic circuits and design sequential circuits, registers and counters, memory and programmable logic devices, register transfers and data paths, and sequencing and control. Offered spring odd years. Prerequisites: CS 2315

CS 4390 Senior Project (0-6). This is a capstone course in which the student is required to complete a project demonstrating command of a significant body of computer science. Includes oral defense of a paper written in ACM style and an exit examination designed to show mastery of all computer science courses completed. This course is required of all senior Computer Science majors. Offered when needed. Prerequisite: Permission of instructor.

CS 5301 Special Topics in Computer Science (3-0). Selected topics in Computer Science. The course may be repeated for different topics. Offered when needed. Prerequisite: Permission of instructor.

CS 5302 Topics in Software Engineering (3-0). This course compasses different methods and techniques in software engineering, developing the software life cycle and implementation of business-related software needs. The course may be repeated for different topics. Offered when needed. Prerequisite: Permission of instructor.
CS 5303 Independent Studies (3-0). Independent study of selected topics in Computer Science. The course may be repeated for different topics. Offered when needed. Prerequisite: Permission of instructor.

COMPUTER SCIENCE ART TECHNOLOGY (CSAT)

CSAT 2103 Individual Studies (1-0). In this course, students complete individual work towards the fulfillment of their degree. Prerequisite: Consent of instructor.

CSAT 2108 Web Development Programming (1-0). A class covering client/server programming in various operating systems, including JAVA script, ASP, PHP, and others.


CSAT 2112 Animation Programming (1-0). This course covers basic animation Programming techniques using high-level languages.

CSAT 2303 Individual Studies (3-0). In this course, students complete individual work towards the fulfillment of their degree. Prerequisite: Consent of instructor.

CSAT 2306 Basic Television Technology (3-0). Introductory course dedicated to basic television principles as related to game technology and communication design. Including, but not limited to camera, sound, lights, story board, and basic production elements to be used with green screen technology.

CSAT 2307 Introduction to Audio (2-2). Students learn the fundamentals of the physics of sound and basic recording and editing techniques.

CSAT 2308 Web Page Development (3-0). Layout and design of web pages, including structuring the page with proper alignment, consistency and site navigation; visual appeal of color and concepts for choosing color schemes that best represent the purpose of the website; and consideration of copyright law as applied to web page technology.

CSAT 2309 Introduction to Game Design (3-0). Students will study a range of game genres in order to understand the fundamentals of game design and what makes a game interesting, addictive, and fun. Game ideas will be developed using paper prototyping and, later in the course, digitally prototyped using game-creation software.

CSAT 2310 Introduction to Digital Imaging (1-2). This course covers digital imaging techniques including Photoshop and Illustrator. The course will focus on digital image editing, digital painting and illustration.

CSAT 2312 Introduction to Animation (2-2). This course will introduce students to traditional animation techniques using Toon Boom’s Animate software and by studying notable historic examples of animation. Basic animation principles will be taught via presentations and reinforced through many practical exercises.

CSAT 2315 Introduction to Game Programming (3-0). A course designed to introduce students to programming languages and techniques used in the computer gaming industry. This course serves as the foundation for all other courses in the Gaming Technology
concentration. Prerequisite: CS 1320

**CSAT 2316 Design Communication I (2-4).** A basic course in layout and production design for computer, online and information technology applications, including webpages., Human Computer Interface (HCI) design, e-publishing and information communication design. This course will focus on the art direction and aesthetics of layout design for computer applications. Students will be introduced to Photoshop, Illustrator, InDesign and other related programs.

**CSAT 2317 Layout Design Programming (3-0).** This course will support the technical/programming needed for CS 2316. Various programs such as Photoshop, Illustrator, and InDesign will be explored and applied for use in web pages, human-computer interfaces, and e-publishing.

**CSAT 2323 Writing for Digital Media (3-0).** The main focus of the course is the transition of invention and composition to digitally communicated formats emphasizing best practices for design, composition, and usability in the creation and implementation of digital content. Prerequisite: ENG 1302

**CSAT 2360 Mobile Program Android/MACiOS (3-0).** This class will address programming principles to be applied in Android and MAC iOS operating systems. Prerequisite: CS 1320

**CSAT 3103 Individual Studies (1-0).** In this course, students complete individual work towards the fulfillment of their degree. Prerequisite: Consent of instructor.

**CSAT 3120 Gaming and Script Programming (1-0).** This course will address gaming script languages to develop games and applications for mobile devices such as iPhone, iPad, Android, and others. Prerequisite: CS 1320

**CSAT 3121 Branding and Identity Design Development (1-0).** This course will address the developing process of branding and identity considering current market trends and its impact in society.

**CSAT 3130 Animation Programming (1-0).** A laboratory course in which students apply techniques learned in CSAT 3330 using software available in the Technology Learning Center. Concurrent enrollment: CSAT 3330

**CSAT 3160 User Interface Design (1-0).** Design related to interactive displays, interfaces, and environments for controlling a variety of computer applications including games and communication, and other programs including human-computer interface applications.

**CSAT 3301 Acting for Animation (2-2).** An Advanced study of animation techniques and approaches focused on motivation, expression, and empathy. Prerequisite: CSAT 2312

**CSAT 3303 Individual Studies (3-0).** In this course, students complete individual work towards the fulfillment of their degree. Prerequisite: Consent of instructor.

**CSAT 3310 Art History for the Designer (3-0).** This course is a survey of the visual arts of the world tailored specifically to the needs of designers. It will cover all regions and periods of the visual arts and focus on how students can utilize historical styles for their own design work.
Emphasis will be placed on how to replicate authentic and historical styles for a variety of design purposes, including gaming, print, costume, theatre, and communication design applications. Prerequisite: CSAT 2310 or FA 2302

CSAT 3311 History of Communication Design (3-0). This course introduces the history of visual communication, including text and image. Lectures, slides, and discussions focus on the work of important practitioners in the field and on the historical and cultural significance of design, technology, and innovation.

CSAT 3312 Advanced Webpage Design (3-0). An advanced course in webpage and information technology design. This course will cover advanced XHTML, CSS, and interactive webpage design applications. The course will focus on art direction, layout, design, aesthetics and art production for webpages and related applications. Prerequisite: CSAT 2308

CSAT 3316 Advanced Publication Design (3-0). This course covers advanced methods for layout, photo, and art direction for pre-press, print, and electronic publishing. The course focuses on managing art direction and production for print and electronic publishing.

CSAT 3320 Gaming and Screenwriting (2-2). A class exploring how to simulate movement and life using 2-dimensional and 3-dimensional means. Students will study selected examples from history of animation and create their own short pieces in a variety of software. Prerequisites: CSAT 2315 or permission of instructor.

CSAT 3321 Branding and Identity Design (3-0). This course explores methods for designing effective logos, creating marketing materials, and establishing advertising programs using computer technology.

CSAT 3330 Introduction to Maya (2-2). This course introduces students to the techniques and concepts used to create 3-dimensional graphics using Autodesk’s Maya. Students will learn how to build light and animate 3-dimensional objects for use in gaming and animation.

CSAT 3340 Advanced Animation (2-2). Further study of frame-by-frame animation continue to develop their animation skilled through examples and projects.

CSAT 3341 Video Editing for Gaming (3-0). Computer driven course focused on non-linear digital editing processes utilizing green screen technology.

CSAT 3342 Advanced Audio Production (2-2). Students record, edit, and mix audio for video game production. Includes techniques for voice talent. Prerequisite: CSAT 2307

CSAT 3345 Techniques of Video Production (3-0). Production course reviewing use of camera and lighting techniques and incorporating studio sound and motion capture technology. Students learn studio production planning, lighting, and audio along with basic video engineering. Students will practice all crew positions, including floor director, camera operator, lighting technician, audio technician, technical director, and program director. Prerequisite: CSAT 2306

CSAT 3350 Advanced Two-Dimensional Imaging (3-0). A course in advanced digital imaging, including creation of original digital matte paintings, illustration and photo manipulation for print, gaming and art applications. Students will work in a variety of industry standard programs including Photoshop and Illustrator. Prerequisite: CSAT 2310
**CSAT 3360 User Interface Programming (3-0).** Programming related to interactive displays, interfaces, and environments for controlling a variety of computer applications including games and communication, and other programs including human-computer interface applications. Prerequisite: CS 2315

**CSAT 3370 Game Producing (2-2).** An overview of managing the game production process, including business practices, team management, marketing, scheduling, budgeting, and contracts.

**CSAT 3380 Motion Capture (2-2).** Covers the basics of directing and capturing 3D data for use in character design and movement in videogames.

**CSAT 4301 Voice-Over Techniques (2-2).** An advanced approach to vocal production and voice-over performance utilizing audio recording equipment. Prerequisite: THEA 2336

**CSAT 4302 Advanced Maya (3-0).** This course is the further study of Maya to create 3-dimensional graphics. Students will refine the creation, lightning, texturing, and animation of their 3-d objects. Prerequisite: CSAT 3330

**CSAT 4310 Senior Capstone (3-0).** The Senior Capstone is the culminating course in the CSAT concentrations sequence. Each capstone is implemented by students with the help and encouragement of an academic advisor. Capstone experiences allow each student to demonstrate the capacity to bring information, skills, and ideas acquired from the major to bear on one significant project. It is aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired as Computer Science majors as well as provide experiences for students to exhibit competent Computer Science skills within their concentration learned during their program of study in order to prepare for a career in Computer Science Applied Technology.

**CSAT 4311 Capstone II (2-2).** Continuation of Senior Capstone. Students complete a collaborative video game project and present a working product and business plan. Prerequisite: CSAT 4310

**COMPUTER SCIENCE CYBERSECURITY (CSST)**

**CSST 1302 Introduction to Digital Forensics (3-0).** This course provides students with a basic understanding of the acquisition and investigation of evidence from devices capable of strong digital data. This course includes the role of technology in investigating and providing evidence for computer-based crime.

**CSST 1340 Systems Administration/Virtualization (3-0)** This course provides students with an understanding of the roles of an operating system, its basic functions, the services provided by the operating system, and the skill to perform basic operations involved in system administration by utilizing virtualization technologies. It includes and secure configuration of a system, password policies, updates and patches, backups, and port security.

**CSST 1370 Cyber Ethics (3-0).** This course focuses on computer science programming ethics and management ethics with consideration for others. Students are expected to meet the learning objective of the course through a wide range of activities to include reading, viewing, researching, programing and completing lab access assignments as well as participation in collaborative projects and a community interaction project.
**CSST 2303 Individual Studies (3-0).** Investigation of special topics in Computer Science Cyber Security, conducted on an individual basis. The course may be repeated with different topics. Prerequisite: Permission of instructor.

**CSST 2306 Special Topics (3-0).** This course is a discussion of selected topics in cyber security suitable for lower-division students. This course may be repeated with different topics and offered when needed. Prerequisite: Permission of the instructor.

**CSST 2370 Fundamental Security Design (3-0).** This course provides students with basic security design components that help create systems worthy of. It covers the first principles of security, security failures, identification of good human interfaces, and their balance against security mechanisms. Prerequisite: CSST 1340

**CSST 2372 Fundamental Security Design and Information Assurance (3-0)** This course provides students with the fundamentals of information assurance and common security architectures with a discussion of policy, legal, ethics, and compliance. It addresses risks, security models, access controls, and legal relationships to systems such as DMZs, proxy servers, cascading, dependencies and secure network design. It also addresses HIPAA, FERPPA, the Computer Security Act, Sarbanes-Oxley, privacy, payment cards, etc. as well as State, U.S and International standards.

**CSST 2374 Cyber Threats & Defenses (3-0).** This course provides students with a basic awareness of the threats that may be present in the cyber realm and the defenses used to mitigate and defend against them. It addresses adversaries, types of attacks, network security, and vulnerabilities.

**CSST 2376 Cryptography for Cyber Security (3-0).** This course provides students with the basic ability to understand where and how cryptography is used. It addresses symmetric cryptography, public key cryptography, key management, hash functions, digital signatures, protocols, and evolution from DES to AES.

**CSST 3303 Individual Studies (3-3).** Investigation of special topics in Computer Science Cyber Security, conducted on an individual basis. The course may be repeated with different topics. Prerequisite: Permission of instructor.

**CSST 3306 Special Topics (3-0).** This course is a discussion of selected topics in cyber security suitable for upper-division students. This course may be repeated with different topics and offered when needed. Prerequisite: Permission of the instructor.

**CSST 3322 Secure Programing Practices (3-0).** This course provides students with an understanding of the characteristics of secure programs and the ability to implement programs that are free from vulnerabilities. It addresses robust programming, defensive programming, and programming flaws. Prerequisite CS 1320 (may be concurrent).

**CSST 3330 Database Systems (3-0).** This course provides an introduction to many of the valuable skills required for employment as a database professional. Topics include basics of database systems, database types, SQL queries, database design theory, data and manipulation languages, relational databases, storage and indexing techniques, privilege levels, etc. It will establish a foundation for more advanced work with database technology and gain a solid understanding of how database systems are deployed and used within the context of real-
world issues.

**CSST 3350 Packet Data Extraction (3-0).** This course provides students with understanding of stream-based data carving and extraction using tools like those contained in The Sleuth Kit. Prerequisite: CSST 1340.

**CSST 3352 Volatile Memory Analysis (3-0).** This course provides students with an understanding of volatile memory preservation, collection, time analysis, and documentation. Students will gain an understanding of abnormal processes, network connection, and other malicious artifacts stored in volatile memory evidence, using tools like Redline and Volatility.

**CSST 3370 Supply Chain Security (3-0).** This course provides students with an understanding of the security issues associated with building complex systems out of the third-party components of unknown origin. It addresses global development, offshore production, and transport and logistics of components. Prerequisite: CSST 2372

**CSST 3372 Secure Hardware/Firmware (3-0).** This course provides students with the ability to apply security methods to the diverse components in hardware/firmware. It addresses microcode, firmware, hardware abstraction layers, virtualization layers, and how software and hardware interact. Prerequisite: CSST 1340

**CSST 3382 Cyber Security Planning and Management (3-0).** This course provides students with the ability to develop plans and processes for a holistic approach to cyber security for an organization. It addresses CBK, operational and tactical strategic plans and management, and making cyber security a strategy. Prerequisite: CSST 2372

**CSST 4372 Intrusion Detection/ Prevention Systems (3-0).** This course provides students with knowledge and skills related to detecting and analyzing vulnerabilities and threats and taking steps to mitigate associated risks. It addresses deep packet inspection, log file analysis, cross log comparison and analysis, host or network based intrusion detection, honeynets and honeypots. Prerequisite: CS3310

**CSST 4374 Network Defense (3-0.)** This course provides students with knowledge of the methods of analyzing and mitigating threats coming from inside or outside the network. It addresses network protocols, security devices, security services, configuration, and packet capture and analysis. Prerequisite: CSST 3310

**CSST 4380 Security Risk Analysis (3-0).** This course provides students with sufficient understanding of risk assessment models, and processes such that they can perform a risk assessment of a particular system and recommend mitigations to identified risks. Prerequisite: CSST 3370 (may be concurrent).

**CSST 4382 Life-Cycle Security (3-0).** This course provides students with an understanding of how security principles can be applied to improve security throughout the system or product life-cycle. It addresses system life-cycle phases and issues, development processes, configuration management, development threats, and software assurance maturity model. Prerequisite: CSST 4380, CSST 4384 (may be concurrent).

**CSST 4384 Quality Assurance/ Functional Testing (3-0).** This course provides students with methods to assess how well functional unit meets a security requirement. It includes testing methodologies, test analysis, test generation and execution, and validation of results.
Prerequisite: CSST 4380, CSST 4382

**CSST 4390 Senior Capstone (3-0).** This is a capstone course in which the student is required to complete a project demonstrating command of a significant body of cyber security including oral defense of a paper written in ACM style and an exit examination designed to show mastery of all digital forensics courses completed. This course is required of all senior Cyber Security majors. Offered when needed. Prerequisite: Permission of the instructor.

**CRIMINAL JUSTICE (CJ)**

**CJ 1301 (CRIJ 1301) Introduction to Criminal Justice (3-0).** History and philosophy of criminal justice and ethical considerations; crime defined; its nature and impact; overview of criminal justice system; police prosecution and defense; trial process; corrections. (Required)

**CJ 1302 Introduction to Homeland Security (3-0).** This course will introduce students to the organization, structure and function of Homeland Security at the federal, state, and local levels as well as in the civilian world. Constitutional issues and special criminal processing will also be discussed.

**CJ 1306 Court Systems and Practices (3-0).** The student will be introduced to topics related to the functioning of the courts and judiciary system including pre-trial services, right to counsel, grand juries, adjudication processes, rules of evidence, and post-trial appeals. Prerequisite: CJ 1310

**CJ 1307 (CRIJ 1307) Crime in America (3-0).** American crime problems in historical perspective; social and public policy factors affecting crime; impact of crime and trends; social characteristics of specific crimes; prevention of crimes.

**CJ 1310 Fundamentals of Criminal Law (3-0).** The student will be introduced to concepts of criminal law including the nature of law, historical development, major definitions, classification and elements of crime and criminal responsibility. Prerequisite: CJ 1301

**CJ 1313 (CRIJ 1313) Juvenile Justice System (3-0).** Study of the juvenile justice system and juvenile crime and delinquency. Theories of delinquency.

**CJ 1320 Police Academy I (3-0).** 1st of 4-part credit for Police Academy. Prerequisite: concurrent enrollment in the SRSU Police Academy and enrollment in 1321, 1322, 1323

**CJ 1321 Police Academy II (3-0).** 2nd of 4-part credit for Police Academy. Prerequisite: concurrent enrollment in the SRSU Police Academy and enrollment in 1320, 1322, 1323

**CJ 1322 Police Academy III (3-0).** 3rd of 4-part credit for Police Academy. Prerequisite: concurrent enrollment in the SRSU Police Academy and enrollment in 1320, 1321, 1323

**CJ 1323 Police Academy IV (3-0).** 4th of 4-part credit for Police Academy. Prerequisite: concurrent enrollment in the SRSU Police Academy and enrollment in 1320, 1321, 1322

**CJ 2302 Basic Skills for Criminal Justice (3-0).** Thinking skills such as critical thinking, legal reasoning, and social-scientific thinking. Basics of criminal justice library research including Internet and data sources. Criminal justice communication skills including report and paper writing and testifying. Ethics and Professionalism.
**CJ 2313 (CRIJ 2313) Correctional Systems and Practices (3-0).** Corrections in the criminal justice system; correctional role; institutional operations; alternatives to institutionalization; treatment and rehabilitation; current and future issues.

**CJ 2321 Special Topics in Criminal Justice (3-0).** Study of selected issues in criminal justice. May be repeated when topic varies.

**CJ 2323 (CRIJ 2323) Aspects of Law Enforcement (3-0).** Police authority; responsibilities; constitutional restraints; laws of arrest, search and seizure; police liability. (Required)

**CJ 2328 (CRIJ 2328) Police Systems and Practices (3-0).** The police profession; organization of law enforcement systems; the police role; police discretion; ethics; police community interaction; current and future issues.

**CJ 2350 Current Issues in Criminal Justice (3-0).** Students will explore the crucial incidents and issues within the criminal justice system that drive changes to the system. Within an ever-changing society, members of the public and members of the criminal justice system are sometimes in conflict requiring adaptation and evolution of the system. Students will examine the dynamics of police operations involving the use of deadly force, high speed pursuits, civil disobedience and unrest, natural disasters, and homeland security. Course may be repeated as topic changes.

**CJ 2351 Hate Crimes (3-0).** This course will cover issues and current research on the causes, controls, and controversies surrounding hate crimes. Students will explore issues that foster hate crimes while learning how these criminal acts impact them.

**CJ 2352 Community Corrections (3-0).** This course will focus on community corrections in the criminal justice system as an alternative to institutionalization. Students will examine the treatment and rehabilitation processes and discuss current and future issues.

**CJ 2353 Crimes Against Children (3-0).** This course is designed to give the student a basic knowledge of the issue surrounding child abuse and neglect.

**CJ 2360 Introduction to Cybercrime (3-0).** Students will explore the history and current state of computer-related crime. Beginning with an exploration of the development of ARPANET and progressing to the interweb and social media, ethical and criminal violations at home and in the workplace. Students will discuss current federal and state laws regarding cybercrime and identify crimes. An introduction to investigative methods and security protocols are also studied.

**CJ 2362 Cybercrime Investigation (3-0).** Students will analyze criminal acts that can be committed using a computer or the Internet, including narcotics and human trafficking, arms and weapons smuggling, and pornography distribution. The students will explore how those acts can be successfully investigated and prosecuted. Legal aspects of search and seizure, and proper procedures for handling digital evidence vis-à-vis the rules of evidence. An overview of the dark web will be included. Prerequisite: CJ 1301 or CJ 1302.

**CJ 3101 Independent Study (1-0).** Independent research of a selected topic in the Criminal Justice or Homeland Security field. Prerequisite: Permission of instructor.
**CJ 3201 Independent Study (2-0)**. Independent research of a selected topic in the Criminal Justice or Homeland Security field. Prerequisite: Permission of instructor.

**CJ 3302 Victimology, Victim Services and Victims' Rights (3-0)**. A study of victims, victimization and the consequences of victimizations, including victims of sexual assault and child abuse; victim precipitation, self-help and prevention of victimization; victimization surveys and other data sources; history of victims' rights and the victims' rights movement; victims' rights and services.

**CJ 3303 Crime and Justice in the Movies (3-0)**. Examination of the interrelationships between cinema, reality, and public opinion. Examination of stereotypes and assumptions shown in cinema as compared to fact. Study of professional, ethical, and historical issues in criminal justice as reflected in movies May be repeated when topic varies.

**CJ 3304 Wildlife Law Enforcement (3-0)**. Application of investigative and evidentiary procedures to wildlife law enforcement; legal basis for wildlife laws; federal and state wildlife laws; role of wildlife law enforcement in wildlife management.

**CJ 3307 Organized Crime (3-0)**. Analysis of crime problems of an organized nature; economic impact upon society; laws regulating organized crime; investigation techniques.

**CJ 3311 Women and Crime (3-0)**. This course is designed to give the student a basic knowledge of the issues surrounding women and their interaction with the criminal justice system. Topics covered will include women as victims of crime, as perpetrators of crime, and as workers within the system.

**CJ 3312 Criminal Investigation (3-0)**. Investigative theory; collection and preservation of evidence; sources of information; interview and interrogation; uses of forensic sciences; case and trial preparation, photography.

**CJ 3316 Domestic Violence (3-0)**. This course is designed to give the student a basic knowledge of the issues surrounding victims and perpetrators of domestic violence. Topics covered will include victim and perpetrator characteristics, explanations for the violence, and explanations for the victim's behavior. Criminal justice responses to domestic violence situations both currently and historically will also be covered.

**CJ 3317 White Collar Crime (3-0)**. This course is designed to familiarize the student with the special crimes that qualify as white collar crime. By the end of the course the student will be able to distinguish white collar offenses from other types of crimes. Additionally, students will be familiar with the criminal justice system's contemporary responses to white collar crimes.

**CJ 3320 Emergency Management (3-0)**. This course covers risk management and disaster management theory, risk assessment, protection of critical infrastructure, Incident Command Systems, FEMA strategies, and other efforts to prevent and mitigate terrorist attacks, natural disasters, and other large scale events. The role of all levels of government, military, and citizenry will be examined.

**CJ 3321 Human Trafficking (3-0)**. This course is designed to give the student a basic knowledge of the issues surrounding human trafficking, including organization, finance, legislation, and regional perspectives.
CJ 3322 Cybercrime in the 21st Century (3-0). Students will examine the developments and changes on the criminal justice system as a result of technology advancements and the introduction of computer-related crime. Discussions will include how criminals profit from technology, cybercrimes against persons, property, and institutions, and how criminal justices (law enforcement, prosecutors, courts, and corrections) have evolved to address cybercrime. Prerequisite: CJ 1301 or CJ 1302.

CJ 3340 Criminal Justice Ethics (3-0). Students will explore a comprehensive overview if ethical issues faced by criminal justice professionals. This course will address many ethical scenarios encountered by law enforcement, prosecutors, court officers, and corrections staff in the performance of their duties. Students will develop an understanding of the moral and ethical issues as well as how these dilemmas are resolved.

CJ 3341 Research Methods for Criminal Justice (3-1). This course provides an introduction to criminal justice research methods. Students will learn how to evaluate current and conduct contemporary research in the field of criminal justice. The course introduces students to terminology and tools of the scientific method. Several data collection techniques available to criminal justice researchers are explored and evaluated. Students will learn how to evaluate academic research products in terms of their contribution to the fields of criminal justice, as well as how to develop their own research problems.

CJ 3342 Multicultural Communication for Criminal Justice (3-0). Students will learn basic practical language skills that will assist them as criminal justice practitioners in situations such as dealing with suspects, victims, witnesses, prison populations, as well as border and immigration issues. Students will also explore various cultures and customs to better understand the needs of members of their communities.

CJ 3362 Advanced Cybercrime Investigations (3-0). This course examines advanced investigation techniques in cybercrime cases, including internet frauds and schemes, issues in ecommerce, and threats to the national infrastructure. Cyber security policies, legal issues, and advanced investigative strategies, as well as the implications of investigations on a national and global scales will also be evaluated. Prerequisites: CJ 1301 or CJ 1302 and CJ 2362.

CJ 4301 Multicultural Studies in Criminal Justice (3-0). Understanding, communicating and working with persons from different cultures; basic human relations skills needed by those working in the criminal justice system; women in the criminal justice system; equal protection of the law and anti-discrimination, civil rights, sexual harassment and related laws; criminal justice ethics. (Required)

CJ 4302 Seminar in Special Problems in Criminal Justice (3-0). Exploration and analysis of contemporary problems related to police, courts or corrections. May be repeated for credit when topics vary.

CJ 4303 Death Penalty (3-0). This class is designed to examine the moral, legal, social and political aspects surrounding the death penalty issues. We will focus on the history of capital punishment both domestic and abroad. Issues of deterrence as well as how problems of discrimination are actively addressed. This course will utilize past legal and criminological research to argue both for and against the death penalty in America. This course is not designed to reinforce a student's current belief-rather to challenge and broaden their understanding of a complicated and divisive criminal/political issue.
**CJ 4304 Criminology (3-0).** Study of factors that contribute to crime; criminological theories; criminal types; research methods; types of crimes; crime trends. (Required)

**CJ 4306 Gangs (3-0).** The Gangs class is designed to introduce and guide students in the understanding of the advent and expansion of criminal gangs. Topics and discussion will focus on the history, organization, identification, and criminological theories surrounding both "street" and "prison" gangs. Emphasis will be placed on the spread of prison gangs in Texas prisons and their influence on Texas prison policy. Street gangs will be studied as an artifact of the "Drug War".

**CJ 4307 Internship (3-0).** This course is designed to give students the opportunity to apply classroom theory to actual practice. Internship may be repeated twice for credit at different agencies. It is the student's responsibility to find a suitable agency to intern for. Students must have a 3.0 GPA and must complete a minimum of 45 hours of supervised work time. (No person may obtain internship credit for full or part time paid employment.) Prerequisite: Criminal Justice Majors only: Junior or Senior standing and permission of the Department Chair.

**CJ 4308 Terrorism (3-0).** This class is specifically designed to introduce students to the threat of terrorism both domestic and international. We will discuss the implications of all aspects of terrorism on U.S. society. Students will have an opportunity to research and present to the class specific topics of interest. We will address the religious, sociological, criminal and legal issues of the police, prosecutors, and courts. Additional focus will be on the application of "The Patriot Act" as it impacts U.S. Freedoms.

**CJ 4309 Senior Seminar (3-0).** Professional ethics and professionalism, role of the private sector in criminal justice, opportunities for employment and graduate study, criminal justice data sources, history and future of discipline and current developments. Offered spring only (Required). The final exam for this course for CJ majors will be the CJ Senior Exam which must be passed to graduate. Students will write a major student-competition level paper. Prerequisite: CJ 1301, 2305, and 4304.

**CJ 4310 Deviant Subcultures (3-0).** This course examines the roots, structures, habits, and sociological implications of deviant subcultures. The most obvious example of a deviant subculture is criminal gangs, either street gangs or prison gangs.

**CJ 4311 Sexual Predators (3-0).** This course examines the roots, structures, habits and sociological implications of sexual predators. The most obvious example of sexual predators is the violent sexual serial killer.

**CJ 4312 Punishment (3-0).** In this course we will review the public policy concerning the death penalty and punishment. We will further look into issues that may or may not affect the use of the death penalty within the various states.

**CJ 4313 Juvenile Delinquency (3-0).** This course will focus on the nature and extent of delinquent behavior, theories of delinquency and their implications for intervention, and the cultural and social factors related to delinquency.

**CJ 4315 Serial Killers (3-0).** This class examines Serial Killers worldwide. Students will be exposed to numerous highly publicized Serial Killers, as well as many that are not so well known. This class will examine the root causes of these criminals and their impact on society.
**CJ 4318 Advanced Homeland Security (3-0).** This course will explore the creation and evolution of the Department of Homeland Security. Additional focus will be on the War on Terror, Weapons of Mass Destruction, new technologies and the role of civilian organizations within Homeland Security.

**CJ 4319 School Violence (3-0).** This class is designed to familiarize students with the sociological and legal issues concerning violence in schools. The subject is not limited to the United States.

**CJ 4320 Forensic Ballistics: Handguns (3-0).** This course is mainly a firearms examination course. Students will learn the historical evolution Handguns and their relationship to changes in the American society. The identification of and differences between all forms Handguns will be emphasized. This course will spend considerable time covering the usage and investigation of the criminal application of Handguns in crime, as well as, the tactical applications employed by law enforcement. The course includes considerable “hands-on” time with actual firearms.

**CJ 4321 Forensic Ballistics: Long Guns (3-0).** This course is mainly a firearms examination course. Students will learn the historical evolution of both Rifles and Shotguns and their relationship to changes in American society. The identification of and differences between all forms of “long guns” will be emphasized. This course will spend considerable time covering the usage and investigation of the criminal application of “long guns” in crime, as well as, the tactical applications employed by law enforcement. The course includes considerable “hands-on” time with actual firearms.

**CJ 4322 Topics in Homeland Security (3-0).** This course covers current and emerging issues in the area of Homeland Security. Topics may include programs, emerging technologies, and legal trends in both the domestic arena and on the global stage.

**CJ 4323 Transnational Crime (3-0).** This course is designed to introduce the student to the study of criminal organizations and their crimes on the global stage. Focus is particularly on those organizations and crimes that cross international boundaries. Areas of study include organized crime, trafficking in drugs, humans and weapons, piracy, and other crime groups and individual criminals. Global efforts and prevention, interdiction and punishment will also be covered. A particular focus will be on placing these issues in the context of Homeland Security and the war on terror.

**CJ 4324 Immigration Issues (3-0).** This course will focus on the history and development of immigration patterns and policies in the United States. Emphasis will be placed on policy issues as related to the work of Criminal Justice practitioners, particularly in the post-9/11 world. Students will also be expected to analyze policy impact on various groups of immigrants.

**CJ 4330 Law Enforcement Administration (3-0).** Students will explore a comprehensive overview of practices within law enforcement administration. The history of law enforcement administration, the evolution of professional policing, as well as current issues and trends will be addressed. Emphasis will be places on issues related to human resource administration and the leadership skills required to successfully manage a law enforcement agency.

**CJ 4331 Legal Issues in Criminal Justice (3-0).** This course will be an advanced study of the various constitutional and other legal issues within all areas of criminal justice. Specific focus will be given to Texas laws, and US Supreme Court decisions affecting law enforcement or
corrections. Prerequisite: CJ 1301 or CJ 1302.

**CJ 4332 Critical Issues in Corrections (3-0).** Corrections has changed over the past several decades. In the course, students will explore the origins of correctional systems, and how these systems and correctional philosophies have evolved over time. Students will examine the growth of the complex and analyze the strengths and weaknesses of the various correctional paradigms.

**CJ 4333 Community Policing (3-0).** Students will analyze ideas and ideals of Community Policing. Students will evaluate topics such as race, gender, economics, status, rural vs. urban, and other sensitive topics.

**CJ 4334 Police Corruption (3-0).** The class is designed to familiarize students with the sociological and legal issues concerning police corruption. Discussion will include specific “critical issues” such as: police militarization, the Police subculture, use of force, and the volatile political aspects of this issue.

**CJ 4335 War on Drugs (3-0).** In this course students will evaluate the public policy concerning the most topical issues of the War on Drugs. Students will analyze topics including historical, political, cost, corruption, and legalization.

**CJ 4336 Prison Gangs (3-0).** This course will focus on prison gangs, their origins and their evolution and growth within the prison system. The course will examine present-day prison gang activity in and out of the prison system and the impact of prison gangs on crime and the criminal justice system in the “free world.” By the end of the course, students will be able to understand and identify various prison gangs and have a detailed insight on the games criminals play.

**CJ 4350 Independent Study (3-0).** The student will pursue an independent research or experiential learning project chosen by the student in consultation and approval of the instructor. Prerequisite: Approval of the instructor

**CJ 4363 Introduction of Criminal Profiling (3-0).** Students will explore the fundamental profiling. Discussions will include the definition of profiling, analysis of both the psychological basis and practical applications of criminal profiling, its uses, and historical applications in theory and practice. Students will explore the relationship between profiling and its application in crime and crime scene analysis, forensic science, and geographic profiling. Overview of applicable behavior-based criminal theories will be included. Prerequisite: CJ 130 or CJ 1302.

**CJ 4365 Cyber Warfare (3-0).** This course is an overview of cyber warfare including discussions on its strategy and impacts. Students will evaluate the use of cyber warfare by the military, terrorist, and criminal organizations. Students will examine computer network benefits and vulnerabilities, potential weaponry, and risk mitigation. Prerequisite: CJ 1301 or CJ 1302 and CJ 2360.

**CJ 4367 Cybercrime Policy and Law (3-0).** In this course, students will examine the impact of emerging technology on criminal justice policy, as well as the legal implications of changing criminal behaviors in the area of cybercrime. Particular attention will be paid to privacy issues, responses to various cybercrimes, and transnational issues such as cyber espionage and human trafficking. Prerequisite: CJ 2360.
**CJ 5301 Overview and Administration of the Criminal Justice System (3-0).** An advanced and detailed overview of the criminal justice system and its administration. This course will take a systematic perspective of our system of police, courts, and corrections. Focus will be placed on how the system, as a system, reacts to changes in legislation and social mood. Some emphasis will be placed on the legislative and political process surrounding U.S. criminal justice efforts.

**CJ 5305 White Collar Crime (3-0).** This course will cover topics relating to white collar crimes across America. Topics will cover both historical and contemporary perspectives as well as corporate and individual level offenses.

**CJ 5306 Drug Abuse (3-0).** The focus of this course is on drug use, misuse and abuse in America. Topics covered include history of drug use, laws concerning use and abuse, illicit and prescription drug abuse, drug control approaches and other relevant topics.

**CJ 5308 Special Populations in Criminal Justice (3-0).** This course will explore issues related to minorities at all levels of the system from three perspectives: employees, victims, and offenders. At the end of the course, the student should have developed a knowledge of and appreciation for the complexity of the effect of the criminal justice system on the lives of minorities in this country.

**CJ 5310 Capital Punishment (3-0).** In this course we will review the public policy concerning the death penalty. We will further look into issues that may or may not affect the application of the death penalty within the various states. Both the history of the death penalty and the future application or abolition of the death penalty will be addressed.

**CJ 5311 Advanced Law Enforcement Administration (3-0).** Management issues in modern police agencies including hiring, retention, training, dismissal, human relations and cultural sensitivity. Communication, management styles, policy development, effectiveness, problem-solving and community policing are also covered.

**CJ 5313 Seminar in Policing (3-0).** This advanced level course will focus on the history and development of modern professional policing. Emphasis will be placed on the evolving role of police in a democracy as well as the trends toward community oriented policing styles.

**CJ 5314 Seminar in Corrections (3-0).** A course on the evolution of corrections. Theories of punishment as well as correctional management techniques will be addressed. This course will go beyond the concepts of institution corrections and will explore modern correctional alternatives and special topics relevant to corrections.

**CJ 5315 Seminar in Courts and Judiciary (3-0).** A Specialized course which will focus on the theories of American justice. Attention will be paid to the structure of the U.S. justice system. A portion of the course will cover the role of each judicial element Federal, State and Local Courts. Students should expect some exposure to case briefs and legal research.

**CJ 5316 Women and Crime (3-0).** This course will cover topics relating to women and their interaction with the various components of the criminal justice system as victims, offenders, and employees. Each of these three categories of women will be covered in the context of police, courts, and corrections. Additionally, issues relating to the rights women have in American society will be covered from a historical and contemporary perspective.
CJ 5317 Juvenile Delinquency (3-0). This course will focus on the nature and extent of delinquent behavior, theories of delinquency and their implications for intervention, cultural and social factors related to delinquency, as well as the philosophy and functioning of the juvenile justice system. Emphasis will be placed on school related delinquency, the role of the media in creating delinquency panics, and the differences between males and females.

CJ 5318 Seminar in Criminal Justice Theory (3-0). An advanced study of theories used in Criminal Justice to explain crime and deviance. This course will require students to explain criminal and deviant behavior and apply their theoretical understanding to policy issues.

CJ 5319 Use of Force in Criminal Justice (3-0). Study of the use of and legal rules and concepts involved in the use of force by criminal justice personnel. The course will include both legal and conceptual dimensions of the issue. Among topics to be covered are force continuums, non-lethal force, verbal judo, and alternatives to using force.

CJ 5321 Domestic Violence (3-0). This course will cover topics relating to domestic violence including spousal abuse, other types of family abuse, and caretaker abuse. Discussion will include possible explanations for the abuse, reasons why the victims stay, and intervention issues.

CJ 5322 Immigration Issues (3-0). This course will focus on the history and development of immigration patterns and policies in the United States. Emphasis will be placed on policy issues as related to the work of Criminal Justice practitioners, particularly in the post 9-11 world. Students will also be expected to analyze policy impact on various groups of immigrants.

CJ 5323 Homeland Security (3-0). This course will explore the various aspects of the government entity – Homeland Security. Discussion will focus on defining the role for this agency, government restructuring, legal basis for actions and the various divisions within the agency. Also, special projects undertaken in support of the agency’s mission will be discussed with emphasis on the effects these will have on the various levels of government and the civilian population.

CJ 5324 Social Deviance (3-0). This course focuses on the concept of deviance; deviant behaviors, and explanations of such behaviors. Although criminal behavior is considered a form of deviance, there are plenty of legal and quasi-legal behaviors that also fall under this category. In the course we will discuss a variety of behaviors considered deviant, such as smoking, drinking, drug use and sexual activity.

CJ 5325 Graduate Seminar in CJ (3-0). The student will explore legal issues, ethics, and application of criminological theories in policy making and research methods in the field of criminal justice. Historical issues and emerging trends will also be examined. This course is the capstone for the Criminal Justice Master’s program. Prerequisite: Minimum 27 hours completed towards the CJ master’s degree.

CJ 5326 Victimology (3-0). This course is designed to give the student a basic knowledge of the issues surrounding criminal victimization. Topics covered will include types of victims, reactions to victims by society and the criminal justice system, and the victim rights movement.

CJ 5327 Graduate Seminar in Homeland Security (3-0). The student will explore government restructuring, policy making, and research methods in the field of Homeland Security. The role of both government and non-government actors in Homeland Security will be examined.
Historical issues and emerging trends will also be analyzed. The course is the capstone course for the Homeland Security Master's program. Prerequisite: Minimum 27 hours completed towards the CJ master's degree.

**CJ 5328 Seminar on Transnational Crimes (3-0).** This course is designed to introduce the student to the study of criminal organizations and their crimes on the global stage. Focus is particularly on those organizations and crimes that cross international boundaries. Areas of study include organized crime, trafficking in drugs, humans and weapons, piracy, and other crimes groups and individual criminals. Global efforts and prevention, interdiction and punishment will also be covered. A particular focus will be on placing these issues in the context of Homeland Security and the war on terror.

**CJ 5329 Seminar in Emergency Management and Disaster Preparedness (3-0).** This course covers risk management and disaster management theory, risk assessment, protection of critical infrastructure, Incident Command Systems, FEMA strategies and other efforts to prevent and mitigate terrorist attacks, natural disasters and other large-scale events. The role of all levels of government, military and citizenry will be examined.

**CJ 5330 Emerging Issues in Homeland Security (3-0).** This course covers current and emerging issues in the area of Homeland Security. Topics may include programs, emerging technologies, and legal trends in both the domestic arena and on the global stage.

**CJ 5331 Topics in Criminal Justice (3-0).** Intensive study of selected issues in Criminal Justice. May be repeated when topic varies.

**CJ 5333 Internship (0-3).** Supervised work experience in an approved criminal justice agency. Designed to allow the student to synthesize theory and practice. It is the student's responsibility to find a suitable agency at which to intern. To be eligible the student must have a minimum GPA of 3.5. A minimum of 45 supervised hours will be required. A student's compensated employment may not be utilized as an internship. Prerequisite: Permission of the Graduate Coordinator.

**CJ 5334 Methods of Social Research (3-0).** An introduction to research methods within the social sciences and the major contemporary approaches to it.

**CJ 5335 Human Trafficking (3-0).** This course is designed to give the student a basic knowledge of the issues surrounding human trafficking. Topics covered will include: the rise of human trafficking, the financial side of human trafficking, legislation and regional perspectives on human trafficking as well as women and children as sex slaves.

**CJ 5336 Seminar on Domestic Terrorism (3-0).** This class is specifically designed to introduce students to the threat of domestic terrorism. We will discuss the implications of all aspects of such terrorism on U.S. society and on the world at large. We will address the root causes of such behavior and the international response to incidents and actors. Additional focus will be on the application of "The Patriot Act" as it impacts U.S. freedoms.

**CJ 5337 Seminar on International Terrorism (3-0).** This class is specifically designed to introduce students to the global threat of international terrorism. We will discuss the implications of all aspects of such terrorism on U.S. society. We will address the root causes of such behavior and the criminal justice response to incidents and actors. Additional focus will be on the Department of Homeland Security and its anti-terrorism programs and policies.
**CJ 5338 Cybersecurity (3-0).** This course introduces students to the wide range of modern communication technologies. Use of these technologies by government and business entities for intelligence gathering, their limitations, and vulnerabilities are introduced to the students. An overview of the history of computer hacking is covered. Additionally, a brief overview of law and policy concerning cyber communications are discussed beginning with the National Security Act of 1947.

**CJ 5339 Ethical Issues in the Criminal Justice System (3-0).** Students will examine ethical issues related to criminal justice administration. The origin and effect of ethical standards as well as ethical leadership will be addressed. Emphasis on the role of ethical decision making in policy making and the establishment of agency values, as well as the value paradigm of community policing will be explored.

**CJ 5340 Policy Making in Criminal Justice (3-0).** Students will explore a comprehensive overview of policy making within law enforcement including the history of law enforcement administration, the evolution of professional policing, and current issues and trends.

**CJ 5341 Criminal Sexual Behavior (3-0).** Students will evaluate the nature and etiology of sex crimes and avenues by which the criminal justice system addresses these crimes and criminals. Law and policies related to sex offender control and registration, and best practices regarding treatment and therapies for various types of sex offenders will be discussed.

**CJ 5342 Women in Policing (3-0).** This course will examine the role of women in law enforcement positions across the United States including historical and contemporary perspectives on women in policing. The experience of women of color will be emphasized.

**CJ 5343 Crimes Against Children (3-0).** This course focuses on, child maltreatment, neglect and abuse (physical, sexual, psychological). Students will discuss extreme forms of abuse, such as child sexual trafficking and forced prostitution. Students will also study those who commit these crimes and intervention and prevention strategies.

**CJ 5350 Independent Study (3-0).** The student will pursue an independent research or experiential learning project chosen by the student in consultation and approval of the instructor. Prerequisite: Approval of the instructor

**CJ 5360 Seminar in Cybercrime (3-0).** This course discusses how perpetrators use high-technical means in order to commit a diverse range of criminal activities. These include attacks against computer data and systems, identity theft, and distribution of child sexual abuse images, internet fraud, the penetration of online financial services, as well as the deployment of viruses, Botnets, and various email scams such as phishing. Methods of mitigation and prevention are addressed.

**CJ 5361 Seminar in Criminal Profiling (3-0).** Students will examine the dynamics of individual criminal acts utilizing inductive and deductive methodology to profile criminal behavior, offender characteristics, crime scene investigation, evidence collection, and case linkage of specific categories of crime. Topical areas in this seminar will include cybercrime, serial crime, stalking, and other criminal behaviors and acts related to technology grounded crimes.

**CJ 5362 Criminology of Cybercrime (3-0).** This course will discuss various types of criminal conduct associated with computers and the Internet. Specific emphasis will be placed on, and
will assess, criminological theories of crime as they relate to cybercrime and cyber terrorism.

**CJ 5363 Seminar in Cybercrime Law and Policy (3-0).** This course addresses issues related to how emerging technologies challenge existing legal paradigms; how countries regulate criminality across political boundaries; what the new paradigm means for individual rights and privacy; and how law enforcement is evolving to meet the demands of the modern world. This course includes an in-depth analysis of case law and various statues related to cyber intrusions, data theft, and crimes against persons.

**CJ 5364 Seminar in Cyber Warfare (3-0).** This course explores an in-depth analysis of the policy, doctrine, and strategy of conducting warfare at the national and international level. This course will examine cyber terrorism, cyber espionage, and other attack paradigms, as well as an examination of defense strategies to repel attacks.

**CJ 5365 Seminar in Cybercrime Investigations (3-0).** This course is a graduate level seminar in the investigation of cybercrimes, with a particular emphasis on Internet fraud schemes, e-Commerce, and dark web related criminal activity. The course also discusses legal issues, investigative techniques and strategies, and implications of investigations based on jurisdictional limitations.

**DEVELOPMENTAL EDUCATION**

Developmental courses (numbered 0100-0999; ED B100, ENG B100, EMATH B100) are courses intended for students who lack the necessary skills for entering collegiate level courses. These courses are not considered in determining academic standing. Since these courses are pre-collegiate level, they shall not be used to satisfy any requirement for graduation. These courses are not used for computation of cumulative grade point average for graduation, determination of class standing, eligibility for the Dean's List, or for eligibility for graduation with honors.

**Education (ED)**

**ED B100 BASE Reading Review (0-0).** This course is a six-hour review of ED 0200 BASE Reading Skills.

**ED 0100 ED 0300 Reading Review (0-0).** This course is a six-hour review of ED 0300.

**ED 0200 BASE Reading Skills (2-0).** This course is designed for students whose score on an approved assessment instrument does not meet the minimum developmental education requirement. In the course, students will develop basic reading skills. Topics included in this course are building vocabulary, defining context clues; identifying main and supporting ideas; identifying author's purpose and tone. Credit in this course cannot be used to satisfy requirements for any degree.

**ED 0300 Reading Skills (3-0).** This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the reading portion of the assessment. In this course, students will develop reading and study skills. Topics included in this course are defining vocabulary in context; identifying stated, implied main ideas and central point; identifying details that support and differentiate between fact or fiction; identifying author's purpose and tone; determining points and support of a critical argument. This course will emphasize correction of reading problems identified through diagnosis. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to any intensive reading course.
English (ENG)
ENG B100 BASE Writing Review (0-0). This course is a six-hour review of ENG 0200 BASE Writing Skills.

ENG 0100 ENG 0300 Writing Review (0-0). This course is a six-hour review of ENG 0300.

ENG 0110 ENG 0310 IRW Review (0-0). This course is a six-hour review of ENG 0310.

ENG 0200 BASE Writing Skills (2-0). This course is designed for students whose score on an approved assessment instrument does not meet minimum developmental education requirement. Topics included in this course are sentence and paragraph development, grammar and vocabulary. Credit in this course cannot be used to satisfy requirements for any degree.

ENG 0300 Writing Skills (3-0). This course is designed for students who score on an approved assessment instrument does not meet minimum requirements on the writing portion of the assessment. In this course, students will develop their writing and reading skills through daily exposure to writing and reading exercises. Topics included in this course are: grammar, sentence structure, paragraph development, and essay writing. Areas which will be emphasized for essay writing are: appropriateness, unity and focus, development, and organization. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to ENG 1301. (ENG 0300).

ENG 0310 Integrated Reading and Writing Skills (3-0). This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the writing and/or reading portion of the assessment. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills in writing a variety of academic essays. Credit in this course cannot be used to satisfy requirements for any degree. Student must earn a grade of C or better to progress to ENG 1301. Prerequisite: C or better in ENG 0300 or ED 0300 OR satisfactory score on placement exam.

Mathematics (MATH)
MATH B100 BASE Math Review (0-0). This course is a six-hour review of MATH 0200 BASE Math Skills.

MATH 0100 MATH 0300 Review (0-0). This course is a six-hour review of MATH 0300.

MATH 0101 MATH 0301 Review (0-0). This course is a six-hour review of MATH 0301.

MATH 0200 BASE Math Skills (2-0). This course is designed for students whose score on an approved assessment instrument does not meet the minimum developmental education requirement. In the course, students will develop basic mathematics skills. Topics included in the course are operations with whole numbers, integers, fractions, decimals and percents; univariate linear equations, including multi-step equations and proportions and verbal and written communication involving mathematical language, symbols and notation. Credit is in the course cannot be used to satisfy requirements for any degree.

MATH 0300 Introductory Algebra (3-0). This course is designed for students whose score on
an approved assessment instrument does not meet minimum requirements on the mathematics portion of the assessment. Topics included in this course are algebraic operations on real numbers, the solving of equations and inequalities, basic operations with polynomials, simple graphing techniques, critical thinking skills, and college readiness skills. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to the next level math course.

**MATH 0301 Intermediate Algebra (3-0).** This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the mathematics portion of the assessment. Topics included in this course are real numbers, exponential, rational, and radical expressions, factoring, complex numbers, and critical thinking skills. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to the next level math course. Prerequisite: C or better in MATH 0300 or satisfactory score on placement exam.

**Non-Course Based Options (NCBO)**

**NCBO 0111 Tutoring (0-0).** Developmental education students enrolled in a college-level course through differentiated placement receive tutoring support.

**NCBO 0112 Academic Support (0-0).** Developmental education students enrolled in a college-level course through differentiated placement receive academic support.

**English Second Language (ESL)**

**ESL 0300 Reading and Vocabulary (3-0).** This course develops English reading proficiency and vocabulary for academic, career, or personal purposes in speakers of languages other than English and prepares them to function in a multicultural, multilingual society.

**ESL 0301 English Composition (3-0).** This course develops strategies and techniques of writing and composition for ESL students.

**ECONOMICS (ECO)**

**ECO 2301 (ECON 2301) Principles of Macroeconomics (3-0).** An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy.

**ECO 2302 (ECON 2302) Principles of Microeconomics (3-0).** Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade.

**ECO 3300 Monetary Theory and Banking (3-0).** Course explores the structure of financial markets, money and its components, the banking system, the Federal Reserve System and the role of monetary policy.

**ECO 4303 Current Economic Financial Problems (3-0).** Examination and analysis of the more important and more pressing economic problems of the nation and world.

**ECO 4305 Advanced Readings and Research in Economics and Finance (3-0).** Selected topics in economics and/or finance to be offered as a seminar or individual study.
**ECO 5301 Comparative Economic Thought-Free Enterprise (3-0).** Survey of the four influential schools of economic thought – Austrian, Keynesian, Monetarist, and Marxist. Emphasis on the development of capitalist theory and free markets as these influenced the economy of the United States. Original works will be reviewed and discussed in the context of recent events.

**ECO 5303 Managerial Economics (3-0).** Economic analysis applied to business problems including cost and revenue measurement, profit planning, and market structure. Special emphasis is placed on optimizing techniques, basic econometrics, and business forecasting. Prerequisite: ECO 2302

**ECO 5304 Research and Readings in Economics (3-0).** Class directed reading or research in a particular field of economics. The course may be repeated for credit when the topic varies.

**EDUCATION (ED)**

Educational certification programs are being revised. It is important to check with an advisor in the major field each semester for updated information.

**ED 2311 Diversity in American Society (3-0). Education Specialization.** Survey of diverse populations found in American society including issues of race, ethnicity, gender, age, religion, sexual orientation, exceptionalities and socio-economic status.

**ED 3300 Principles of Education (3-0).** A course for teachers that includes the legal and ethical aspects of teaching, and the recognition of and response to signs of abuse and neglect in children; structure, organization, and management of the American school system, with emphasis on the state and local structure in Texas. Prerequisite: Completion of Blocks I and II.

**ED 3301 Curriculum and Instruction for Classroom Teachers (1-2).** A course designed for the classroom teacher with emphasis on appropriate curriculum and instruction for the classroom. This course will provide companion theory and practice to ED 3303 with field work. Includes 10 hours of field experience. Prerequisite: Completion of Block I.

**ED 3302 Developmental and Learning Theories (3-0).** An integrated study of correct developmental and learning theories pertaining to human physical, cognitive, emotional and cultural development. Includes 10 hours of field experience. Prerequisite: Admitted to Block I.

**ED 3303 Methods and Materials for the Classroom Teacher (1-2).** A course designed for the classroom teacher with an emphasis on practical, hands-on techniques, classroom management and field experience. Prerequisite: Completion of Block I

**ED 3307 Technology in the Instructional Setting (3-0). Education Specialization.** This course prepares teachers to plan, organize, deliver, and evaluate instruction that incorporates the effective use of current technology. Includes 20 hours of field experience.

**ED 3308 Language Acquisition and Emergent Literacy (3-0). Education Specialization.** A course in language acquisition in children. Developmentally appropriate activities, diversity, and individual learning styles found in the educational setting are discussed as they facilitate language and literacy in young children. Includes 20 hours of field experience.

**ED 3309 Early Childhood: The Young Child (3-0).** A study of the growth and development
of infancy and early childhood with detailed case studies of a kindergarten age child.

**ED 3312 Fine Arts in the Classroom (3-0).** Course is designed to introduce students to the principles of art, music, and theatre that can be related to the expressive and developmental needs of children in the Early Childhood-Sixth grade classroom. Students will learn basic techniques, activities, and strategies for integrating art, music, and theatre into the EC-6 curriculum.

**ED 3314 Language Arts/Social Studies Methods (3-0).** This course explores methods and strategies in teaching language arts and social studies in the elementary school. Classroom management, instructional materials, curricula, and measurement and evaluation of outcomes are included. Field Experiences Required.

**ED 4303 Measurement and Evaluation (3-0).** A survey of available standardized educational tests and their interpretation and uses, and principles of test development.

**ED 4306 Survey of Exceptional Children (3-0). Education Specialization.** A survey of exceptional children involving categorical identification, learning characteristics, instructional intervention, and adjustment needs.

**ED 4307 English/Language Arts in the Classroom (3-0).** This is a course in methods and strategies in teaching English/Language Arts curriculum in the public schools. Topics include but are not limited to the essential elements of listening, speaking, reading, writing (composition, handwriting conventions, and spelling), language (English grammar and usage) curricula, instructional materials, assessment and evaluation.

**ED 4308 The Teaching of Reading (3-0). Education Specialization.** Intensive study of reading assessment, readiness, beginning reading, remedial reading, reading devices, and the use of audio-visual aids in reading.

**ED 4310 Social Studies in the Classroom (3-0).** This is a course in methods and strategies in teaching social studies curriculum in the public schools. Topics include, but are not limited to, citizenship, historical knowledge, political systems, socioeconomic systems, historical inquiry, curricula, instructional materials, and assessment and evaluation.

**ED 4311 Methods and Materials for the Middle Grades (1-2).** Designed as a companion course to ED 3306, this course prepares teachers to meet the educational needs of students in grades 4-8, including classroom management and communicating with students, colleagues, and parents. This course is field-based and has a strong component addressing instructional technology. Prerequisites Completion of Block I.

**ED 4312 Secondary School Methods and Materials (1-2).** A course emphasizing the practical details of methods of teaching in the secondary school, including unit and lesson planning, materials and technology of instruction, curriculum content and provisions for individual differences. Includes a unit on exceptional and multicultural students. This course has a field experience component. Prerequisites; Completion of Block I.

**ED 4313 Reading Comprehension and Enrichment (3-0). Education Specialization.** Emphasis on divergent learning in the following reading areas: vocabulary development, critical-analytical reading, research and reporting, and appreciative reading. Includes 20 hours of field experience.
**ED 4314 Reading Skills for Content Subjects (3-0)**. Methods and materials for teaching skills needed for locating, interpreting, and organizing reading materials used in science, social studies, math and the other content subjects. Includes interpretation of graphic aids, skimming and scanning. Includes 10 hours of field experience. Prerequisite: Admission to Teacher Education

**ED 4315 Reading Diagnosis and Remediation (3-0). Education Specialization.** Strategies for teaching reading to pupils who have problems in auditory learning, visual learning, language learning, and the slow learner. Prerequisite: ED 4308.

**ED 4317 Diverse Populations in the Regular Classroom (3-0).** Instructional strategies addressing diversity in the regular classroom, with emphasis upon students with cultural differences, limited English proficiency, educational disabilities, and/or gifts and talents. Prerequisites: Approval of the Director of Teacher Education; Completion of Blocks I and II.

**ED 4318 Word Identification Skills (3-0). Education Specialization.** The study of the skills involved in word identification in the context of language concepts. Attention will be given to phonics, structure, context, whole word skills, and the teaching strategies useful to increase the students’ knowledge of words and word analysis skills. (No prerequisite. Suggested as a foundation course for students specializing in reading and open to other students.) Includes 20 hours of field experience.

**ED 4322 Classroom Management (3-0).** This course presents practical methods for creating a positive learning environment working with behavior problems and dealing with a range of challenges in the K-12 classroom. An online format that provides discussion opportunities during student teaching. Prerequisite: Approval of Coordinator of Field Experiences; completion of Blocks I and II.

**ED 4327 Readings and Research (3-0). Education Specialization.** A course taught on an individual basis wherein special topics are studied. Course content varies according to needs of the student.

**ED 4399 Special Topics (3-0). Education Specialization.** A course covering various topics in the field of education. May be repeated for credit when topic varies. Prerequisite: Approval of advisor.

**ED 4601 Student Teaching in the Elementary School (0-6).** The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

**ED 4602 Student Teaching in the Middle School (0-6).** The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in the public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of
Teacher Education.

**ED 4603 Student Teaching: All-level Certification (0-6).** The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in a public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

**ED 4605 Student Teaching in the Secondary School (0-6).** The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in a public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

**ED 5100 Pedagogy of Mathematics for the English Language Learner (1-0).** This course is for teachers of mathematics and introduces basic concepts associated with the effective teaching of mathematics to English language learners (ELL) on the Math STAAR objectives. Three areas covered are: best practices for ELL (Spanish), mathematics vocabulary, and dual language problem solving.

**ED 5138 Professional Development Appraisal System (PDAS) (1-0).** An investigation of the PDAS training for appraisers in the Professional Development Appraisal System developed by the Texas Education Agency. Included are statutory requirements, historical development, domains, criteria, indicators, exception quality, and holistic expectations. Prerequisite: ED 5236.

**ED 5236 Leadership and Evaluation of Instruction (ILD) (2-0).** An investigation of the processes and procedures used to evaluate instructional and administrative personnel in the public schools. Special attention is given to the role of the principal and supervisor. Included in the content are programs of clinical supervision and staff development. Prerequisite: Approval of advisor.

**ED 5300 Internship in Teaching I (0-3).** Required for post-baccalaureate certification candidates seeking to satisfy the teaching requirement by teaching full-time as a teacher of record in an accredited school, jointly supervised by University faculty and school district personnel. This is the first semester of the Internship. Prerequisite: Must be accepted in the Post-Baccalaureate Initial Certification Program.

**ED 5301 Internship in Teaching II (0-3).** Required for post-baccalaureate certification candidates seeking to satisfy the teaching requirement by teaching full-time as a teacher of record in an accredited school, jointly supervised by University faculty and school district personnel. This is the second semester of the Internship. Prerequisite: ED 5300. ED 5301 must be taken the next consecutive long semester after successful completion of ED 5300; must be accepted in the Post-Baccalaureate Initial Certification Program.

**ED 5302 The Principalship (3-0).** A course designed especially for elementary and secondary school principals in which the role, scope and function of the principalship is
thoroughly studied.

**ED 5305 Technology in the Educational Setting (3-0).** This course will focus on technology for content-area instruction, instructional software, multimedia presentations, telecommunications, data organization, and student projects. Issues regarding equity, copyright law and fair use will be included.

**ED 5306 Assessment of Individual Intelligence (3-0).** Required for educational diagnostician certification. Students will administer, score, and interpret major assessment instruments used to determine eligibility and services provided through special education. Legal requirements and ethical practices will be stressed. Prerequisite: Instructor’s approval.

**ED 5307 Graduate Research (3-0).** A course designed to broaden the perspectives of graduate students and to introduce them to the techniques of research and the various fields of graduate work offered on this campus. Must be completed in first 12 sch.

**ED 5308 Foundations of Reading (3-0).** A study of reading problems from the standpoint of maturation and growth of the pupil, together with the adoption of reading materials to the needs and stages of reading readiness of the child.

**ED 5310 Organization and Structure of the Public School Curriculum (3-0).** A course designed for post-baccalaureate students pursuing teacher certification. Emphasis will be upon developmental appropriate curriculum design, qualitative and quantitative evaluation, and classroom organization.

**ED 5311 Improvement of Instruction in the Public School (3-0).** A course designed for post-baccalaureate students pursuing teacher certification. Emphasis will be upon learner-centered practices in specific academic areas, and effective teaching behaviors for diverse learners.

**ED 5312 Advanced Survey, Exceptional Children (3-0).** A survey of exceptional children involving categorical identification, terminology, advocacy litigation, legislation at the national and state levels, and state guidelines, involving special populations.

**ED 5313 Career Development and Life Planning (3-0).** A study of career development theory; systems of career awareness, exploration, preparation, and growth, and their application to career counseling, career guidance, career decision making, life planning, and career education. Prerequisite: ED 5314 and ED 7302.

**ED 5314 Personality and Counseling Theory (3-0).** A study of human personality dynamics as related to counseling theory and practice, emphasis on modern humanistic and phenomenological theories as they apply to counseling and developmental guidance.

**ED 5315 Assessment in Counseling (3-0).** An introduction to testing and assessment for use in counseling individuals and groups, including: basic psychometric theories and approaches to appraisal; psychometric statistics; factors influencing appraisals, data and information gathering; and use of appraisal results in the helping process. Also addresses test selection, test administration, and the dynamics of test interpretation. Prerequisite: ED 5314

**ED 5316 Diversity in Public Education (3-0).** A study of theory, research and methodology relative to the needs of multicultural and special student populations.
ED 5317 History, Philosophy, and Trends in Education (3-0). This course is a survey of the historical, philosophical and contemporary landscape of schools in the United States. Emphasis is placed on enduring debates about the purposes of education in a democratic society.

ED 5318 Management and Development of Human Resources (3-0). A comprehensive study of the human resource function in public schools. Included are job analyses, staffing needs, recruitment, selection, placement, induction, evaluation, appraisal, and development of school personnel at all levels.

ED 5319 School Law (3-0). A study of general laws applying to all states concerning education, and in-depth study of cases and decisions affecting current education.

ED 5320 Advanced Methodology for Exceptional Children (3-0). An advanced study of ways to organize, modify, and supplement the traditional curriculum, to provide appropriate learning activities, and to evaluate progress on an individual basis for the exceptional student.

ED 5321 Foundations of Special Education Law (3-0). A course designed to provide an understanding of the laws governing the area of special education, focusing on current law as such as IDEA, Section 504, and ADA, as well as the legal aspects of the development and implementation of IEPs and IFSPs. Previous cases impacting special education will be examined.

ED 5322 Behavior Management (3-0). An in-depth look at classical and operant conditioning principles from the standpoint of human application, from the classroom to the home, from private practice to institutional placements. Actual behavior modification project included. Prerequisite: Approval of instructor.

ED ED 5323 Appraisal of Educational Disabilities (3-0). Required for educational diagnostician certification. Students will administer, score, and interpret major academic achievement tests used to identify educational disabilities, and design appropriate instruction and services. Students will examine current trends in programs designed for early identification and intervention of possible educational disabilities. Factors involved in multicultural assessment will be addressed. Prerequisite: Instructor’s approval.

ED 5324 Advanced Educational Psychology (3-0). An advanced study in the sets of circumstances that are present when human learning occurs, including the conditions that govern learning beyond the traditionally studied prototypes of response conditioning and association.

ED 5325 Advanced Educational Remediation (3-0). An advanced study of ways to design and implement instructional intervention for the remediation, compensation, or adjustment to the exceptional learner’s deficiency in order to design and implement individualized instruction programs. Additional focus on functional assessment of behavior and academic performance in order to develop positive behavioral supports as well as intervention plans.

ED 5327 Readings and Research (3-0). A course taught on an individual basis wherein special topics are studied. Course content varies according to needs of the student. Prerequisite: Approval of advisor and instructor.

ED 5330 Introduction to School Administration (3-0). An overview of school
administration that includes roles, functions and duties of those who administer and supervise
in the schools. Policy development, planning, goal setting, program evaluation, and
accreditation standards are also included.

**ED 5350 Nature of Gifted and Talented Students (3-0).** Introduction to the intellectual,
social, and emotional characteristics of gifted and talented individuals with emphasis on
educational needs. Includes varied concepts of giftedness and research findings on creativity.

**ED 5351 Curriculum for Gifted and Talented Students (3-0).** Methods and materials to
meet the needs of gifted, talented, and creative students. Individual assessment, curriculum
modification, instructional materials, and classroom organization will be covered. Includes
theories and models of creativity and high-level thinking.

**ED 5352 Social/Emotional Development of the Gifted and Talented (3-0).** Affective growth
and potential adjustment problems of gifted students. Emphasis on self-concept, career
concerns, peer relationships, and family interactions.

**ED 5353 Program Planning for Gifted and Talented Students (3-0).** Instruments and
procedures for identification of gifted, talented and creative students. Program models and
evaluation and implementation of programs are also covered.

**ED 5360 Professional Roles and Responsibilities (3-0).** A course that provides an
understanding of the roles and responsibilities of teaching that includes knowledge of legal and
ethical issues and requirements for teachers; professional knowledge and skills needed for
communicating and collaborating with professional colleagues, the community, and families;
and the importance of family involvement in children's education. A course designed to meet
the needs of those seeking initial teacher certification through the PBICP alternative
certification route.

**ED 5600 Clinical Teaching in the Post Baccalaureate Program (6-0).** This is for Post
Baccalaureate students who wish to satisfy the teaching experience requirement for
certification through clinical teaching in the public schools. Prerequisite: Approval of the
Director of Education

**ED 5627 Clinical Teaching in the Post Baccalaureate Program (0-6).** The course serves as
a capstone experience for teacher candidates enrolled in teacher education program. Students
are required to work within their placement campuses and fulfill the responsibilities and
obligations outlined in the student teaching handbook. Students are expected to serve in a
teaching and leadership role in a public school classroom(s) under the supervision of an
experienced cooperating teacher and university supervisor.

**ED 6109 Administration of the UIL Program (1-0).** A course designed to provide students
the opportunity to study the University
Interscholastic League organization and operation for governing interscholastic competition in
the public schools of Texas.

**ED 6304 Organization and Theory in Administration (3-0).** Current trends, issues and
problems in the elementary and secondary schools involving the planning, organizing,
administering and evaluating the total school system.

**ED 6307 School Public Relations (3-0).** A course designed to acquaint the school
administrator and the teacher with the techniques of dealing with the public in such a way as to give an intelligent understanding of the aims, the scope, the achievements, and the problems of an educational program.

ED 6308 Advanced Human Growth and Development (3-0). A study of the human life span from conception to death, with emphasis on childhood and adolescence, and the implications for effective academic and interpersonal experiences.

ED 6311 Emergent Literacy and Language Development (3-0). A course that focuses on the correlation between the development of language and literacy during the preschool, kindergarten, and primary grades. It is designed to provide students with an understanding of how language is acquired and how competence in oral language supports the development of reading and writing. Prerequisite: ED 5308 or enrollment in ED 5308 concurrently.

ED 6313 Teaching Reading in the Content Areas (3-0). A course that focuses on the development of reading skills in elementary, middle, junior high, and high school subject area content classes. Multiple literacies and their classroom applications are examined, strategies for developing reading fluency and comprehension are emphasized, and methods for expanding vocabulary are included.

ED 6314 Diagnosis and Correction of Reading Disabilities (3-0). A course that focuses on the symptoms and causes of reading disabilities, methods of assessing and diagnosing reading disabilities, and strategies for intervening, remediating, and correcting reading disabilities. Opportunities for assessing, diagnosing, and designing intervention programs are included. Prerequisite: ED 5308.

ED 6315 Design and Implementation of the Instructional Program (3-0). A course which examines curriculum theory and development in grades K-12; emphasis on trends, development of curricular units and courses of study, and on federal, state and local curricular influences.

ED 6316 Seminar in Counseling (3-0). Issues and topics in counseling; may be repeated twice if course content varies.

ED 6317 Organization and Supervision of Reading Programs (3-0). The organization and administration of regular and corrective reading programs in the public schools. The emphasis is on the integration of reading and writing skills and diagnostic principles and procedures in the classroom instructional program.

ED 6318 Literacy Through Literature (3-0). A course that focuses on using literature in the elementary, junior high, and secondary classroom to teach and support the skills necessary for independent reading. Children's and young adult literature is explored through different genres and cultures, current technology applications, and informative evaluation criteria. Prerequisite: ED 5308.

ED 6320 School Support Services (3-0). A study of the management of school services for which a chief administrator of an educational unit is responsible. Course content includes attendance, accounting, physical plant and facilities, construction and maintenance, human resources, nutrition, and transportation.
**ED 6341 Psychopathology (3-0).** This course examines existing concepts of mental illness and offers a healthier, client-freeing approach. Presentations on medications, stress and the immune system, mental status exam, and cases exemplifying diverse responses to human suffering are included. Prerequisite: Advisor Approval

**ED 6342 Addictive Disorder (3-0).** This course introduces counseling students to the field of addictions, including history, basic pharmacology, conceptualizations of addictions, assessment, models of treatment, prevention, and family and societal issues. Addictions counseling will overview but is not limited to process addictions, such as gambling, sexual, and eating, as well as chemical addictions, such as alcohol or drug. Prerequisite: Advisor Approval

**ED 6343 Mental Health Assessment (3-0).** Presentation of and exposure to major psychological tests used in a psychological report. Referral questions, psychological report writing, ethical issues, and examinations of actual clinical data round out the course. Prerequisites: Permission of instructor

**ED 6344 Counseling in a Multicultural Society (3-0).** Designed to help students develop knowledge, skills, and attitudes needed to provide effective counseling in a multicultural and pluralistic society. Issues addressed include awareness of one's own worldview and that of others; racism, stereotyping, and discrimination; demographic community, and family characteristics of various minority groups; and the application of theory, technique, and ethics to multicultural counseling. Prerequisite: Approval of advisor.

**ED 6345 Family Counseling (3-0).** A survey of the field of family counseling, examining history, theories, and practice. Includes discussion of ethical, legal, and other professional issues related to family counseling. Prerequisite: Advisor Approval

**ED 6346 Ethical and Legal Issues in Counseling (3-0).** A course to familiarize students with ethical and legal practice in the field of counseling; included are standards of ethical practice and their application to the various areas of counseling, ethical decision-making, major ethical and legal issues, and ethical responses to unethical behavior. Prerequisite: ED 5314.

**ED 6347 Introduction to Play Therapy (3-0).** This course will explore the history and essential principles and elements of play therapy, as well as theories, techniques, modalities and application of play therapy. Skills are developed through experiential activities, case studies, and video presentations. Prerequisite: Advisor Approval

**ED 6371 History and Principles of Career and Applied Technology Education (3-0).** A course in the history, development, and operation of career technology education programs, including the impact and implications of state and federal legislation and regulation.

**ED 6372 Information Resources for Career Development (3-0).** A course designed to train counselors in the collection, evaluation, and interpretation to data related to the labor market and market trends. Emphasis is placed upon sources of information (government, industry, professional), and the means by which such information can be used by teachers, counselors, students, and parents.

**ED 6373 Career and Technology Student Identification, Placement, and Follow-up (3-0).** A course designed to develop counselor competencies in the identification, placement, and follow-up of students who may participate in career and technology education programs. Emphasis is placed on involvement at the appropriate grade levels as an alternative or in
addition to college preparation for career entry and advancement.

**ED 6375 Foundations of Educational Technology (3-0).** This course provides the students with an overview of the historical, theoretical, and philosophical foundations of educational technology. Current trends and research, emerging technology, and critical issues will be examined and the student will have the opportunity to apply newly acquired technological knowledge and skills to a variety of educational environments. Prerequisites: must be completed in first 6 sch of coursework.

**ED 6376 Inquiry-Based Research Methods (3-0).** This course will examine methods and approaches to graduate level research, including qualitative, quantitative, and mixed-method inquiry. Special attention will be given to inquiry-based approaches and social constructivist learning theories, as well as the ethical research of human subjects. Prerequisites: must be completed within first 12 sch.

**ED 6377 Instructional Design (3-0).** This course will provide students with insight into the theories and process that guide effective instructional design. A systems-approach to designing instruction will be examined, along with methods to evaluate instructional methods.

**ED 6378 Integration of Technology into the Curriculum (3-0).** This course will examine the advantages and challenges of effectively integrating technology into the curriculum in an effort to promote student motivation, engagement, and learning. Technologies assisting school personnel in assessment, evaluation, record-keeping, and data collection will be examined as well.

**ED 6379 Implementation of ED Tech Programs in the Educational Setting (3-0).** Students in this course will examine best-practices for the implementation of educational technology programs in the educational environment through the development of specific goals and a strategic plan. Although educational settings will be emphasized, strategies can be applied to a variety of settings and occupations.

**ED 6380 Special Topics in Educational Technology (3-0).** This special topics course provides the student with an opportunity to examine the role of educational technology in a variety of settings, through a case-study type approach. Emphasis will be placed on project/problem-based learning and critical analysis. Prerequisite: Advisor Approval

**ED 6381 Critical Issues in Educational Technology (3-0).** Students will examine their role as the agent of change and how that role affects and influences the diffusion of technology and the delivery of its services. Probable sociological, financial, and educational implications of the application of change will be examined, as well as approaches to reduce the occurrence of undesirable consequences.

**ED 6382 Basic Applications of Media and Technology (3-0).** This course will identify available technologies used to enhance instructional design and delivery. Concentration will be placed on the utilization of multimedia, print materials, audiovisual, computer and web-based technologies, and media conversion for educational and instructional purposes.

**ED 6383 Educational Technology Capstone with Portfolio Development (3-0).** This course is reserved for students enrolled in the final semester of the Educational Technology graduate program. Students will utilize an electronic portfolio to present an approved topic of research and/or review of program for peer and faculty committee presentation. Prerequisite:
Advisor Approval

**ED 7211 Practicum in Superintendency I (2-0).** This course provides a conduit for students enrolled in the fall semester of the superintendent certification program to gain the required clock hours of superintendent practicum for the fall courses in the superintendent certification program. This course will serve the purpose of a single depository for students who are working on their assistant/deputy school superintendent in a public school in Texas. Prerequisite: Full admission to the Superintendent Certification Program

**ED 7212 Practicum in Superintendency II (2-0).** This course provides a conduit for students enrolled in the spring semester of the superintendent certification program to gain the required clock hours of superintendent practicum for the spring courses in the superintendent certification program. This course will serve the purpose of a single depository for students who are working on their assistant/deputy school superintendent in a public school in Texas. Prerequisite: Full admission to the Superintendent Certification Program

**ED 7300 Advanced Applications of Media Technology (3-0).** This course explores the uses of multimedia in the classroom and extends the teacher's skill base in the development of advanced multimedia examples to support and enhance the curricula. Throughout the course, students will gain experience in still and motion digital editing, audio and animation production. Prerequisite: ED 5320 & ED 6307

**ED 7301 Clinical Practice in Counseling (3-0).** This course provides a conceptualization of the counseling process and clinical interviewing; emphasizes development of the counseling skills necessary to function appropriately as an entry-level counselor in a variety of settings, including crisis counseling. Training is done through role-play, coaching, and experiential activities. It includes presentation of case studies applicable to current issues, multicultural concerns, legal decisions, and ethics in the field. Prerequisites: Must be taken last semester of coursework. Prerequisite: Completion of a minimum of 30 semester hours of counseling coursework.

**ED 7302 Management of Guidance, Counseling, and Human Services Programs (3-0).** A professional orientation course covering program development, organization, management and accountability; professional organizations; codes of ethics; legal aspects of practice; standards of preparation; position functions. Prerequisite: ED 5314

**ED 7303 Techniques of Counseling (3-0).** The initial course in the sequence of counseling practice courses which applies knowledge of ethical practice, counseling theory, and human development to the process of therapeutic change and growth; emphasis is on basic counseling skills and various techniques in individual practice and crisis intervention. Prerequisite: ED 5314.

**ED 7304 Educational Leadership for Principals (3-0).** A critical examination of the theory and practice of leadership. The behaviors, skills, attributes, beliefs, and attitudes for leadership will be researched and investigated. Special attention will be given to the difference between the concept of leadership and the concept of management in organizations.

**ED 7305 Workshop in Education (3-0).** A special topics course in which the course content varies according to the instructor's course design. May be repeated when the course content varies.
**ED 7306 Superintendent Leadership (3-0).** This course will provide a comprehensive overview of the leadership aspects of the school superintendent. This would include dealing with the board, the public, the school community and all stakeholders within the district and how to view the big picture of being the CEO of a school district, including keeping all entities fully informed on a continuing basis, long range planning on all levels, leading and managing campus-based planning committees and district- planning committees, curriculum development and management, and all else pertaining to school district leadership. Prerequisite: Full admission to the Superintendent Certification Program

**ED 7307 Advanced Seminar in Administration (3-0).** A course designed especially for preparing administrators for the superintendency; emphasis on decision-making modes and leadership change strategies.

**ED 7308 The Superintendency (3-0).** This course is an introduction to school superintendency which would provide a broad overview of what a practicing superintendent is required to do as well as the legal implications of the position. Additionally, the expectations of the Sul Ross State University Superintendency Certification program of study would be clearly delineated. Additionally, 75 clock hours of internship with a practicing superintendent in which the students will be exposed to the daily routine of the superintendent will be required. Prerequisite: Full admission to the Superintendent Certification Program

**ED 7309 State and Federal Programs in Public Schools (3-0).** A study of federal and state programs currently being used in public schools.

**ED 7310 Public School Buildings (3-0).** A study of past and present building architecture with a special emphasis on building types.

**ED 7311:1 and 7311:11 Superintendent Internship (0-3) and (0-3).** A course which provides the student with a minimum of 300 clock hours of reality experiences in the superintendency in a T.E.A. accredited public, private, or parochial school; students work with a superintendent, assistant superintendent, or business manager in the conduction of everyday central office administrative duties. Prerequisite: Approval of advisor and have completed the mid-management/principal certification program. Clock hours must be accumulated during two consecutive semesters. 7311:1 is required for enrollment in 7311 II.

**ED 7312 Practicum in Reading (0-3).** A course that provides internship experiences for students seeking the reading specialist certificate. It consists of a 160-hour, 15-week field experience designed to allow students opportunities to put into practice the knowledge gained throughout the program. Students will be supervised by university faculty as they administer and interpret diagnostic assessments, plan and conduct intervention programs, and document the reading development of their case studies. Prerequisite: Must have completed 18 hours of reading or be in last semester of coursework; consent of advisor.

**ED 7313 Practicum in School Administration (0-3).** A course which provides reality experiences in the principalship in a T.E.A. accredited public, private, or parochial school; students spend a minimum of 160 clock hours working with a principal and/or assistant principal in the conduction of everyday administrative duties. Prerequisite: Approval of advisor and completion of a minimum of 18-24 semester hours of mid-management coursework.

**ED 7315 Group Processes in Guidance and Counseling (3-0).** A course which explores
numerous theoretical models, exposes students to various techniques and principles, and includes class presentations, role play and opportunity for "hands on," experiential involvement in a group. Prerequisite: ED 5314 and 7303.

**ED 7316 Practicum in Guidance and Counseling (0-3).** A course that provides reality field experiences in guidance and counseling in an appropriate school or agency setting; students spend a minimum of 160 clock hours under supervision in the conduction of counseling and guidance activities. May be taken twice, with permission of advisor. Prerequisite: Approval of advisor and completion of a minimum of 27-30 semester hours of counseling coursework.

**ED 7317 Internship in Guidance and Counseling (0-3).** A course that provides field supervision and high-quality professional development throughout the entire term of the internship, including all extension of the initial term. Required for and restricted to probationary certification candidates seeking to satisfy the school counseling requirements by working full time as a school counselor of record in an accredited school, under supervision of the appointed counseling program University faculty. Prerequisite: Must be accepted in the school counseling probationary certification program and advisor approval. May be taken repeatedly.

**ED 7318 Practicum in Special Education (0-3).** A course which provides field experience in special education in a T.E.A. accredited public, private, or parochial school or identified agency. Students spend a minimum of 160 clock hours under supervision of designated mentor and university faculty. Prerequisite: Instructor's approval.

**ED 7319 Practicum in Gifted and Talented (0-3).** A course which provides field experience in gifted and talented education programs in a T.E.A. accredited public, private, or parochial school. Students spend a minimum of 100 clock hours under the supervision of school and university faculty. Prerequisite: Completion of a minimum of 12 hours of gifted and talented course work and permission of the instructor.

**ED 7320 Professional Issues and Ethics in Counseling (3-0).** This course familiarizes students with professional, legal, and ethical issues facing clinical mental health counselors. The focus will be an overview of business, family law and professional practice, the study of current board rules, and records management. Students will demonstrate knowledge of and ability to apply the Texas State Board of Examiners of Professional Counselors Statutes/Law and Rules/Regulations. Prerequisite: Advisor Approval

**ED 7321 Superintendent/School Board Relations (3-0).** This course would provide a comprehensive view of the legal ramifications a practicing superintendent faces both on a daily basis and long range and would specifically focus on how this affects the working relationship with the Board of Trustees. This would include dealing with the Board of Trustees on/with the following: policy matters, working with human resources, learning to keep abreast of impending and new enacted legislation and working with the board and school community to develop long range predictions as to how possible future legislation and proposed legislation will affect the school community. Prerequisite: Full admission to the Superintendent Certification Program

**ED 7322 Superintendent Finance Issues (3-0).** This course would provide a comprehensive view of all things financial with which the practicing school superintendent must deal on both a daily basis and as an aspect of long range planning, including budgeting, fiscal growth, facilities planning and the politics of each aspect of finance. Prerequisite: Full admission to the Superintendent Certification Program
**ED 7323 Emotional Intelligence (3-0).** This course explores numerous theoretical models of emotional intelligence, examines the skill sets necessary to strengthen interpersonal and intrapersonal relationships, exposes the counseling student to transpersonal theories and techniques that are intended to improve the counselor outlook to prevent compassion burnout. Students will also complete individual assessments to gain baseline information on Personal Values, Individual Emotional Intelligence, and the student’s Quality of Motivation. Prerequisite: Advisor Approval

**ENGLISH (ENG)**

**ENG 1301 (ENGL 1301) Composition I (3-0).** This is an introductory college course which emphasizes the composition of short essays and reading skills. Required of all students. Prerequisite: English 0300 or sufficient English, verbal, and reading scores to meet the requirements of English 0300 as described above.

**ENG 1302 (ENGL 1302) Composition II (3-0).** This course includes the study of various writing modes, with emphasis on exposition, critical analysis, and research techniques. Students will write well-developed, critical, persuasive, documented papers. Required of all students. Prerequisite: English 1301.

**All sophomore and advanced English courses require completion of the freshman English courses as a prerequisite.**

**ENG 2306 Topics in Literature (3-0).** A sophomore-level study related to literature. Topics may include Introduction to Poetry, Rural Literature, Multicultural Literature. May be repeated for credit when the topic varies. Prerequisite: ENG 1301 and ENG 1302

**ENG 2310 Introduction to Folklore (3-0).** An introduction to folklore that may include genres of folklore, fieldwork techniques, cultural contexts for folklore, and folklore in literature.

**ENG 2311 (ENGL 2311) Technical and Business Writing (3-0).** The study and practice of writing technical and professional reports related to scientific, industrial, and commercial fields. Prerequisite: ENG 1301.

**ENG 2312 Writers of the American West (3-0).** A study of writers of the American West from the nineteenth century to the present. Readings may focus on works by one author or on works by several authors.

**ENG 2315 Environmental Literature (3-0).** An ecocritical survey of literature that reflects relationships among humans, animals, and nature. Readings will span literature from rural, agricultural, Native American, Hispanic, and world cultures.

**ENG 2322 (ENGL 2322) British Literature I (3-0).** English literature of the Anglo-Saxon Period, Middle Ages, Renaissance, and Age of Reason.

**ENG 2323 (ENGL 2323) British Literature II (3-0).** English literature of the Romantic, Victorian, and Modern Periods.

**ENG 2327 (ENGL 2327) American Literature I (3-0).** A study of American literature from Colonial times through the Civil War.

**ENG 2328 (ENGL 2328) American Literature II (3-0).** A survey of American literature from the
Reconstruction to the Second World War.

ENG 2331 (ENGL 2331) World Literature (3-0). A study of masterpieces of world literature from ancient times to 1600.)

ENG 2341 (ENGL 2341) Forms of Literature (3-0). Techniques of critical analysis of major literary types: prose, fiction, poetry, and drama.

ENG 3301 Contemporary Literature (3-0). A study which emphasizes works of fiction, drama, and poetry since 1960.

ENG 3303 Structure and History of the English Language (3-0). The structural essentials of English, with some treatment of the historical development of the language, from Anglo-Saxon to modern English.

ENG 3304 Shakespeare (3-0). Shakespeare's principal histories, comedies, and tragedies.

ENG 3305 Dramatic Literature (3-0). Introduction to themes in drama. Close analytical reading of play in relation to context., history, social, and aesthetic forms. Focus on character development, figurative language, setting, imagery, action, context, and origin. May be repeated for credit when course subject content varies.

ENG 3306 Language and Culture (3-0). A study of the role of language in cultural and/or gender relationships as it functions in social contexts.

ENG 3307 Myth and Legend in Literature (3-0). An examination of the role of myth and legend as they are manifest and represented in literature. Course may focus cross-culturally and/or historically, and may reflect various genres. May be repeated for credit when course subject content varies.

ENG 3308 Culture and Literature (3-0). An interdisciplinary and critical approach to culture and literature. Possible genres include television, film cyber culture, music and radio, and their representations in literature. May be repeated for credit when course subject content varies.

ENG 3311 Children's and Adolescent Literature (3-0). A survey of children's and adolescent literature and a familiarization with outstanding authors and illustrators of that literature. Includes the application of literary evaluation to children's and adolescent literature and a survey of resource. Prerequisite: English major or Interdisciplinary Studies major.

ENG 3312 Advanced Composition (3-0). An intensive study of writing techniques useful to the advanced writer. Areas of concentration include grammar, rhetorical strategies, and style.

ENG 3320 Creative Writing: Fiction (3-0). Emphasis on writing short stories. Includes the study of ways to examine and incorporate techniques used by established short story writers into original short fiction. Focuses on writing and critiquing original short stories.

ENG 3321 Creative Writing: Poetry (3-0). Emphasis on poetry. Provides intensive study of various poetic forms. Focuses on writing and critiquing original poetry.
**ENG 3322 Creative Writing: Nonfiction (3-0).** Emphasis on writing creative nonfiction (creative essays). Includes the study of various rhetorical devices used in effective creative nonfiction. Focuses on writing and critiquing original creative nonfiction.

**ENG 3324 Creative Writing: Introduction to Novel Writing (3-0).** An intensive study of techniques and aims unique to writing and critiquing original novel chapters.

**ENG 4300 Portfolio Capstone Course (3-0).** A course required of English majors in which they compile the portfolio of materials which must be submitted to the department for its assessment of program learning outcomes. Students enroll in this class during their final semester in the English undergraduate program.

**ENG 4302 Southwestern Literature (3-0).** A study of the literature of the Southwest with attention given to its regional characteristics and the social background that produced it.

**ENG 4303 Special Topics in Literature (3-0).** Topics include specific areas of literacy studies and will be announced in the curricular schedule for the semester in which they are offered. May be repeated for credit when topic varies.

**ENG 4304 Photography for Writers (3-0).** A survey of basic photographic and written skills needed for publication and visual literacy. Emphasis on developing photographs and text as matched pairs in order to enhance the aesthetic value and meaning of both.

**ENG 4309 Readings and Research (3-0).** Individually guided study and research in English, American or international literature or the English language. May be repeated for credit when the topic varies.

**ENG 4310 Topics in Folklore (3-0).** Emphasis on folklore in distinct cultures and literature. Topics may include Western, African-American, Women's, Native American, American, or Multicultural folklore. May be repeated for credit when topic varies.

**ENG 4312 Women in Literature (3-0).** A study of women writers, images of women in literature and feminist literary criticism. Topics may include Regional Women Writers, 19th Century Women Novelists, Women's Autobiography, Contemporary Women Poets. May be repeated for credit when topic varies.

**ENG 4315 Film as Literature (3-0).** A study of literacy works as recorded in the cinematic language of sound and image, considering both original film creations and adaptations from literacy works, originally in print. May be repeated for credit when course subject content varies.

**ENG 4316 Teaching Language Arts (3-0).** A study of the development of reading and writing in English, focusing on applying this knowledge to the language arts classroom. Preparation for the TExES certification exam in English Language Arts and Reading 8-12.

**ENG 4318 Arthurian Literature (3-0).** A study of the Arthurian literary tradition from the Middle Ages to the present. The course also emphasizes the impact of Arthurian themes and characters on art and film.

**ENG 4320 International Literature (3-0).** A study of contemporary international, often postcolonial, literature by authors from countries such as Australia, New Zealand, India, the
Caribbean, and various African nations.

**ENG 4322 Predators in Literature (3-0).** A study of the way large charismatic predators (lions, tigers, wolves, jaguars) are represented in literature. Perspectives include those from folklore, myth, symbol, religion, and science.

**ENG 5300 Studies and Research Techniques in Bibliography and Critical Theory (3-0).** An introduction to graduate research methods in literature, including experience in enumerative and analytical bibliography, and to critical theory as applied to literature.

**ENG 5302 Seminar: Creative Writing (3-0).** A writing workshop course which may be devoted to fiction, poetry, nonfiction, or other such genres. May be repeated for credit when topic (genre of writing) changes.

**ENG 5304 Studies and Research Techniques in General Literature (3-0).** Topics include subjects like those named below and are announced in the Schedule of courses for the semester in which they are offered: Contemporary Literature, Folklore, and Multicultural Literature. May be repeated for credit when the topic changes.

**ENG 5305 Studies and Research Techniques in English Teaching Methods (3-0).** Recent trends and discoveries in teaching methods and learning process as related to the teaching and learning of rhetoric, composition, literature, or creative writing. May be repeated for credit when the topic varies.

**ENG 5306 Seminar: Studies and Research Techniques in English Literature (3-0).** Topics include subjects like those named below and are announced in the Schedule of courses for the semester in which they are offered: Shakespeare; British Novel; Victorian Poets; Contemporary Fiction. May be repeated for credit when the topic varies.

**ENG 5307 Seminar: Studies and Research Techniques in American Literature (3-0).** Topics include subjects like those named below and are announced in the Schedule of courses for the semester in which they are offered: Thoreau; American Short Fiction; Southern Fiction; Twentieth-Century Fiction. May be repeated for credit when the topic varies.

**ENG 5308 Studies and Research Techniques in the English Language (3-0).** A study of specific problems concerned with the English language. May be repeated for credit when the topic varies.

**ENG 5309 Readings and Research (3-0).** Individually guided research in English or American literature or the English language. May be repeated for credit when the topic varies.

**ENG 6301 Thesis Proposal (0-6).** Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee. The student will normally register for this course no earlier than the third semester of graduate study. The student will enroll each semester of summer term in which assistance is provided by committee members or when use of the library or other research facilities of Sul Ross State University is made.

**ENG 6302 Thesis Defense (0-6).** The student will enroll in this course each semester or summer term in which assistance is provided by committee members or when use of the library or other research facilities of Sul Ross State University is made. Satisfactory completion of this course will result in the completed thesis presented to the Graduate Committee, accepted by
the Dean of the College, and filed in the Office of the Executive Vice President and Provost for Academic Affairs.

FINANCE (FIN) Back to Top
FIN 1101 Personal Financial Literacy (1-0). The topics to be covered will include, but are not limited to, budgeting, managing debt and credit, saving and investing, preventing identity theft, and retirement planning.

FIN 3340 Corporation Finance (3-0). Money and Capital Markets, financial news and investor services; and gives a broad view of the entire financial field with special emphasis on discounted cash flow analysis, stock and bond valuation models, financial statement analysis, capital budgeting, cost of capital, and working capital management. Prerequisite: ACC 2301, MATH 1314, GBA 3352

FIN 4342 Investments (3-0). Sources of information for investors; investment planning; securities selection; types of stocks and bonds; investment companies. Prerequisite: FIN 3340

FIN 5306 Seminar in Financial Management (3-0). Scope and objective of financial management in the modern corporation; nature and mathematical formulation of underlying relationship in financial decision-making. Theories of capital budgeting, cost of capital, and investment.

FINE ARTS (FA) Back to Top
FA 1302 (MUS 1306) Music Appreciation (3-0). This course develops music appreciation through an exploration of the relationship between musical symbolic sounds and technological innovations with a focus on instrument construction and musical composition. The course familiarizes students with music technology in a broad array of historical and geographical music environments through readings, lectures and hands-on exercises covering the timbres, scales, rhythms and forms that instruments produce, the contexts people play instruments in, and the reasons why they play.

FA 1304 Art History for the Designer (3-0). The course is a survey of the visual arts of the world tailored specifically to the needs of designers. It will cover all regions and periods of the visual arts and focus on how students can utilize historical styles for their own design work. Emphasis will be placed on how to replicate authentic and historical styles for a variety of design purposes, including gaming, print, costume, theater and communication design applications. This course meets the multicultural requirement.

FA 1315 (HUMA 1315) Fine Arts Appreciation (3-0). A survey course which introduces students to selected fine arts areas. The course is taught in three blocks, one each for art, music, and theatre. A specialist in each area will present information of a practical and historical nature, emphasizing aesthetic values and accessibility for lay persons.

FA 2301 Special Topics (2-1). A course dealing with topics in the study of fine arts, such as investigations into the history of theatre, film, dance, music and/or the visual arts. Course may be repeated for credit.

FA 2302 Intro to Digital Design (3-0). A course in digital-imaging techniques using Adobe Photoshop. The course will focus on digital image editing, digital painting and design.

FA 2303 Special Topics in Multicultural Visual & Performing Arts (3-0). This course
introduces the student to topics in theatre and art from a multicultural viewpoint or women’s studies perspective with particular emphasis given to the social, religious, political and historical relevance of these topics throughout the non-western world.

**FA 2305 Design II: Three Dimensional Design (3-0).** This course is an introduction to the principles of three-dimensional design, and the construction of three-dimensional space as a design element. This course will utilize traditional and computer-based approaches to teach the student to develop compelling three-dimensional designs for product and industrial design, architecture, exterior and interior design, gaming and virtual environments as well as a variety of other applications.

**FA 3301 Arts Administration (3-0).** An introduction to the business side of performing and visual arts. Will include promotion/merchandising, organizational management, legal aspects, fund raising, and career planning/development.

**FA 3302 Advanced Digital Imaging (3-0).** A course in advanced digital imaging techniques including Photoshop and Illustrator. The course will focus on advanced digital image editing, digital painting and illustration.

**FA 3303 Field Studies (3-0).** A discussion of subjects such as writing reviews, press releases, visiting professional public, private and non-profit venues, interviews with artists and behind the scene looks at museum, theatres, foundations and studios. Class also includes resume and portfolio development, career choices, marketing and sales, and other areas which are of interest and importance to all Visual & Performing Arts students/ (Includes major field trip out of the area. Required for all majors - preferably taken in junior year.)

**FA 4101 Senior Capstone Project (3-0).** The Senior Capstone is the culminating course for the Visual and Performing Arts Major. Each Capstone is a follow-through of a proposal for the project written by students with the help and encouragement of their academic advisor. It is aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired within their area of specialization and share it in a public form. Prerequisites: Written proposal and permission of instructor.

**FRENCH (FREN)**

**FREN 1411 (FREN 1411) Beginning French I (4-0).** An introductory course for students with no previous knowledge of the language. Focus on the basic skills of listening, speaking, reading, and writing.

**FREN 1412 (FREN 1412) Beginning French II (4-0).** A continuation of French 1401 with additional practice in the four basic skills of listening, speaking, reading, and writing. Prerequisite: French 1411 or consent of the instructor.

**FREN 2311 (FREN 2311) Intermediate French I (3-0).** Third semester of college French. A continuation of French 1411 and 1412. Continued development and review of speaking, reading, and writing skills in French. Includes literary and cultural readings. Prerequisite: French 1412 or consent of instructor.

**FREN 2312 (FREN 2312) Intermediate French II (3-0).** Fourth semester of college French. A continuation of French 2311. Conversation, composition, literary and cultural readings, and grammar review. Prerequisite: French 2311.
FRESHMAN LEADERSHIP PROGRAM (FLP)

FLP 1101 Freshman Leadership Program (1-0). This course is developed for students who exhibit leadership potential as student leaders. Students receive a scholarship to attend and are expected to lend their talents to the Sul Ross State University through student clubs and organizations. This course will cover basic leadership theory and provide practical application in the educational content. It is an introductory course covering a broad range of leadership topics from self-development and understanding self to group behavior, organizational design, ethics and teamwork. Prerequisite: Consent of Instructor.

FLP 2101 Freshman Leadership Program Sophomore Assistant (1-0). This course is developed for students who exhibit leadership potential in the Freshman Leadership Program (FLP). Students receive a scholarship to attend and are expected to lend their talents to the Sul Ross State University through student clubs and the Freshman Leadership Program. It is an introductory course covering a broad range of leadership topics from self-development and understanding self to group behavior, organizational design, ethics and teamwork. Prerequisite: FLP 1101

GENERAL BUSINESS ADMINISTRATION (GBA)

GBA 1301 (BUSI 1301) Business Principles (3-0). Introduction to the role of business in modern society. Overview of business functions as well as introduction various business and societal issues, including contemporary dimensions of business as ethics, social responsibilities, changes in the workplace and international dimensions of business are considered.

GBA 2199 Applied Research/Internship/Independent Study (1-0). This course is designed expressly for students with sufficient curiosity and demonstrated ability to work independently while under the guidance of a professor. Content may include, but not limited to, selected reading; topic investigations and projects. Prerequisite: Consent of Instructor.

GBA 2299 Applied Research/Internship/Independent Study (2-0). This course is designed expressly for students with sufficient curiosity and demonstrated ability to work independently while under the guidance of a professor. Content may include, but not limited to, selected reading; topic investigations and projects. Prerequisite: Consent of Instructor.

GBA 2354 Management Communication (3-0). Oral communication skills for application into interpersonal, small and large groups, and public speaking situations are studied in depth. Strategic and practical communication methods are applied to support the development of effective and ethical oral presentation skills at all levels and in business and public settings. Students use critical thinking skills to analyze business communication case studies in both oral and written forms. Communication in the global business environment is studied.

GBA 2399 Applied Research/Internship/Independent Study (3-0). This course is designed expressly for students with sufficient curiosity and demonstrated ability to work independently while under the guidance of a professor. Content may include, but not limited to, selected reading; topic investigations and projects. Prerequisite: Consent of Instructor.

GBA 3199 Applied Research/Internship/Independent Study (1-0). This course is designed expressly for students with sufficient curiosity and demonstrated ability to work independently while under the guidance of a professor. Content may include, but not limited to, selected reading; topic investigations and projects. Prerequisite: Consent of Instructor.
**GBA 3299 Applied Research/Internship/Independent Study (2-0).** This course is designed expressly for students with sufficient curiosity and demonstrated ability to work independently while under the guidance of a professor. Content may include, but not limited to, selected reading; topic investigations and projects. Prerequisite: Consent of Instructor.

**GBA 3350 Business Information Systems (3-0).** Introduction to information systems in business. Hands on exposure to business applications software in microcomputer laboratories. Practical experience in the principles of information technology.

**GBA 3351 Business Law (3-0).** Legal aspect of business transactions with emphasis on the law of contracts, agency, bailment, and commercial paper.

**GBA 3352 Quantitative Systems in Business (3-0).** Statistical data analysis and statistical inference. Estimation of population parameters, hypothesis testing, linear regression and correlation. Will demonstrate computer or microcomputer technology in handling statistical data. Prerequisite: Math 1314

**GBA 3399 Applied Research/Internship/Independent Study (3-0).** This course is designed expressly for students with sufficient curiosity and demonstrated ability to work independently while under the guidance of a professor. Content may include, but not limited to, selected reading; topic investigations and projects. Prerequisite: Consent of Instructor.

**GBA 4350 Advanced Readings and Research in Business Administration (3-0).** Selected seminar topics in business administration.

**GBA 4355 International Business (3-0).** Covers the economic underpinnings of free trade; investment and trade barriers; foreign direct investment; the multi-national enterprise; assessing the international business environment; and global organization and strategy.

**GBA 5301 Business Strategy (3-0).** Required of all MBA students. Emphasis on the case method. Also emphasis on business simulations, business reporting techniques, and in-depth integration of course content across the MBA curriculum. Prerequisite: 15 SCH of MBA course work.

**GBA 5302 Readings and Cases in Business Administration (3-0).** Covers one or more special fields. May be repeated for credit as topics change.

**GBA 5304 Management Information Systems (3-0).** Function of management information systems, decision support systems, executive information systems, and expert systems in business decision making, planning, and control. Management participation information system design and development.

**GBA 5308 Problems in Business Administration (3-0).** An investigation, analysis, and discussion of business problems, trends, policies, and special topics. May be repeated for credit as topics change.

**GBA 5309 Quantitative Analysis and Decision Theory for Business (3-0).** Techniques and application of quantitative tools and theories useful for analyzing problems and making decisions. Utilizes microcomputers.
GENERAL STUDIES (GS)  
GS 4100 Senior Assessment (1-0). Senior Assessment is a capstone course in which the students demonstrate proficiency in research and analysis through the engaging in original research. Prerequisite: Senior standing (90 sch completed)  

GEOGRAPHY (GEOG)  
GEOG 1302 (GEOG 1303) World Regional Geography (3-0). A regional study of the world in a survey course which uses the basic elements as tools for observation and analysis in revealing the interrelationships of features involving man and different areas of the earth.  

GEOG 2302 Geography of the United States and Canada (3-0). An overview of significant physical and human elements of the United States and Canada and their relationships within a setting of fourteen specific regions.  

GEOG 2303 Geography of Environment and Society (3-0). This course introduces students to the study of relationships between people and the environment from a social science perspective, and provides a context for thinking about the social causes and consequences of environmental changes in different parts of the world. The course will analyze how human use of the environment has varied over time and space. Course examines decision-making about environment issues and the relative roles of culture, institutions, technology, and economy in causing and resolving contemporary environmental problems around the world.  

GEOG 2308 Readings and Research. (0-3). Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.  

GEOG 3301 Geography of Texas (3-0). A topical study of the physical and cultural elements of Texas which reveal the great diversity of a growing and vibrant state. Features examined include the landscape, cultural groups, and various economic activities  

GEOG 3302 Readings and Research in Geography (3-0). An individualized course with varying topics to be chosen by the instructor in consultation with the student. May be repeated once.  

GEOG 3303 Special Topics in Geography (3-0). Selected topics in Geography. May be repeated for credit when the topic varies.  

GEOG 3401 Interdisciplinary Geographic Information Systems (2-4). This course is designed to introduce the concepts of computer-based spatial data handling, referred to as geographic information systems (GIS). The interdisciplinary approach focuses on bringing students from diverse academic backgrounds together in a team effort to learn the fundamentals of GIS, including data, sources, input, manipulation, and output presentation. There are no prerequisites, but it is recommended that the student have completed an introductory class in one of the following: geology, biology, natural resource management, or archaeology. This course is cross-referenced with Geology 3401.  

GEOG 3412 Geomorphology (3-3). An introduction to surficial processes and landforms. Understanding the landscape upon which we live and depend can be of vital importance to nearly everyone from the homeowner to the civil engineer. Fluvial, glacial, costal, groundwater and weathering processes will be studies along with lithological and structural influences. Labs will include map and photo interpretation and field studies. This course is cross-referenced with Geology 3412. Prerequisite: Geology 1303/1103.
GEOG 4301 Geography of the Borderlands (3-0). This course provides a political and geographical look at the U.S. Borderlands. Examination of historical and current territory, law and policy, natural environment, border culture and diverse people groups. Course content would include analysis of immigration, security/terror discourse, indigenous nations and international economic networks (legal and illegal). At times, a thematic approach may be employed with focus on indigenous Nations on U.S. borders, water rights, natural resource and wildlife management, or other issues between nation-states.

GEOLOGY (GEOL)

GEOL 1103 (GEOL 1103) Physical Geology Lab (0-2). Laboratory exercises supporting GEOL 1303 including principles of physical and historical geology.

GEOL 1104 (GEOL 1104) Historical Geology Laboratory (0-2). Laboratory exercises supporting GEOL 1304 including principles of physical and historical geology. Prerequisites: Geology 1303

GEOL 1105 (GEOL 1105) Environmental Geology Laboratory (0-2). Laboratory will consist of the study of a variety of environmental problems.

GEOL 1303 (GEOL 1303) Physical Geology (3-0). This course covers the nature and properties of the materials which make up the earth, the distribution of these materials throughout the earth, the processes (volcanism, glaciation, stream erosion, weathering, etc.) by which these materials are formed, altered, transported, and deformed and the nature and development of the landscapes.

GEOL 1304 (GEOL 1304) Historical Geology (3-0). A study of the record of life forms (fauna and flora) that evolved throughout the geologic time 4.5 billion years ago up to the occurrence of man. It also covers the physical changes of the earth through 4.5 billion years of advancing and retreating seas, of deposition, and of erosion of rocks, fashioned into mountain ranges-the entire chronological history of how processes of physical geology have operated. Prerequisite: Geology 1303

GEOL 1305 (GEOL 1305) Environmental Geology (3-0). This course emphasizes the complex relations between the land, sea and atmosphere and human activities. Topics include: geologic hazards, land management use, water resources, hazardous waste disposal, energy and mineral resources, conservation of natural resources, and atmosphere and ocean sciences. This course may be used by persons seeking earth science teacher certification.

GEOL 2301 Lithology (3-2). Introductions to the basic concepts of identification, classifications and origins of igneous, sedimentary and metamorphic rocks. Laboratory exercises consist of hand specimen identification and classification of suites of all three rock classes. Prerequisite: Geology 1311/1103

GEOL 2405 (GEOL 2405) Optical Mineralogy (3-3). Introduction to crystallography, crystal chemistry, and optical mineralogy. Identification of minerals by physical, optical, and X-ray diffraction techniques. Prerequisite: Geology 1303, 1103, Chemistry 1311, 1111

GEOL 2407 Air Photo Interpretation (3-3). This course is designed for students wishing to acquire a broad overview of the surface of the earth as revealed by aerial photography. It will commence with the analysis of geological structures and progress through human interaction
with the environment through natural resource management such as forestry and hydrology through agricultural activities and urban planning.

**GEOL 3301 Geology of West Texas (3-0).** Designed as an introduction the geology of West Texas, this course contains a brief introduction to general geology followed by outlines of the geologic evolution of the region. Topics range from billion-year-old continental collisions, through deep sea deposition, coral reefs, explosive volcanism, mineral and petroleum deposits, to the evolution of the present day West Texas landscape. Optional field trips will be available. Prerequisite: Geology 1304

**GEOL 3302 Dinosaurs, Volcanoes and Earthquakes (3-0).** Designed to introduce the non-major to recent developments and theories dealing with the changing face of the Earth and some of the animals that lived on it. New views on dinosaurs, their lives and their ultimate extinction. The distribution, causes, effects, and prediction of earthquakes and volcanoes. This course does not count toward advanced hours for Geology majors.

**GEOL 3304 Forensic Geology (3-0).** The course is divided into two parts; "criminal" forensics and "civil" forensics. The first part examines such things as soil, rock, glass, etc. used in the commission of crimes. The second part looks at case studies of landslides, floods, etc. where people have sued for damages.

**GEOL 3305 Geology of the Western National Parks (3-0).** This course is a survey of the geology of the National Parks of the western United States. Some National Monuments and state parks are also covered. Emphasis is placed on stratigraphy, paleogeography and paleoenvironments. National Park geology is used to interpret the development of the western margin of North America. Prerequisite: GEOL1304.

**GEOL 3311 Special Topics (3-0).** This is a junior level course covering various material in geology. It may be repeated for credit when course topic varies. Prerequisite: GEOL 1304.

**GEOL 3401 Interdisciplinary Geographic Information Systems (2-4).** This course is designed to introduce the concepts of computer-based spatial data handling, referred to as geographic information systems (GIS). The interdisciplinary approach focuses on bringing students from diverse academic backgrounds together in a team effort to learn the fundamentals of GIS, including data, sources, input, manipulation, and output presentation. It is recommended that the student have completed an introductory class in one of the following: geology, biology, natural resource management, or archaeology. Prerequisite: CS 1301, AST 1305, equivalent or approval of instructor.

**GEOL 3402 Structural Geology (3-3).** A study of the deformation of Earth’s crust. Covers stress and strain as well as geometric analysis of the structures (faults, folds, joints, shear zones) that comprise deformation. Construction of geologic maps and cross sections will be included, as will field trips. Prerequisite: GEOL 1304/1104, GEOL 3408, Math 1316

**GEOL 3403 Advanced Geographical Information Systems (3-3).** This course is designed to build on the skills learned in the Interdisciplinary GIS class. Topics will include a review of advanced vector analysis, followed by a detailed coverage of raster based analysis. Projects will include the creation and manipulation of digital elevation models, classification on aerial and satellite imagery, and vector to raster conversion and analysis. The projects and assignments will utilize an extensive Trans-Pecos spatial database housed in the Sul Ross GIS lab. Software used will include the Spatial and 3D Analyst extension for ArcGIS and ERDAS Image.
Prerequisite: Geology 3401 or approval of instructor.

**GEOL 3408 Stratigraphy and Sedimentation (3-3).** A study of the processes governing the formation and distribution of recent sediments, which established the guiding principles used in the classification, correlation and interpretation of ancient, stratified sedimentary rocks. The stratigraphic record is largely the result of the continuity of sedimentary processes through the dimension of geologic time. Prerequisite: Geology 1304/1104

**GEOL 3410 Geochemistry (3-1).** A survey of the application of chemical principles to the problems of geology. Topics include the origin and distribution of the elements in igneous, metamorphic, and sedimentary rocks. Basic concepts of thermodynamics, solution chemistry, and isotope geochemistry will be discussed. Prerequisite: Chemistry 1312/1112

**GEOL 3411 Invertebrate Paleontology (3-3).** The course deals with the morphology, classification, identification, evolutionary trends and geological distribution of invertebrate fossils. Laboratory work consists of systematic study of index fossils as well as representative fossils of various phyla. Prerequisite: Geology 1304/1104 or permission of the instructor.

**GEOL 3412 Geomorphology (3-3).** An introduction to the study of geologic processes operating at the Earth’s surface and the landforms produced by those processes. Fluvial, glacial, coastal, groundwater, soil, and both wind and water weathering processes will be studied along with lithologic and structural influences. Labs include interpretation of air photos and topographic maps as well as field studies. Prerequisite: Geology 1303/1103

**GEOL 3421 Special Topics (3-3).** This is a junior level lecture and lab course covering various topics in geology. It may be repeated for credit when course topic varies.

**GEOL 3601 Field Geology (3-6).** A capstone summer field course reviewing methods of geologic mapping, construction of geologic cross sections, measurement of stratigraphic sections, hydrogeologic surveys, and preparation of geological reports, in the context of regional geologic settings. Prerequisite: Geology 3402, 3408 or permission of the instructor.

**GEOL 4101 Research (1-0).** Research by the student into a carefully outlined problem in the earth or geologic sciences. May be repeated for credit when topics vary.

**GEOL 4301 Research (3-0).** In this course, the student researches a carefully outlined problem in the earth or geologic sciences. Prerequisite: GEOL 1304 and GEOL 2405. Geology major of junior or senior classification.

**GEOL 4308 Tectonics (3-0).** A detailed study of geologic features related to tectonic-plate margins around the world, with emphasis on convergent margins and the frontier research currently conducted there. Topics also include plate reconstruction, mantle plumes, and early-earth tectonics. Prerequisites: GEOL 1303/1103

**GEOL 4311 Special Topics (3-0).** This is a senior-level course covering various topics in geology. It may be repeated for credit when course topic varies. Prerequisite: GEOL 1304 and GEOL 2405. Geology major of junior or senior classification.

**GEOL 4401 Sedimentary Petrology (3-3).** The course concerns the laws of sedimentation, the origin, history, description, classification, and interpretation of sedimentary rocks. It also involves determination of the rock types in the source areas. Laboratory work consists of
petrographic investigation of thin sections of sedimentary rock types. Prerequisite: Geology 2405, 3408

**GEOL 4402 Special Problems (3-3).** This course consists of individual directed readings and conference on special topics in geology. A lecture or seminar format may be used when sufficient interest exists in a topic. Course may only be used once for credit. Prerequisite: GEOL 1303, 1103, 1304, 1104 and 2405.

**GEOL 4403 Igneous and Metamorphic Petrology (3-3).** A study of the mode of origin, environment, evolution, characteristics and association of igneous and metamorphic rocks. Laboratory consists of hand specimen and petrographic examination of igneous and metamorphic rock suites from differing environments. Prerequisite: Geology 2405, and Chemistry 1311, 1111

**GEOL 4405 Lunar and Planetary Geology (3-3).** A study of the terrestrial planets and moons in which a systematic description of the planetary surfaces will be integrated with geochemical data, mineralogic data, and experimental studies in theories of the formation and evolution of terrestrial planets. Prerequisite: Geology 4403

**GEOL 4418 Groundwater Hydrology (3-3).** A detailed, analytical, quantitative discussion of the occurrences and movements of waters beneath the Earth’s surface. Topics include: the hydrodynamics of water flow through aquifers and the geologic setting for them as well as considerations for their development as water sources. A combination of lecture, field and lab exercises emphasize the subsurface part of the hydrologic cycle in various rock types, and the quantities and qualities (physical and chemical) of ground water. Prerequisite: GEOL 1303 and GEOL 1103

**GEOL 4421 Special Topics (3-3).** This is a senior level lecture and lab course covering various topics in geology. It may be repeated for credit when course topic varies.

**GEOL 5101 Graduate Seminar (1-0).** The course deals with modern fields of research in the geosciences. The format varies from group discussions to the presentation of oral reports. The course can be taken for credit up to a maximum of three times. At least one semester is required of all students.

**GEOL 5302 Special Problems. (3-0).** Qualified students may pursue independent laboratory or field problems under the supervision of the staff. A project proposal is required before enrollment.

**GEOL 5304 Special Topics (3-0).** A seminar or lecture format may be used when sufficient interest exists in a timely topic. Prerequisite: Graduate standing in geology and by arrangement with the instructor.

**GEOL 5306 Advanced Structural Methods (3-0).** Discussion of new geophysical, paleomagnetic, and structural methods. Application of these methods in resolving large-scale structural problems to scale, applied structural problems.

**GEOL 5308 Advanced Igneous Petrology (3-0).** A study of the origin, emplacement, and distribution of igneous rocks utilizing thermodynamics, phase equilibria, major and trace elements, and isotope geochemistry.
GEOL 5312 Volcanology (3-0). Origin and emplacement of volcanic systems. Application of information obtained from modern volcanoes, experimental studies and theoretical considerations to the understanding of ancient volcanic terrains.

GEOL 5316 Trace Elements in Magmatic Systems (3-0). Discussions from current literature concerning the thermodynamics of trace element distribution and the application of isotopic and trace element geochemistry to models of magma genesis and evolution. Prerequisite: Geology 3410 or 4403, Chemistry 3404 recommended

GEOL 5317 Aqueous Geochemistry (3-0). The course involves the study of the geochemistry of surface and groundwater as applied to geologic and environmental problems. Prerequisite: Geology 3410 and Chemistry 3404 recommended

GEOL 5320 Advanced Paleontology (3-0). Understanding the basic principles of evolution and ecology through the study of fossil organisms. The use of fossils in paleoenvironmental interpretations.

GEOL 5322 Stratigraphic Analysis (3-0). The determination of the depositional history of sedimentary rocks by the study of lithology and paleontology.

GEOL 5326 Carbonate Petrology (3-0). Origin, classification and diagenesis of ancient and modern carbonate rocks and sediments.

GEOL 5328 Advanced Sedimentation (3-0). Selected recent sedimentary environments and their ancient counterparts. Methods of investigation of sediments and sedimentary rocks with emphasis on terrigenous environments and rocks.

GEOL 5332 Dynamic Stratigraphy (3-0). An analysis of the stratigraphic record emphasizing the relationships between dynamic processes and facies changes in modern and ancient environments.

GEOL 5333 The Dynamic Earth (3-0). An earth science course designed to provide the elementary and secondary teacher with modern concepts of plate tectonics, volcanism, earthquakes and other manifestations of the dynamic earth.

GEOL 5401 Remote Sensing (3-0). A course dealing with the uses of remote sensing for geology interpretation. The lab provides practical application of a technique used in almost all fields of geology.

GEOL 5402 Interdisciplinary Geographical Information Systems (3-3). This course is designed to introduce the concepts of computer-based spatial data handling, referred to Geographical Information systems (GIS). The interdisciplinary approach focuses on bringing students from diverse academic backgrounds together in a team effort to learn the fundamentals of GIS, including data sources, input, and analysis, and presentation of results. It is recommended that the student have completed an introductory class in one of the following: geology, biology, natural resource management, archeology, geography, or criminal justice. This graduate version of the class will require a term research project, preferably related to thesis project. Prerequisite: CS 1301, AST1305, equivalent, or permission of instructor.

GEOL 5403 Advanced Geographical Information Systems (3-3). This course is designed to build on the skills learned in the Interdisciplinary GIS class. Topics will include a review of
advanced vector analysis, followed by a detailed coverage of raster-based analysis. Projects will include the creation and manipulation of digital elevation models, classification on aerial and satellite imagery, and vector-to-raster conversion and analysis. The projects and assignments will utilize an extensive Trans-Pecos spatial database housed in the Sul Ross GIS lab. Software used will include the Spatial and 3D Analyst extension for ArcGIS and ERDAS Image. The graduate requirements will include a term research project related to the individual student's research interest. Prerequisite: Geology 3401, Geology 5402, or approval of instructor.

**GEOL 5404 Special Topics (3-3).** A seminar or lecture format may be used when sufficient interest exists in a timely topic. Prerequisite: Graduate standing in geology and by arrangement with the instructor.

**GEOL 6040 Thesis Research (0-18).** The student will enroll in this course after earning credit for GEOL 6301 each semester or summer term in which assistance is provided by committee members or when use of the library or other research facilities of Sul Ross State University is made. The course is variable for 1 to 9 credit hours, and may be repeated with approval of advisor. Credit hours earned may not be applied towards the 30 or 36 hours required for the degree. Prerequisite: Master of Science students that have been admitted to candidacy.

**GEOL 6301 Thesis Proposal (0-6).** Satisfactory completion of this course requires an acceptable prospectus presented to the Graduate Committee. The student will normally register for this course no earlier than the second semester of graduate study. The student will enroll each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made.

**GEOL 6302 Thesis Defense (0-6).** The student will enroll in this course at the time of the defense, and after earning credit for GEOL 6301 (Thesis Proposal). Satisfactory completion of this course will result in the completed thesis presented to the Graduate Committee, accepted by the Dean of the School, the Dean of the Graduate School, and filed in the Office of the Provost and Vice President for Academic and Student Affairs. Prerequisite: GEOL 6301.

**HISTORY (HIST)**

**HIST 1301 (HIST 1301) History of the United States to 1877 (3-0).** A general survey of the history of the United States from the discovery of the New World to 1877.

**HIST 1302 (HIST 1302) History of the United States Since 1877 (3-0).** A general survey of the history of the United States from 1877 to the present time.

**HIST 2301 (HIST 2311) World History to 1500 (3-0).** A survey of world history from the ancient world until the end of the fifteenth century.

**HIST 2302 (HIST 2312) World History Since 1500 (3-0).** A survey of European history since the 15th century to the present.

**HIST 2303 Readings and Research (0-3).** Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

**HIST 2309 History of Texas (3-0).** A survey of the history of Texas from the pre-historic Indian civilizations to the present, stressing cultural, political, and social developments.
**HIST 3300 Ancient Civilization (3-0).** A history of the ancient civilizations of the Near East, Greece, and Rome to the 4th Century.

**HIST 3301 The Middle Ages to 1350 (3-0).** A history of the political, social, and intellectual development of medieval society to the 14th century.

**HIST 3302 Europe During the Renaissance and Reformation to 1648 (3-0).** A history of Europe from the mid-14th century to mid-17th century with particular emphasis on humanism in Italy and the religious revolt of the 16th century.

**HIST 3303 Europe: Absolution to Revolution, 1648-1815 (3-0).** A study of European history from the Treaty of Westphalia to the defeat of Napoleon. Emphasis on the scientific revolution, the English Revolution, French absolution, the enlightenment, and the French Revolution and Napoleon.

**HIST 3304 Europe the 19th Century, 1815-1919 (3-0).** A history of the social, political, and economic factors that influenced industrialization, nationalism, Marxism, democracy, imperialism, and the outbreak of World War I.

**HIST 3305 Europe since 1919 (3-0).** A history of Europe from the Treaty of Versailles to the present.

**HIST 3306 History of Native Americans (3-0).** This course is designed to familiarize the student with the history, cultures, peoples, and religions of Native Americans. The course spans the pre-Colombian, colonial, early American, nineteenth and twentieth centuries' experience.

**HIST 3307 History of Pre-Columbian and Colonial Mexico (3-0).** This course examines the history of Mexico from its earliest beginnings through the civilizations of the Olmec, Maya, and Aztecs. The impact of the Spanish Conquest of Mexico and the subsequent colonial society through the Independence War of 1810-1821.

**HIST 3308 History of Modern Mexico 1821-Present (3-0).** This course begins with Mexican Independence in 1821 and continues through the present.

**HIST 3310 History of the American West (3-0).** A study of the American West during the nineteenth century, emphasizing the successive frontiers, such as explorers, the mountain men, the cattlemen, the railroads, and the farmers.

**HIST 3311 The Study of History (3-0).** An introduction to the techniques and the materials important to the study of history.

**HIST 3312 American Foreign Policy and the Cold War 1945-1991 (3-0).** This course covers the history of American Foreign Policy as it relates to the history of the U.S.-Soviet Cold War 1945-1991.

**HIST 3313 Mexican-Americans in the History of the United States (3-0).** Examines the roots and traditions of Mexican Americans, their emergence as a people, their historical presence in what is now the American Southwest, the emergence of the Chicano Movement, and their trajectory in American life.
**HIST 3314 History of African Americans (3-0).** Social, political, economic, and cultural history of African American in the United States since its beginnings. A comparison of the African American experience with the experiences of other Americans.

**HIST 4304 History of Immigration and Ethnicity in America (3-0).** This course examines the history of immigration and the issue of ethnicity and multiculturalism in the United States from the 18th century through the present. This course will focus on immigration from Europe and Asia from the early colonial era through the present.

**HIST 4305 History of Modern Asia (3-0).** The focus of this course is East Asia, that is, the Confucian societies of China, Korea, Vietnam, and Japanese model. The course begins with the late traditional era and proceeds to the present. Basic historiographical issues are introduced.

**HIST 4316 Readings and Research (3-0).** An individualized course with varying topics to be chosen by the instructor in consultation with the student. May be repeated once.

**HIST 4317 Special Topics (3-0).** Selected Topics in areas of history. May be repeated for credit when the topic varies. When U.S. History is the topic, the course may be used to meet U.S. History requirements.

**HIST 4318 The American Revolution and Construction (3-0).** This course covers the history of the American War for Independence against Great Britain and the early years of the Republic through the writing of the U.S. Constitution.

**HIST 4319 Nineteenth Century America (3-0).** A survey of or a thematic approach to 19th Century American history. Themes might include economic, cultural, political, or ethnic topics, to name a few. Approaches will vary.

**HIST 4320 Twentieth Century America (3-0).** A survey of or a thematic approach to 20th Century American history. Themes might include economic, cultural, political, or ethnic topics to name a few. Approaches will vary.

**HIST 4321 History of American Women (3-0).** A study of American women from the colonial period to modern times, emphasizing social, cultural, economic, and political development.

**HIST 4323 U.S. Civil War and Reconstruction (3-0).** Explores the causes of the Civil War; the military, political, economic, and social aspects of the war; and the issues and results of Reconstruction.

**HIST 5302 Seminar in Texas History (3-0).** Topics to be announced. May be repeated for credit as topic varies.

**HIST 5303 Seminar in Mexican History (3-0).** Topics to be announced. May be repeated for credit as topic varies.

**HIST 5304 Seminar in World History (3-0).** Topics to be announced. May be repeated for credit as topic varies.

**HIST 5308 Seminar in European History (3-0).** Topics to be announced. May be repeated for credit as topic varies.
**HIST 5309 Seminar in Western History (3-0).** Topics to be announced. May be repeated for credit as topic varies.

**HIST 5310 Seminar in American History (3-0).** Topics to be announced. May be repeated for credit as topic varies.

**HIST 5312 Readings and Research (3-0).** An individualized course with varying topics to be chosen by the instructor in consultation with the student.

**HIST 5313 Special Topics (3-0).** Selected topics in areas of history. May be repeated for credit when topic varies.

**HIST 6301 Thesis Proposal (0-6).** Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee. The student will normally register for this course no earlier than the second semester of graduate study. The student will enroll each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made.

**HIST 6302 Thesis Proposal (0-6).** The student will enroll in this course each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made. Satisfactory completion of this course will result in the completed thesis presented to the Graduate Committee, accepted by the Dean of the College, and filed in the Office of the Executive Vice President and Provost for Academic Affairs.

**HONORS PROGRAM (HONS) Back to Top**

**HONS 1301 Honors First-Year Seminar: Communications (3-0).** This is an introductory Honors course emphasizing oral and written communication skills. This course is designed to introduce students to the tools required for independent research and presentation of results. Topics vary. Prerequisite: Admission into the Honors Program or consent of the instructor.

**HONS 1302 Honors First-Year Seminar: English (3-0).** This is an introductory Honors course emphasizing the development of composition, rhetoric, and research skills. Students will write expository, analytical, and persuasive papers and read a variety of materials. Prerequisite: Consent of instructor and either admission to the Honors Program or ENG 1301.

**HONS 1303 Honors First-Year Seminar: Fine Arts (3-0).** This is an introductory Honors course emphasizing the development of critical thinking skills through the study of topics in the visual and performing arts. Topics vary. Prerequisite: Consent of the instructor and either admission to the Honors Program or ENG 1301.

**HONS 1304 Honors First-Year Seminar: Social Sciences (3-0).** This is an introductory Honors course emphasizing the development of critical thinking skills through the study of topics in the behavioral and social sciences. Topics vary. Prerequisite: Admission into the Honors Program or consent of the instructor.

**HONS 2301 Honors Literature Studies (3-0).** This course presents a study of literary types, which may include prose, fiction, poetry and drama. The course topics may come from, but are not limited to, multicultural literature, rural writers, Arthurian legends, detective fiction, autobiography, and contemporary poetry. Prerequisite: Completion of the freshman English
requirement and one of the following: admission into the Honors Program or consent of the instructor.

**HONS 2401 Honors Integrated Life Sciences (4-1).** This course presents an integrated study of life sciences. Topics that may be addressed will come from, but are not limited to, human anatomy and physiology, botany and zoology. Topics vary. Prerequisite: Biology 1311/1111 or Biology 1313/1113

**HONS 3301 Honors Seminar in Integrated Social Sciences (3-0).** This course presents an integrated study of social sciences. Topics to be addressed will come from, but are not limited to, world civilizations, women in society and cultural studies. This course may be repeated one time for credit. This course would fulfill the Multicultural core requirement or could be used as an upper level elective. Prerequisite: Admission into the Honors Program or consent of the instructor.

**HONS 3302 Honors Seminar in Fine Arts (3-0).** This course presents the study of the interrelationships of the various disciplines as they relate to the presentations of art, film, stage plays and music. Course may be repeated one time for credit. Prerequisite: Admission into the Honors Program or consent of the instructor.

**HONS 4300 Individual Honors Research (3-0).** This course is intended for students working independently under the guidance of a graduate faculty member. This course may be repeated one time for credit. Prerequisite: Admission into the Honors Program and consent of the Director of the Honors Program.

**INDUSTRIAL TECHNOLOGY (IT)**

**IT 1303 (ENGR 1304) Engineering Drawing I (2-4).** Use of American National Standards Institute symbols and conventions; techniques of freehand sketching; accepted styles and practices of lettering; and the relationship between points, lines and planes through multi-view drawing principles. Shape description through pictorial methods.

**IT 1306 Beginning Metalwork Technology (2-4).** A comprehensive course in industrial metals processes. Problems of pattern development, shearing, cutting, forming, bending, folding, and fabricating sheet steel as related to the sheet metal industry. Investigation of other industrial processes and techniques such as: industrial foundry processes; cold metal forming using bending, twisting, hammering, and combining techniques; forging and tempering techniques.

**IT 1308 Basic Electricity (2-4).** Principles of direct current and alternating current electricity. Applications of series, parallel, and series-parallel circuitry including Ohm's Law, Kirchhoff's Laws, batteries, meters, resistance, capacitance, inductance, magnetism and electromagnetism, soldering and assembly.

**IT 1309 Power Technology (2-4).** A foundation course, which looks into energy, power, and transportation technologies. Investigation into their evolution, development, production, relationships, and use.

**IT 2301 Special Topics (3-0).** The Special Topics course is used in case of Independent Studies or new course introduction.

**IT 2303 Introduction to Computer-Aided Design and Drafting (2-4).** Introduction to how
commercial CAD systems operate. Computer graphics hardware and software. Applications of CAD graphics applications specifically in two dimensions.

**IT 2304 (ARTS 2356) Photography (2-4).** A foundation course in understanding the camera and the principles of its operation, light and film, darkroom techniques and photographic processes as they may be applied in industry using black and white films.

**IT 2305 Machine Wood Technology (2-4).** A comprehensive course in industrial woods processes. The course includes some hand processes but focuses on machine operations as required in mill work and the woodworking industry. Reading and analyzing drawings, selecting materials, completing a bill of materials, and project planning are integral components in the course.

**IT 2306 Machine Shop Technology (2-4).** A foundation course in the use of precision measuring instruments and metal working machines. Intended as an introduction to the machine shop practices of industry.

**IT 2307 Welding Technology (2-4).** A study of principles and correct use of the equipment, materials, and processes required for oxy-acetylene welding, cutting and brazing, and electric arc welding.

**IT 2309 Technology of Small Engine Maintenance and Repair (2-4).** The scientific, mechanical, and service concepts of two- cycle and four-cycle engines. Provides the student with the basic knowledge of these concepts and their application.

**IT 2313 Pictorial Representation (2-4).** Pictorial drawing with emphasis on the fundamentals of isometric, diametric, oblique, one- point perspective, and two-point perspective drawing techniques. Investigation into industrial rendering techniques for illustration of manufactured components.

**IT 2314 Welding Technology II (2-4).** Advanced topics based on accepted welding codes. Training provided with various electrodes in shielded metal arc welding processes with open V-groove joints in all positions. Prerequisite: IT 2307

**IT 2315 Solar Photovoltaics Systems (2-4).** Study of the history, technology, design and installation of solar photovoltaic systems, both on and off-grid.

**IT 2316 Ironworking I (2-4).** Forge operation and basic blacksmithing techniques including metal forming, forge welding, and steel tempering techniques used in industry.

**IT 2317 Ironworking II (2-4).** A continuation of the ironworking skills studied in IT 2316 including ornamental and tool making. Prerequisite: IT 2316 or permission of the instructor

**IT 3301 Special Topics (3-0).** A course covering various topics in the field of Industrial Technology. May be repeated for credit when the topic varies.

**IT 3303 Architectural Drafting and Home Planning (2-4).** Architectural drafting with emphasis on the principles of good design and planning the small home. Time is spent on architectural details, materials and methods of construction, energy conservation practices, the use of symbols, lettering, and building standards of the American Institute of Architects.
**IT 3315 Techniques in Furniture and Cabinet Making (2-4).** An advanced course in woodworking with a focus on furniture and cabinet construction as well as finishing, with emphasis on current methods, techniques, and materials. Students will receive practical experience is design, layout and construction of furniture and cabinets, mass production techniques, using plastic laminates and modern finishing materials and methods. Prerequisite: IT 2305 or equivalent or special permission.

**IT 3316 Advanced Machine Metalwork Technology (2-4).** Modern methods, techniques, and materials of the metal working industry. Special emphasis is placed upon advanced lathe and milling operations. Prerequisite: IT 2306 or equivalent or special permission.

**IT 3323 Three Dimensional Computer Graphics (2-4).** An advanced course in computer aided drafting and design. Focus is on 3D design including work with solids and materials rendering. Prerequisite: IT 2303 or special permission.

**IT 3325 Methods and Techniques of Construction (2-4).** Methods, techniques and processes in the construction industry. Emphasis on practical application and the acquisition of skills in standard residential construction practices.

**IT 3326 Pattern Making and Foundry (2-4).** Advanced foundry and pattern making techniques with emphasis on molding, materials and equipment, core making, construction of various types of patterns, casting non-ferrous metals, production methods, and quality control. Prerequisite: IT 2305 or equivalent.

**IT 3354 Studio Photography (2-4).** Advanced study in photography. Emphasis is on studio lighting techniques, studio equipment, posing, and composing. Time is spent on corrective techniques and advanced processing and finishing techniques. Prerequisite: IT 2304 or equivalent.

**IT 4301 Organization of Industrial Processing (3-0).** A course designed to acquaint students with production planning and research from design through marketing for industrial products.

**IT 4303 Architectural Working Drawings and Specifications (2-4).** Emphasis is on developing complete plans, schedules, and specifications for common construction. Attention will be given to residential, light commercial, structural specifications, and an introduction to computer applications in architecture.

**IT 4305 Special Processes in Wood Technology (2-4).** Modern wood technology, wood lamination, the application of plastic laminates, advanced lathe operations, advanced gluing and decorating techniques, advanced finishing processes, techniques of bending and special designs.

**IT 4306 Machine Design and Fabrication (2-4).** A look at how industrial machines are designed. Time is spent designing and building an industrial or production machine. Prerequisite: IT 2306 and/or 3316 or special permission.

**IT 4307 Advanced Welding Technology (2-4).** Advanced theory and practical application of knowledge in the area of welding. Prerequisite: IT 2307 or special permission.

**IT 4311 Special Problems in Industrial Technology (3-0).** Individual study in a selected
area of industrial technology. May be repeated for credit when the topic varies based on and individual program requirements.

**IT 4315 Upholstery (2-4).** Techniques, practices, and procedures of upholstering.

**IT 4317 Special Welding Processes (2-4).** Special welding processes and the practical application of special techniques and processes in the field of welding with emphasis in Metal Inert Gas (MIG), Tungsten Inert Gas (TIG), Carbon Arc, and other specialized welding processes. Prerequisite: IT 2307 or special permission.

**JOURNALISM (JOUR)**

**JOUR 1102 Journalism Laboratory (0-2).** Practical application of newspaper reporting and writing. (May be repeated twice). Prerequisite: Permission of the instructor

**JOUR 2101 Journalism Laboratory (0-2).** Practical application of newspaper editorial desk work. Prerequisite: Permission of the instructor

**JOUR 2302 Feature and Editorial Writing (3-0).** To provide a basic but comprehensive exposure to the aspects of feature writing and to provide students with the opportunity to improve their writing and interviewing skills through active participation. Course will include interviews with guest speakers who will both lecture and be interviewed for feature stories. Student stories may be selected for publication in The Skyline and other media outlets. The course is intended to stimulate student interest in writing for Sul Ross student publications, including The Skyline student newspaper and The Brand yearbook.

**JOUR 2311 (COMM 2311) News Gathering and Writing I (3-0).** Writing for news media; clarity in use of language, style and punctuation; sentence and paragraph structure and organization of stories; credibility of information and new judgment; basic methods of researching and writing.

**JOUR 3301 Student Publications Workshop (1-4).** This course is designed for students interested in applying basic journalism knowledge and skills to photojournalism, yearbook, or literary magazine production and/or newspaper production. Prerequisite: Permission of the instructor. May be repeated for credit but not more than once for credit toward Communication major.

**JOUR 3302 Layout and Design (3-0).** Various programs such as Photoshop, Illustrator, and InDesign will be explored and applied for use in web pages, newspaper and magazine publication, and e-publishing.

**KINESIOLOGY (KES)**

**KES 1310 Essentials of Public Health (3-0).** The course will cover basic public health functions and principles as well as historical context, the core disciplines of public health, essential functions that every public health system should apply, and health communications.

**KES 2203 Applied Anatomy (2-0).** General survey of the anatomy of the body. Topics include the major organ systems relevant for human performance majors. An emphasis on cellular structures and the histology of selected anatomical structures will also be incorporated.

**KES 2303 Nutrition (3-0).** Principles of nutrition including roles of nutrients, psychosocial aspects of eating, nutritional issues at various stages in life; developing diet plans, computing
energy consumption and energy expenditures.

**KES 2304 Essential of Epidemiology (3-0).** Epidemiology, the study of disease occurrence and determinants, lays the foundation for all public health practice. It is a scientific way of thinking about cause and effect. Epidemiology is used to investigate disease outbreaks, determine the natural history of disease, set resource priorities, and develop policies. Basic epidemiologic theory and techniques, applicable to public health practice, will be taught.

**KES 2311 Recreation and Leisure Services (3-0).** Introduction to recreation, includes brief historical backgrounds, professional opportunities, present status, past and present leaders. Role of leisure time in our social structure, professional responsibility, familiarization with current issues and trends, and professional literature. Lecture and filed trips.

**KES 2312 Essentials of Global Health (3-0).** This course will introduce students to the main concepts of the public health field and the critical links between global health and social and economic development. Students will get an overview of the determinants of health, and how health is measured. Students will also review the burden of disease, risk factors, and key measures to address the burden of disease in cost-effective ways. The course will cover key concepts and frameworks but be very practical in orientation. The course will be global in coverage but with a focus on low and middle-income countries and on the health of the poor.

**KES 2314 Essentials of Health Behavior and Health Promotion (3-0).** This course focuses on how to address health issues facing communities by making changes at the individual, community, organizational, and governmental levels. Students will examine methods and theories to promote healthful changes using real-life examples. Specifically, the course will cover individual change theories, community development strategies. Diffusion of innovation theory, and media advocacy strategies.

**KES 2330 Leisure and Outdoor Recreation (3-0).** An overview of the role of the natural world in recreation and leisure services. The course will focus on values of outdoor recreation, outdoor education, adventure recreation, environmental impact, and the role of government in the provision of outdoor recreation.

**KES 3302 Health and Aging (3-0).** Health concerns and quality of life during the aging process, ageism, demographics, ethnicity, research on aging, economics, health status, nutrition, fitness, health care in the 21st century, and death and dying.

**KES 3303 Care and Prevention of Athletic Injuries (3-0).** Injury prevention, treatment and rehabilitation techniques in sports.

**KES 3305 Physiology of Exercise (3-0).** Physiological responses of the human body during various levels/intensities of physical activity and exercise.

**KES 3306 Motor Learning and Development through the Lifespan (3-0).** Acquisition and performance of movement behaviors including generalized patterns and specific skills for sport activities; how individuals learn movement skills’ interaction with cognitive, effective, and psychomotor learning domains, application of learning theories to physical education, physical therapy, and athletics.

**KES 3310 Community Health Assessment (3-0).** This course will focus on the assessment of community health and the capacity to support the development of policy and community-based
systems of health protection, health promotion, disease control, and health services. Students in this course will investigate the impact that social determinants of health (i.e. gender, race/ethnicity, socioeconomic status, etc.) have on community health.

**KES 3313 Kinesiology and Biomechanics (3-0).** This course pertains to the mechanics of human movement during physical activity and exercise; applications of fundamental physics to anatomical structures and motion and analysis of musculoskeletal structures that influence human movement.

**KES 3316 River Recreation and Water Craft Safety (2-2).** Acquiring an understanding and application of teaching basic paddling skills of water crafts (river board, kayaks, rafts, canoes, inflatables, etc.) Additional content includes: aspects of safety, river policy, history, culture, careers/guiding, equipment maintenance/storage, river camping and leadership. Field days required (3-5 days). Prerequisites: KES 2330

**KES 3318 Mountain recreation and Safety (2-2).** This course will teach fundamentals of back country camping, orienteering, and basic rock climbing including equipment, climbing techniques, knots, belaying, and rappelling; emphasis on skills development, risk management, and leadership. This course will follow and promote industry safety standards and teach best practices. Instruction requires three to five full days of practical field application for hands-on experience. Prerequisites: KES 2330

**KES 3330 Sustainable Tourism & Commercial Recreation (3-0).** Course will analyze commercial recreation; economics, marketing, and financing commercial recreation endeavors; and assemble the various opportunities available in the commercial and private sector. Prerequisites: KES 2311

**KES 4303 Fitness Testing and Exercise Prescription (3-0).** Evaluation of health and fitness levels of athletic and nonathletic populations; creating effective exercise programs for various populations.

**KES 4310 Program Planning and Evaluation (3-0).** This course will emphasize a systems approach in the planning of effective health services. Students will develop an evidence-based program that will include effective and culturally appropriate implementation strategies using state or national health objectives as a framework for planning.

**KES 4312 Health Promotion at the Workplace (3-0).** Needs assessment; program development, implementation, and evaluation in corporate and private business settings; developing environmental and social support for healthy behaviors with the business community.

**KES 4313 Legal and Ethical Issues in Exercise and Sport Science (3-0).** This course will cover basic legal principles, terminology, risk-management approaches, application of legal principles for the protection of employees and employers in kinesiology-related fields, and contemporary ethical issues.

**KES 4316 Exercise Programming for Special Populations (3-0).** Creating exercise programs for populations of people having health concerns in the 21st century; programming application to coronary heart disease, diabetes, asthma, obesity, pregnancy, and physical and mental disabilities.
**KES 4362 Senior Capstone in Exercise and Sport Science (3-0).** Completion and presentation of a research project is required. Additionally, the research project must be submitted to a professional conference, publication, or the student must attempt an approved professional certification examination. Prerequisite: Senior standing

**KES 4380 Recreation Practicum (0-3).** The student participates at the administrative and/or leadership level in the ongoing work of a selected parks and recreation company. The work is supervised by an agency representative and a faculty member trained in the recreation field. All other courses within the recreation concentration should be completed. Prerequisite: Cumulative GPA of 2.75 and have minimum junior level status

**KES 5305 Research Methods (3-0).** An introduction to the fundamental concepts of research design, measurement, statistical analysis and scientific inquiry as they apply to understanding and evaluating published research. Upon completion of this course, students should be informed about the relevance of published research to their own practice and research.

**KES 5307 Issues in Sports Law (3-0).** This course covers various individual and non-professional sports law issues and focuses on the regulation of interscholastic, intercollegiate, and Olympic sports. Topics covered include tort law, contract law, Title IX gender discrimination, the relationship between the college athlete and university, drug testing of amateur athletes, the regulatory authority of the NCAA, and the rules and regulations pertaining to “amateurism” and use of agents.

**KES 5312 Advanced Human Nutrition (3-0).** Dietary factors associated with chronic disease development are examined with an emphasis on heart disease, stroke, cancer, diabetes, osteoporosis, and neurodegenerative diseases. Students will access diets and provide alternative food choices to lower chronic disease risk. Acute and chronic exercise’s effects on nutrient requirements metabolism and the ergogenic efficacy of dietary supplements receive substantial attention.

**KES 5313 Physiological Basis of Human Performance (3-0).** The purpose of this course is to prepare the student in the areas of exercise physiology. The goals of this course are to provide the student with an active learning experience that will increase their knowledge of (a) energy metabolism and nutrition, (b) aerobic and anaerobic principles of work and exercise, (c) body composition measurement themes in exercise science, (d) cardiorespiratory/renal responses to exercise, (e) muscular/neural responses to exercise, and (f) thermoregulation during exercise in differing environments. Historical and contemporary concepts of exercise physiology will be discussed to improve the student’s understanding of the genesis and progression of exercise physiology throughout the twentieth century. This course will prepare the student for practical applications of exercise physiology.

**KES 5314 Diagnostic Test and Measurement in Exercise Science (3-0).** This course will provide students with the background in the appropriate design structures, both qualitative, for research projects. Within the different framework of experimental designs, an emphasis will be on how to collect and organize data, data clearing, statistical analysis, and the interpretation of data. At the conclusion of the course, the student should have identified and be comfortable applying the appropriate experimental design for the thesis/project.

**KES 5315 Group Dynamics (3-0).** An analysis of small-group structures and function with emphasis on leadership, membership, attitude and value formation, and role theory. 1. To provide the students with an analysis and understanding of small-group structure and function with emphasis on leadership, membership, attitude formation, value formation, and role
theory. 2. To acquaint the students with basic methods of effective management and control of the group situation. 3. To provide practical application of small-group principles to simulated situations.

**KES 5316 Neurological Basis for Motor Learning and Control (3-0).** This course is designed to provide an understanding of psychological/physiological principles involved in motor learning, control, and performance in skill acquisition for school-age children and adult populations.

**KES 5373 Health and Human Behavior (3-0).** This course explores the process and methods of scientific inquiry and interpretation of research findings in kinesiology. Students will gain familiarity with the major elements of research including literature review, quantitative and qualitative methodology, design, evaluation of research, statistical analysis, presentation of data, and ethical considerations. This course also provides an overview of statistics including descriptive and inferential statistics and one-way ANOVA. Students should have a basic understanding of conducting library and Internet information searches prior to taking this course.

**KES 5909 Advanced Practicum in Exercise Science (0-9).** Limited to students who have completed all 24 hours and have demonstrated their ability to complete their internship work sponsored by the Kinesiology Department and who are considered able to do independent work. Before registering for the internship, students should have completed all 24 hours on their degree plan and consult with the advisor concerning their program of study. Students are expected to work independently with supervisors, mentors, or directors. Evidence of progress demonstrated by papers and discussion. Consent of a faculty supervisor and Department Chair.

**LIBERAL ARTS (LA)**

**LA 5101 Prospectus for Master's Project (0-1).** Students will prepare and present an acceptable prospectus to their committee which describes the project to be undertaken in LA 5301. The project must reflect or incorporate ideas, subject material, research, or creative work from the three disciplines selected for study. Students should enroll in this class after consulting with their advisor and/or committee and must complete the class before enrolling in LA 5301. Prerequisite: Permission of graduate committee.

**LA 5301 Master’s Project (0-3).** Students will complete the interdisciplinary project proposed in LA 5101, submit it to their committee, and respond to questions from the committee in an oral interview/defense. The project may take the form of a creative production (such as an exhibit, performance, portfolio, or video); an extended paper or publishable article; an internship; or a practicum. Projects in other formats are acceptable if they have been approved by the student's committee. This course is to be taken as the final course for the Master of Arts in Liberal Arts program. Prerequisite: Permission of graduate committee and successful completion of LA 5101

**MANAGEMENT (MGT)**

**MGT 3360 Principles of Management (3-0).** Introduction to the basic management concepts and processes.

**MGT 3363 Human Resource Management (3-0).** Study of the human resources tasks and duties managers perform including: determining the organizations human resource needs; compensation; evaluation; benefits, discipline; promotion; assignments; employee related legal matters, records, training, privacy; policy application; and orientation.
MGT 4361 Organizational Behavior (3-0). The study of inter-personal skills in organizations. The course provides the student with insights critical to management concerning individual processes, social dynamics, and organizational practices combined with knowledge of real work sensitivities, demands and practices.

MGT 4362 Management of Small Business Enterprise (3-0). This course offers a practical approach to planning, organizing, and running a small business. It explains how to achieve optimum benefits from the limited resources available to small firms, as well as how to plan for growth and succession in a business. It also explores arguments both for and against owning a small business. The focus is on the start-up and operation of small business. Through the creation of a business plan the student will examine the functions of business as they pertain to small business endeavors.

MGT 5304 Seminar in Management (3-0). Special topics in the application of the processes of management.

MGT 5312 International Management (3-0). This course familiarizes the student with management issues especially germane in international business including, but not limited to politics, culture, economics, decision-making, strategic planning, and human resources in a global environment.

MARKETING (MKT)

MKT 3370 Principles of Marketing (3-0). Studies the place of marketing in our economic structure; the present marketing structures and the formulation by management of marketing policies and procedures aimed at satisfying consumer wants. Cases, lectures, exercises.

MKT 3371 Advertising and Promotion Management (3-0). Consumer motivation, perception, learning, group influences, and consumer decision processes.

MKT 3372 Sales Management (3-0). An analysis of the management skills needed to plan, organize and control a modern sales organization.

MKT 4370 Marketing Research (3-0). Techniques of marketing research, research design, analysis, and interpretation of marketing data, questionnaire design, and sampling methods. Prerequisites: MKT 3370

MKT 4371 Retailing Management (3-0). Principles and methods of modern retailing. Designed to aid students seeking a general knowledge of the retail field as well as those specializing in marketing.

MKT 4379 Business Capstone (3-0). Application of strategic business tools and techniques across all business functions to respond effectively to industry and marketplace needs. Recognition of both internal and external variables in formulating business strategies will be considered. Course content may involve the use of a computerized business simulation, strategic cases, articles and/or text material. Business Administration students are encouraged to take this course no sooner than the senior year. Prerequisites: Business Major - Senior standing

MKT 5303 International Marketing (3-0). A comprehensive management approach to prepare the student for the pervasiveness of global marketing competition.
MKT 5305 Seminar in Marketing (3-0). A graduate marketing management course utilizing cases and readings.

MATHEMATICS (MATH)

MATH 1314 (MATH 1314) College Algebra (3-0). In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

MATH 1316 (MATH 1316) Plane Trigonometry (3-0). In-depth study and application of trigonometry including definitions, identities, inverse functions, solutions of equations, graphing, and solving triangles. Additional topics such as vectors, polar coordinates and parametric equations may be included. Prerequisite: Math 1314 or consent of instructor.

MATH 1325 (MATH 1325) Business Calculus (3-0). A modeling based introduction to graphing, differentiation, integration and optimization, with a focus on business applications. The use of a graphing calculator or a computer algebra system will be required. Offered spring.

MATH 1332 (MATH 1332) Contemporary Mathematics (3-0). This course is an introduction to a selection of college-level math topics. This course typically covers topics selected from the following: problem-solving, counting, the real number system, sets, geometry, solutions of linear and quadratic equations, elementary probability, financial math, the mathematics of voting, and fair division.

MATH 1342 (MATH 1342) Elementary Statistical Methods (3-0). Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis-testing. Use of appropriate technology is recommended.

MATH 2303 Individual Studies (3-0). Independent study of selected topics in mathematics. This course may be repeated during different semesters. Prerequisite: Permission of instructor.

MATH 2306 Special Topics (3-0). Discussion of selected topics in mathematics, at or above the level of college algebra, suitable for lower division students. The course may be repeated for different topics. Offered when needed. Prerequisite: Permission of instructor.

MATH 2310 Foundations of Elementary Mathematics I (3-0). First course in required mathematics content sequence for preservice elementary and middle school teachers. Topics include problem-solving techniques, reasoning, study of sets, systems of numeration, natural numbers, integers, number theory and rational numbers. Emphasis on problem-solving as a pedagogical tool with integration of manipulative-based explorations. Offered fall. Prerequisites: Satisfactory completion Math 1315 or Math 1342 with a grade of C or better; or equivalent advanced credit placement.

MATH 2311 Foundations of Elementary Mathematics II (3-0). Second course in the mathematics content sequence for preservice elementary and middle school teachers. Topics include: fraction operations, decimals, real numbers, ratio and proportion, percent, basic notions of geometry, measurement, and basic probability and statistics. Offered spring. Prerequisites: Satisfactory completion of Math 2310 with a grade of C or better.
**MATH 2318 Linear Algebra (3-0).** Introduces and provides models for application of the concepts of vector algebra. Topics include finite-dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvectors; and applications in science and engineering. Prerequisite: MATH 1316.

**MATH 2340 Discrete Mathematics (3-0).** Sets, Boolean algebra and Venn diagrams, function, elementary propositional and predicate logic, proof techniques, graph theory, combinatorics and elementary probability, and modular arithmetic. Offered spring. Prerequisites: MATH 1315

**MATH 2403 Individual Studies (3-2).** In this course, students complete individual work towards the fulfillment of their degree. Prerequisite: Consent of instructor.

**MATH 2413 (MATH 2413) Calculus I (3-2).** Topics include limits and continuity, the derivative, techniques for differentiation of algebraic, logarithmic, exponential and trigonometric functions applications of the derivative and anti-differentiation. Offered fall. Prerequisite: Math 1315 and Math 1316 or consent of instructor.

**MATH 2414 (MATH 2414) Calculus II (3-2).** Topics include the definite integral and its applications, techniques of integration, improper integrals, Taylor's formula and infinite series. Offered spring. Prerequisite: Math 2413

**MATH 3101 Departmental Seminar (1-0).** A forum for the presentation and discussion of results from various disciplines relating to Computer Science and Mathematics. Presentations will be made by visitors, faculty, and students. Students enrolled for credit in the departmental seminar will be expected to make at least one oral presentation during the semester. The course may be repeated during different semesters. (This course is a cross-listing of CS 3101). Offered fall and spring. Prerequisite: Consent of Instructor.

**MATH 3301 Geometry (3-0).** This course consists of a modern formal development of Euclidean geometry and a limited introduction to non-Euclidean geometry, with an integration of topics, methods, and use of technology appropriate for prospective middle grade and secondary mathematics teachers. Offered fall or spring as needed. Prerequisite: Math 2311 or Math 2330; or consent of instructor.

**MATH 3303 Individual Studies (3-0).** Independent study of selected topics in mathematics. This course may be repeated during different semesters. Prerequisite: Permission of instructor.

**MATH 3306 Special Topics (3-0).** Discussion of selected topics in mathematics, at or above the level of college algebra, suitable for lower division students. The course may be repeated for different topics. Offered when needed. Prerequisite: Permission of instructor.

**MATH 3320 Differential Equations (3-0).** First order differential equations, linear differential equations of higher order, power series solutions, systems of linear differential equations, and applications. Use of a programmable graphing calculator may be required. Students are also introduced to a symbolic algebra system running on a personal computer. Offered spring. Prerequisite: Math 2414.
MATH 3330 Number Theory and Cryptography (3-0). This is an introductory course in basic number theory via its important applications in modern cryptography. Topics include divisibility and the Euclidean algorithm, congruences, finite fields, quadratic residues, enciphering matrices, public key cryptography, pseudoprimes, and factoring techniques. Offered fall or spring when needed. Prerequisite: Math 2414.

MATH 3340 Foundations of Higher Mathematics (3-0). A transition course to higher mathematics. Students learn how to organize and structure their mathematical thoughts, how to read and manipulate abstract definitions, and how to prove or refute proofs by effectively evaluating them. Topics such as propositional logic, set theory, and techniques of proving will be the basis for discussions on functions, sequences, relations, limits, cardinality, divisibility, the real numbers and complex numbers. Offered fall and spring when needed. Prerequisite: Math 2414

MATH 3350 History of Mathematics (3-0). Biographies of a representative sample of mathematicians along with an exploration of the chronological development of important ideas in mathematics, particularly in the fields of geometry and number theory. Offered fall or spring when needed. Prerequisite: Math 2413

MATH 3403 Individual Studies (3-2). In this course, students complete individual work towards the fulfillment of their degree. Prerequisite: Consent of instructor.

MATH 3415 Calculus III (3-2). This course includes the study of the calculus of functions of several variables and topics in vector calculus including line and surface integrals, Green's Theorem, Divergence Theorem, and Stokes' Theorem. Offered fall. Prerequisite: Math 2414

MATH 4303 Individual Studies (3-0). Independent study of selected topics in mathematics. This course may be repeated during different semesters. Prerequisite: Permission of instructor.

MATH 4320 Analysis I (3-0). Topology of the real line, sequences of real numbers, and continuity of functions of a single real variable. Includes an introduction to logic, set theory, and cardinal arithmetic. Rotated with 4330 and 4360. Prerequisite: Math 2415

MATH 4321 Analysis II (3-0). A continuation of Math 4320. The course includes rigorous treatments of differentiation, the Riemann integral, sequences and series of functions, and an introduction to Fourier series. Offered when needed. Prerequisite: Math 4320

MATH 4330 Modern Algebra I (3-0). Group theory and its applications to number theory and geometry, introduction to rings, integral domains, and fields. The course may require the use of programmable graphing calculator and/or a symbolic algebra system running on a personal computer. Rotated with 4320 and 4360. Prerequisite: Math 2330 and Math 2415

MATH 4331 Modern Algebra II (3-0). A continuation of Math 4330. This course continues the study of rings and fields with a brief introduction to Galois Theory. The course focuses on polynomial rings, vector spaces, and rings of matrices. Offered when needed. Prerequisite: Math 4330

MATH 4340 Mathematical Statistics (3-0). Classical probability theory, discrete and continuous random variables, distribution functions, expectation, law of large numbers, central
MATH 4360 Complex Variables I (3-0). An introductory course covering functions of one
complex variable. Topics will include: the algebra of complex numbers, geometry in the
complex plane, polar representation of complex numbers, analytic functions, mappings,
continuity, differentiability, Cauchy-Riemann equations, elementary functions of a complex
variable, contour integrals and the Cauchy integral formula. Rotated with 4320 and 4330.
Prerequisite: Math 2414

MATH 4361 Complex Variables II (3-0). Further treatment of functions of a single complex
variable. Topics will include: Taylor and Laurent series, Residue theorems, integration,
mappings using elementary functions, and conformal mappings. Offered when needed.
Prerequisite: Math 4360

MATH 4390 Senior Project (0-6). Directed individual studies in a mathematical topic of
interest to the student. The course requires a written paper appropriately documented in AMS
style and an oral presentation. The student will also be expected to answer questions from
faculty for purposes of curriculum assessment. Offered fall and spring. Prerequisite:
Completion of any 4000 - level course with a grade of "C" or better.

MATH 5301 Special Topics in Mathematics (3-0). Selected topics in theoretical and applied
mathematics. The course may be repeated for different topics. Offered when needed.
Prerequisites: Permission of instructor.

MATH 5302 Topics in Mathematics Education (3-0). Selected topics in mathematics and
mathematics education which relate to the teaching of K-12 mathematics. The course may be
repeated for different topics. Offered when needed. Prerequisite: Permission of instructor.

MATH 5303 Individual Studies (3-0). Independent study of selected topics in
mathematics. This course may be repeated during different semesters. Prerequisite:
Permission of instructor.

MEXICAN AMERICAN STUDIES (MAS)

MAS 2301 (HUMA 1305) Introduction to Mexican American Studies (3-0). Introduction to
Mexican American culture, history, literature, music, world view, and place in both Mexican and
American societies and nations.

MAS 2302 Readings and Research (0-3). Selected readings and research projects to be
offered as individual study to meet student's needs. May be repeated for credit.

MAS 3309 Language on the Border. (3-0). This course looks at language along the U.S.-
Mexican border from linguistic, social and political perspectives. Topics will include bilingualism,
bilingual education, cultural identity, language varieties, and code- switching.

MAS 3310 Special Topics (3-0). Selected topics in the area of Mexican American Studies.
May be repeated for credit when the topic varies.

MAS 3311 Folklore and Culture on the Texas-Mexican Border (3-0). Students are to
become familiar with Mexican Revolution's history. Students will review the origin and history of
Mexican Corridas. This course will be taught in English.
MAS 4309 Political Issues in Mexican American Studies (3-0). Selected readings or research projects to be offered as individual study to meet student need. May be repeated for credit when the topic varies.

MUSIC (MUS)

MUS 1111 Individual Instruction (1/2-6). (May be repeated for credit.) One thirty-minute lesson and not less than 5 hours practice per week. Enrollment is open to music majors and minors, and all interested students with the permission of the instructor.

- 01 Piano 07 Bassoon 13 Percussion
- 02 Voice 08 French Horn 14 Guitar
- 03 Flute 09 Trumpet 15 Violin Family
- 04 Oboe 10 Trombone 16 Other
- 05 Clarinet 11 Euphonium 17 Organ
- 06 Saxophone 12 Tubas

MUS 1112 Vocal Ensemble (0-3). (May be repeated for credit.)
01 - University Chorus - This group prepares and presents a major composite musical work each semester. There are usually two performances per semester. Enrollment is open to all students, regardless of their musical skills and/or experience, the ability to match pitch is essential.
02 - Concert Choir - This group prepares and presents sacred and secular music of all styles, as well as folk and popular song arrangements. Enrollment is open to all students with permission of the instructor.
03 - Vocal Ensemble - This group will prepare and perform music from the classical and popular styles.
04 - Musical Theatre Ensemble - This group will prepare and perform music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

MUS 1113 Instrumental Ensembles (0-3). (May be repeated for credit.)
01 - Concert Band - This group performs concert band literature. Enrollment is open to all students with permission of the instructor.
02 - Symphonic Wind Ensemble - This group prepares and presents the finest of band and wind ensemble literature available. Membership is by audition only.
03 - Jazz Ensemble - This group prepares and presents works in styles ranging from early jazz to modern rock. Membership by permission of the instructor.
04 - Brass Ensemble - This group prepares and presents selected small brass ensemble literature. Membership is by audition only.
05 - Woodwind Ensemble - This group prepares and presents selected wood-wind ensemble literature. Membership is by audition only.
06 - Wind Ensemble - This group prepares and performs concert literature. Performances include both formal and informal settings and athletic events. Enrollment by permission of the instructor.
07 - Guitar Ensemble - This group will prepare and perform music from the Classical and Popular Styles. Membership by audition only.
08 - Specialty Ensemble - Special instrumentation. Membership by audition only.
09 - Percussion Ensemble - Membership by audition only.
10 - Orchestra - Membership by audition only.
11 - Marching Band – Fall Semester only.

**MUS 1116 (MUSI 1116) Sight Singing & Ear Training I (2-0).** The aural study of basic musical elements with emphasis on sight singing, scales, intervals, chords, and harmonic and melodic diction. Meets two hours per week.

**MUS 1117 (MUSI 1117) Sight Singing & Ear Training II (2-0).** Continuation of MUS 1116. Meets two hours per week. Prerequisite: MUS 1116

**MUS 1118 Guitar Class (0-2).** (*May be repeated for credit once only). For beginning guitarists. Emphasis on learning cords, strumming, finger style and note reading. Several guitars available for rent. Open to all students.

**MUS 1171 Composition (1-0).** Students will study basic compositional techniques. Prerequisites: Permission of instructor.

**MUS 1181 (MUSI 1181) Piano Class I (0-3).** Class instruction for Music majors and minors, and for other students who have not had previous study.

**MUS 1183 (MUSI 1183) Voice Class I (0-2).** Class instruction for students, who have not had previous study, and for Music majors and minors, and for other students in the use and understanding of the singing voice. Emphasis is on the ability to use the voice correctly by study of fundamentals of vocal technique, sight singing, ear training, and repertoire.

**MUS 1211 Individual Instruction (1-9).** (May be repeated for credit.) Two thirty-minute or one-hour lesson and not less than 10 hours practice per week. Designed for Music majors, but other students may enroll with the permission of the instructor.

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<td>01</td>
<td>Piano</td>
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<td>Bassoon</td>
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<td>02</td>
<td>Voice</td>
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<td>Oboe</td>
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<td>05</td>
<td>Clarinet</td>
<td>11</td>
<td>Euphonium</td>
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<td>06</td>
<td>Saxophone</td>
<td>12</td>
<td>Tuba</td>
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</tbody>
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**MUS 1303 (MUSI 1303) Fundamentals of Music (3-0).** An elementary course for general students in the fundamentals of music; singing, piano keyboard, listening activities, and a study of clefs, keys and rhythms will be used to explore these fundamentals. This course meets Fine Arts requirement.

**MUS 1308 (MUSI 1308) Music Literature I (3-0).** (A fine arts/humanities course). A course designed to acquaint students with representative music of different ages, styles, media, and forms; and to its historical background. This course meets Fine Arts requirement.

**MUS 1310 Problems in Music (3-0).** Individual or small group study of specific topics in music on the lower division level. May be repeated for credit when topic varies.

**MUS 1311 (MUSI 1311) Music Theory I (3-0).** A study of basic musical elements with emphasis on terminology, scales, intervals, chords, tonal relationships, and simple part writing.
MUS 1312 (MUSI 1312) Music Theory II (3-0). Continuation of MUS 1311. Prerequisite: MUS 1311 or equivalent.

MUS 1314 Vocal Techniques (3-0). This course covers three areas: basic theory of singing, including the relationship of the body to singing; lyric diction for choral ensembles and soloists; and vocal/choral rehearsal techniques.

MUS 2112 Music Theatre Ensemble (0-3). This group will prepare and perform music of the musical theatre idiom. Performance may be staged or sung in a concert setting, depending on the repertoire for the given semester. Placement auditions may be held at the beginning of the semester. Prerequisite: Ability to accurately match pitch and sing confidently alone or in a group.

MUS 2115 Piano Class II (0-2). (May be repeated for credit). A study to develop keyboard skills, ear training, sight reading, keyboard harmonization. Class instruction is for music majors, minors, or permission from the instructor.

MUS 2116 (MUSI 2116) Sight Singing & Ear Training III (2-0). The continued aural study of basic musical elements with emphasis on sight singing, scales, intervals, chords, and harmonic melodic dictation as well as musical forms and structures. Prerequisite: MUS 1117.

MUS 2121 String Techniques (2-0). Class instruction for string instruments, for music majors and minors who have not had previous study, and for other interested students. Emphasis is on the ability to play the instruments studied.

MUS 2122 Percussion Techniques (2-0). Class instruction for percussion instruments, for music majors and minors who have not had previous study, and for other interested students. Emphasis is on the ability to play the instruments studied.

MUS 2123 Brass Techniques (2-0). Class instruction for brass instruments, for music majors and minors who have not had previous study, and for other interested students. Emphasis is on the ability to play the instruments studied.

MUS 2124 Woodwind Techniques (2-0). Class instruction for woodwind instruments, for music majors and minors who have not had previous study, and for other interested students. Emphasis is on the ability to play the instruments studied.

MUS 2311 (MUSI 2311) Music Theory III (3-0). A continuation of musical elements studied in MUS 1331, with greater emphasis on musical structure, analysis, and music writing. Prerequisite: MUS 1312.

MUS 3111 Individual Instruction (2-6). (May be repeated for credit.) One thirty-minute lesson and not less than five hours practice per week. Enrollment is open to Music majors and minors, and to other students with the permission of the instructor.

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<th>Piano</th>
<th>01</th>
<th>Bassoon</th>
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<td>Trumpet</td>
<td>15</td>
<td>Violin Family</td>
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<tr>
<td>04</td>
<td>Brass</td>
<td>04</td>
<td>Trombone</td>
<td>16</td>
<td>Other</td>
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<tr>
<td>05</td>
<td>Clarinet</td>
<td>05</td>
<td>Euphonium</td>
<td>17</td>
<td>Organ</td>
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</tbody>
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MUS 3112 Vocal Ensembles (0-3). (May be repeated for credit.)
01 - University Chorus. This group prepares and presents works by major composers and
contemporary composers each semester. There are usually two performances per semester.
Enrollment is open to all students regardless of musical skills or experience: The ability to
match pitch is essential.
02 - Concert Choir – See description for Music 1112, above.
03 - Vocal Ensemble – See description for Music 1112, above.

MUS 3113 Instrumental Ensembles (0-3). (May be repeated for credit.) – See description for
Music 1113, above.
01 Concert Band 05 Woodwind 09 Percussion
02 Symphonic 06 Wind 10 Orchestra
03 Jazz 07 Guitar 11 Marching
04 Brass 08 Specialty

MUS 3117 Individual Studies (0-1). Individual study of selected academic topics in music.

MUS 3141 Ear Training IV (2-0). The aural study of advanced musical elements with
emphasis on sight singing, chromatics, scales, intervals, chords, and harmonic and melodic
dictation, as well as forms and structure. Prerequisite: MUS 2116.

MUS 3171 Advanced Composition (1-0). Students will study advanced compositional
techniques. Prerequisites: Permission of instructor.

MUS 3211 Individual Instruction (1-9). (May be repeated for credit.) Two thirty-minute
lessons or one-hour lesson and not less than 10 hours practice per week. Designed for music
majors and minors but other students may enroll with the permission of the instructor.
01 Piano 07 Bassoon 13 Percussion
02 Voice 08 French Horn 14 Guitar
03 Flute 09 Trumpet 15 Violin Family
04 Oboe 10 Trombone 16 Other
05 Clarinet 11 Euphonium 17 Organ
06 Saxophone 12 Tuba

MUS 3217 Individual Studies (0-1). Individual study of selected academic topics in music.

MUS 3310 Special Topics in Music (3-0). Topics to be selected from: History and Literature
of Music, Music in the General Culture, Techniques of Instrumental or Vocal Music or another
topic in the field of music. (May be repeated for credit when topic Varies.)

MUS 3311 Music Materials for Children (3-0). A study of music materials and skills which
are effective in providing a musical background for children.

MUS 3312 Problems in Music (3-0). Individual or small group study of specific topics in
music on the upper division level. May be repeated for credit when the topic varies.
Prerequisite: junior standing.
MUS 3313 Fundamentals of Conducting (3-0). (May be repeated for credit if conducting problem varies.) A study of effective hand and baton techniques used in conducting music ensembles.

MUS 3316 Secondary Music Methods (3-0). A study of the value of music in society; music as a fine art; music for the performer; music for the listener; the necessary skills Required for vocalists and instrumentalists, including the understanding of the changing male adolescent voice; appropriateness of music literature for use in instrumental or vocal ensembles for adolescents; music as a cultural force in society; and, basic understanding of instrumental and vocal ensembles organization. Prerequisite: Junior standing and consent of the instructor.

MUS 3317 Problems in Music (0-3). Individual or small group study of specific topics in music on the upper division level. May be repeated for credit when topic varies.

MUS 3341 Music Theory IV (3-0). Continuation of MUS 2311, plus analytical techniques used in the understanding of formal structures found in musical compositions. Prerequisite: MUS 2311 or equivalent.

MUS 4112 Advanced Musical Theatre Ensemble (0-2). Advanced instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

MUS 4131 Senior Recital (1-0). A course to be the capstone of applied music individual instruction. Students will prepare 20 minutes (actual) of music for a public recital, demonstrating proficiency on their instrument or voice. They will also prepare a program, including scholarly program notes which have been researched and performed.

MUS 4215 Marching Band Techniques (2-0). A study of the problems peculiar to the marching band and their solutions; planning, charting, and rehearsing of marching performances for parades, half-time shows, and contests; the administration of marching band personnel and equipment; baton twirling and drum majoring.

MUS 4216 Arranging (2-0). (May be repeated for credit if arranging problem varies.) A practical study of arranging music for a variety of vocal and instrumental ensembles through an understanding of their traditions and problems. Prerequisite: Music 2311 or its equivalent.

MUS 4310 Special Topics (3-0). Students will study a selected topic from the field of music, such as the History and Literature of Music; Music in the General Culture; or Techniques of Instrumental or Vocal Music. Prerequisites: Permission of instructor.

MUS 4311 History of Music I (3-0). This course is a survey of the history and literature of music, including in-depth study of composers, periods, styles, and musical development from antiquity to the present time. Prerequisite: MUS 1308 or permission of the instructor.

MUS 4312 History of Music II (3-0). This course is a survey of the history and literature of music, including in-depth study of composers, periods, styles, and musical development from the Class Period (1750) through the present. Prerequisite: MUS 4311 or permission of the instructor.
MUS 5112 Musical Theatre Performance (0-2). Advanced instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

MUS 5113 Musical Theatre Ensemble (0-2). Advanced instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

MUS 5319 Individual Research Problems in Music (0-3). The student will do independent work in a limited area of music selected in consultation with the instructor in terms of both departmental and student interest and needs.

MUS 5320 Seminar in Instrumental Pedagogy (3-0). Advanced study of teaching methods, analysis, rehearsal and performance for musical instrument or voice in the individual or group setting. May be repeated for credit when topic varies.

MUS 5321 Seminar in Vocal Pedagogy (3-0). Advanced study of teaching methods, analysis, rehearsal and performance for musical instrument or voice in the individual or group setting. May be repeated for credit when topic varies.

NATURAL RESOURCE MANAGEMENT (NRM)

NRM 1101 Freshman Seminar (1-0). Seminar course designed to introduce students to faculty, facilities, and programs in ANRS and to introduce students to study skills essential for a successful career.

NRM 1301 (HORT) Horticulture (2-2). A survey of the general field of horticulture; a study of the principles and practices of propagation; the growth and fruiting habits of horticulture plants and the culture, harvesting, handling and utilization of fruit and nuts. Entrepreneurship skills and landscape design will be emphasized.

NRM 2203 Introduction to Field Studies (1-3). An introduction to science in the field. This course will cover topics including field safety, first aid, basics of camping and hiking, keeping a field journal, and use of field equipment such as a compass and GPS. The course will also introduce students to basic field science topics e.g. wildlife identification, plant identification, geology etc. Offered spring.

NRM 2301 Range Resources (3-0). An introduction to the principles of range management, including a survey of its history, resources, policies, grazing regions, range ecology, grazing systems, range improvements, and evaluation.

NRM 2303 Principles of Conservation Biology (3-0). Introductory course on the fundamental issues in the discipline of conservation biology including conservation genetics, habitat fragmentation, natural resources sustainability, and island biogeography.

NRM 2305 Soils (2-2). The origin, formation, and classification of soils, as well as their physical, chemical, and biological properties. Organic matter, moisture, and soil fertility
maintenance are also covered.

**NRM 2311 Problems in Natural Resource Management (3-0).** Individualized instruction in all facets of natural resource management. This course is designed to meet the specific needs of freshman and sophomore students on an individual basis. May be repeated with approval of NRM chair. Prerequisite: Approval of NRM chair

**NRM 2330 (AGRI 2330) Wildlife Conservation and Management (3-0).** An introduction to the wildlife resources of the United States with specific reference to Texas. The history of game management, endangered species, and methods for the maintenance, control, and increase of wildlife resources.

**NRM 3201 Wildland Plants (1-2).** A study of wildland plants and plant communities, including identification, growth and phenology, forage and browse values, restoration value, and habitat.

**NRM 3202 Wildlife Identification and Natural History (1-2).** A course that provides fundamental identification skills and an understanding on the life history and habitat requirements of various game and nongame animals. Prerequisite: NRM 2302

**NRM 3301 Fire Ecology (3-0).** Study of fire in range ecosystems, including history of fire, climate factors associated with fire, vegetation response, evolution of ecosystems with fire, prescribed burning as a management tool, fire safety and liability concerns.

**NRM 3302 Forest Ecology (3-0).** Introduction to forest ecosystems. Includes forest types and distribution, inventory and monitoring techniques and management of forest ecosystems.

**NRM 3303 Ecology and Conservation of Natural Resources (3-0).** An overview of the history, science, use and policy approaches to natural resource management, with an emphasis on rangeland, wildlife, soil and water resources within a social context.

**NRM 3304 Natural Resource Policy and Administration (3-0).** An advanced course in land use management and policy, administrative organizations, and public relation philosophies of private, state, and federal agencies that manage natural resources on publicly and privately owned lands. This course includes special programs presented by speakers from both state and federal agencies responsible for policy implementation and administration of wildlife and other natural resources. Prerequisite: NRM 2330

**NRM 3308 Agricultural Statistics (3-0).** Major emphasis is placed upon design, analysis and interpretation of agricultural and biological experimental data. Information presented in this course will include statistical concepts and models, simple tests of significance, analysis of variance, mean separation procedures, and linear regression-correlation analysis. Prerequisite: Math 1332, or 1314, or 1342 or permission of instructor.

**NRM 3310 Special Topics (3-0).** Selected topics in the field of natural resource management. Topic selected according to student interest and need. May be repeated as topics vary.

**NRM 4101 Range and Wildlife Activities (1-0).** An elective course for students involved in activities supportive of natural resource science. Activities include, but are not limited to: range plant identification, wildlife quiz bowl, and range and wildlife conclave.
**NRM 4301 Human Dimensions in Natural Resource Management (3-0).** Theory and applications for considering human dimensions in an integrated approach to wildlife conservation and management. Course emphases will include human values, the role of constituency groups, natural resource policy development, conflict resolution, group decision-making, research methods, and case studies. Prerequisite: NRM 2330 and NRM 2303

**NRM 4302 Advanced Topics in Conservation Biology (3-0).** Examines the major areas in conservation-oriented research including patterns of biodiversity, extinction, conservation genetics, conservation of populations, communities and landscapes, and natural resource sustainability.

**NRM 4303 Range Ecology (3-0).** A study of rangeland communities, including principal forage species characteristics, growth, and phenology; resource planning and management; the effects of range livestock and wildlife on range vegetation; the study of plant succession and climax in relation to grazing and ecological condition. Prerequisite: NRM 2301

**NRM 4304 Range Inventory and Analysis (2-2).** An overview of methods for measuring and analyzing rangeland plant communities and populations; statistical analysis of sampling; techniques to inventory rangeland resources; determining range health; determining forage production and utilization; determining proper stocking rates. Prerequisite: NRM 2301, NRM 3201, and NRM 3308

**NRM 4305 Wildlife Management Techniques (2-2).** An overview of habitat inventory and evaluation techniques, census methods, age and sex criteria; banding, data analysis, telemetry analysis, and research methods in wildlife management. Prerequisite: NRM 2302 and NRM 3202

**NRM 4306 The Control of Domestic and Wildlife Diseases (2-2).** Management as related to the control of animal diseases; sanitation and its importance in disease prevention; diseases prevented by vaccination; practical means of diagnosing diseases and ailments; treatment of afflicted animals. Prerequisite: Biology 2406 or permission of instructor.

**NRM 4307 Range and Wildlife Habitat Management (2-2).** Principles and practices of range and wildlife habitat management, including range improvement through mechanical, chemical, prescribed burning and biological manipulation of vegetation, grazing systems, revegetation and other habitat management practices. Prerequisite: NRM 2301

**NRM 4308 Big Game Management (2-2).** Application of the principles of wildlife management to big game species with a focus on the biology and behavior of big game species and how this influences habitat management, production, population characteristics, and management strategies for each species. Prerequisite: NRM 2301 and NRM 2302

**NRM 4309 Wildlife Population Dynamics (3-0).** Subject material dealing with the mechanics of growth and structure of populations, departures from stability and natural and artificial regulation of population levels, and techniques used to survey and monitor wildlife populations. Prerequisite: NRM 2302 and junior or senior status or approval of instructor.

**NRM 4311 Problems in Natural Resource Management (3-0).** Individualized instruction in all facets of natural resource management. This course is developed to meet specific needs of individual students. May be repeated with approval of NRM chair. Offered all semesters. Prerequisite: Approval of NRM chair.
NRM 4314 Range Watershed and Hydrology (3-0). Discussion of basic hydrologic processes, watershed drainage on rangeland watersheds; networks and stream-flow characteristics; influences of range vegetation on watershed, and management of rangelands to optimize watershed benefits.

NRM 4409 Mammalogy (3-2). The systematics, phylogeny, natural history and economic relations of mammals of the world with particular emphasis on mammals native to the Trans-Pecos region of Texas. Museum technique and field work will be stressed. Prerequisite: General Zoology or equivalent

NRM 4410 Ornithology (3-2). The systematics, phylogeny, natural history and field studies of birds with emphasis on those found in the Trans-Pecos region of Texas. Prerequisite: General Zoology or equivalent

NRM 5101 Graduate Seminar (1-0). A course designed to give graduate students the opportunity to present oral papers and receive evaluation of the presentation, or to review job search techniques and employment opportunities for new graduates. Should be repeated for credit (proposal and defense semesters).

NRM 5302 Seminar in Range and Wildlife Management (3-0). This course is designed to be flexible to meet the needs of graduate students studying various disciplines in Range and Wildlife Management. May be repeated under different subject matter titles. Recent courses include GIS applications; Applied Wildlife Research; Wildlife Research, Grants, and Publications; Principles of Ecology; Wildlife Conservation for Teachers; Advanced Techniques in Vegetation Analysis; Range Research Techniques. May be repeated under different subject matter titles.

NRM 5303 Special Topics (3-0). Advanced studies in current agricultural and natural resource sciences research. Topics assigned according to student interest and need. Registration approval by the NRM chair. May be repeated under different subject matter titles.

NRM 5304 Research (0-6). Advanced studies in natural resource management. Problems assigned according to the experience, interest, and needs of the individual student. Registration approval by the NRM chair.

NRM 5305 Range and Wildlife Research Methods (3-0). An overview of the design and analysis of research projects pertaining to the ecology and management of wildlife species and rangeland ecosystems. Specific problems pertaining to the Trans-Pecos region will be stressed, but regional and national issues will be discussed. Methods discussed in the classroom will be applied in field situations.

NRM 5306 GIS, GPS, and Remote Sensing for Resource Managers (2-2). An advanced course on the rapidly growing geographic technology used by natural resource managers and scientists including: geographic information systems (GIS), global positioning systems (GPS), and remote sensing methods. Prerequisite: Geology 3401

NRM 5311 Scientific Writing (3-0). An advanced study of proposal and thesis format in Animal Science or Range and Wildlife Management. Covers publication styles common in each student’s chosen field. Scientific publications are emphasized.
NRM 5312 Biostatistical Analysis I (2-2). An introduction to statistical concepts and models applied to agricultural and biological systems. The course introduces the scientific method, inferential theory, data types, descriptive statistics, and goodness of fit, contingency tables, the normal distribution and one- and two-sample hypothesis testing. Emphasis will be placed on data analysis and interpretation using computer statistical applications. Offered fall.

NRM 5313 Biostatistical Analysis II (2-2). An advanced course in statistical concepts and models applied to agricultural and biological systems. The course will cover experimental designs, paired-sample hypotheses, multisampling hypotheses (ANOVA), multiple comparisons, factorial and nested ANOVA, data transformations, linear regression, and correlation, multiple regressions and correlation, polynomial regression and the binomial distribution. Emphasis will be placed on data analysis and interpretation using computer statistical applications. Prerequisite: NRM 5312 or permission of instructor. Offered spring.

NRM 5316 Project Research (1to9-0). Research for thesis project. May be repeated. Prerequisite: Master of Science students that have been admitted to candidacy. May be repeated.

NRM 5320 Environmental Law and Policy (3-0). This course will provide a conceptual framework of the legal system with regards to natural resources. This course examines the existing policies and laws regulating wildlife, water, and land use; and reviews the roles and philosophies of various regulating and policy-making agencies including federal, state, and private organizations. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

NRM 5321 Wildlife and Society (3-0). This is an advanced course on the theory and applications for considering human dimensions in wildlife conservation. Course emphasis will include human values, the role of constituency groups, natural resource policy development, conflict resolution, group decision-making, and community-based conservation. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

NRM 5322 Sustainability (3-0). This course examines the theories, principles, and practices of sustainability. Topic covered will include water, resources, food production, urban development, and economics. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

NRM 5323 Social Media and Outreach (3-0). This course examines the various forms of social media and their use in education and outreach. This course reviews the latest trends in social media, use including audience demographics and best practices specific to the field of natural resource conservation. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

NRM 5324 Conservation Biology (3-0). This is an advanced course exploring conservation-oriented research, including threats to biodiversity, biogeography, extinction, conservation genetics, landscape connectivity, endangered species conservation, ecological restoration, and conservation education. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.
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**NRM 5325 Natural Resource Conservation (3-0).** This course is a study of rangeland communities, including principle forage species characteristics, growth and phenology; resource planning and management; the effects of range livestock and wildlife on range vegetation; the study of plant succession and climax in relation to grazing and ecological conditions. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

**NRM 5326 Silviculture (3-0).** This course examines ecological processes affecting establishment and growth of forest stands with particular emphasis on forest types throughout the United States. This course will also cover forest stand productivity, how productivity is influenced by site, stand dynamics, climatic factors, and application of specific prescriptions to establish and manipulate composition, growth, and health of forest stands. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

**NRM 5327 Soils (3-0).** This course is an advanced overview of soil science and soil management. This course will include soil taxonomy, physical properties, nutrient cycling, carbon cycling, and soil moisture principles and management. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

**NRM 5328 Principles of Game Management (3-0).** This course is an application of the principles of wildlife management to game species with a focus on the biology and behavior of big game, waterfowl, and upland bird species, and how this influences habitat management, production, population characteristics, and management strategies for each species. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

**NRM 5329 Internship (3-0).** This course is designed to combine classroom theory with practical application through job-related experiences. Students are either employed by or volunteer with a natural resource conservation organization and work with a pre-approved project. THIS COURSE WILL NOT BE AVAILABLE TO STUDENTS PURSUING AN M.S. IN NATURAL RESOURCE MANAGEMENT WITHOUT WRITTEN PERMISSION FROM THEIR GRADUATE COMMITTEE.

**NRM 5403 Special Topics (4-0).** Advanced studies in current agricultural and natural resource sciences research. Topics assigned according to student interest and need. Registration approval by the NRM chair. May be repeated under different subject matter titles.

**NRM 5409 Wildlife Population Dynamics (3-2).** Advanced course dealing with the mechanics of growth and structure of populations, departures from stability and natural and artificial regulation of population levels, and techniques used to survey and monitor wildlife populations.

**NRM 6301 Thesis Proposal (0-6).** Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee. The student will normally register for this course no earlier than the
second semester of graduate study.

**NRM 6302 Thesis Defense (0-6).** The student will enroll in this course each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made. Satisfactory completion of this course will result in the completed thesis presented to the graduate committee, accepted by the Graduate Dean and filed appropriately.

**PHILOSOHY (PHIL)**

**PHIL 1301 (PHIL 1301) Introduction to Philosophy (3-0).** An introduction to the field of philosophy and its leading questions in metaphysics, epistemology, philosophy of mind, ethics, social philosophy, existentialism, logic, and aesthetics.

**PHIL 1302 (PHIL 2306) Ethics (3-0).** An introduction of systematic approaches to moral reasoning, including both normative ethics and meta ethics as moral philosophy. Survey of approaches to judging the Tightness or wrongness of actions and judgments about the goodness or badness of things.

**PHIL 1303 (PHIL 2303) Logic (3-0).** An introduction to logic emphasizing the nature of the rational process, types of reasoning, the scientific method, and fallacies. Sound reasoning skills are developed.

**PHIL 2301 Special Topics in Philosophy (3-0).** Selected topics in Philosophy. May be repeated for credit when the topic varies.

**PHIL 2302 Readings and Research in Philosophy (3-0).** An individualized course with varying topics to be chosen by the instructor in consultation with the student. May be repeated once.

**PHYSICAL EDUCATION (PE)**

**PE 1150 Wellness/Fitness Assessment (0-2).** A course that assists students in making an assessment of their level of fitness. Included are: cardiovascular fitness, muscular strength, body composition, flexibility, muscular coordination, and concepts of healthy living. May not be repeated for credit.

**PE 1153 Individual Activities (0-2).** Individual sports of Archery, Aerobics, Golf, and Weight Training and Conditioning.

**PE 1154 Team Activities (0-2).** Team sports of Basketball, and Volleyball.

**PE 1155 Dual Activities (0-2).** Dual sports of Badminton, Racquetball, Handball, and Tennis.

**PE 1156 Aquatic Activities (0-2).** Beginning Swimming, Intermediate Swimming and Life Guarding. Red Cross Certification is available.

**PE 1301 (PHED) Introduction to Physical Fitness and Sport (3-0).** A course emphasizing the aims and objectives and historical background for sports and fitness and recreation. (Fall/Spring) This class must be completed with at least a grade of “C” or better prior to enrolling in an upper level Physical Education class.

**PE 1306 (PHED 1306) First Aid (3-0).** A course which includes class discussion, reading
and units on the fundamentals of safe conduct at home, in traffic, in play and recreation, and in
the community with a section devoted to first aid in accordance with the latest National Safety
Council first aid techniques and Advanced First Aid and CPR certification (Fall/Spring)

**PE 2101 Intercollegiate Activities (0-2).** Participation as a member of an intercollegiate
athletic team. Upon dismissal or voluntary withdrawal from the team, the student must report to
the Chair of the Department for assignment to the regular activity claps. Elective credit only.
May be repeated but may not be used to fulfill P.E. activity course requirements in General
Education. Prerequisite: Membership on an intercollegiate athletic team.

**PE 2303 (PHED 1331) Activities for Children (3-0).** This course is designed to give a
foundation for a working knowledge of activities that are appropriate for children. These
activities include elements that are deemed necessary for the complete physical development
of the child. (Fall/Spring)

**PE 2304 Skills and Techniques of Individual and Team Sports (3-0).** A course that
emphasizes the training in basic skills and techniques of a wide range of individual and team
activities including but not limited to: tennis, golf, badminton, archery, speedball, softball,
volleyball, basketball, soccer and other selected individual and team recreational activities.
(Fall/Spring)

**PE 3301 Theory of Practice of Football (3-0).** A course giving emphasis to the theory of
football, including policies in organization and administration of competitive sports programs.
(Fall)

**PE 3302 Theory and Practice of Basketball (3-0).** A course which gives emphasis to the
theory of basketball, including policies in the organization and administration of competitive
sports programs. (Spring)

**PE 3303 Theory and Practice of Baseball and Softball (3-0).** A course which gives
emphasis to the theory of baseball and softball, including policies in the organization and
administration of competitive sports programs. (Spring) Prerequisite: PE 1303

**PE 3304 Contemporary Health Problems (3-0).** A study of current health problems and
topics in society. Specific topics will include substance abuse, communicable diseases,
mental health, environmental health, birth control, and nutrition and fitness. (Fall)

**PE 3305 Motor Development (3-0).** This course is designed to permit students to study the
various aspects of motor development of children. This will give students the opportunity to
study physical growth as a factor accompanying motor development, fundamental motor skill
learning and refinement and physical fitness development. (Spring)

**PE 3307 Kinesiology (3-0).** A study of the analysis of human motion and posture subject to
both mechanical and biological laws and principles. (Fall) Prerequisite: PE1301

**PE 3308 Theory and Practice of Volleyball and Tennis (3.0).** A course which gives
emphasis to the theory of volleyball and tennis including organization and administration of
competitive sports programs. (Fall) Prerequisite: PE 1301

**PE 3309 Theory and Practice of Track and Soccer (3-0).** A course which gives
emphasis to the theory of track and soccer including organization and administration of

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competitive sports programs. (Spring)

**PE 4102 Workshop in Sports and Fitness (1-0).** A course that may be repeated for credit when course content varies. (Various)

**PE 4103 Athletic Training Clinical Practicum I (0-3).** A practical clinical experience course for the first year athletic training student. Working under the direct supervision of a certified athletic trainer, experience will be gained in taping, bandaging, illness/injury evaluation, rehabilitation and related services. May be repeated for credit. (Fall) Prerequisite: Admission to the student training program.

**PE 4104 Athletic Training Clinical Practicum II (0-3).** A practical clinical experience course for student athlete trainers to work under direct supervision by a certified/licensed athletic trainer. Includes practical experience in bandaging and taping, athletic training Room management, medical referral and administration of injury care and related services. (Fall/Spring)

**PE 4301 Tests and Measurements (3-0).** A course emphasizing the application of tests and measurements to the field of sports and fitness, including medical, written, motor skills, and physical examinations and tests. (Fall/Spring) Prerequisite: Completion of Mathematics Requirement and make a C or better in PE 1301

**PE 4302 Psychology and Physiology of Exercise (3-0).** A study of the relation of physiological and psychological principles to physical fitness and exercise. (Fall/Spring). Prerequisite: PE 1301

**PE 4303 Concepts of Kinesiology and Fitness (3-0).** This course provides a health-related fitness knowledge base with skill and assessment techniques and a review of important kinesiological concepts. (Fall/Spring/Summer) Prerequisites: PE 1301, 3307, 4301, 4302 or permission of instructor

**PE 4304 Athletic Training I (3-0).** A course which deals with proper methods of conditioning for prevention of sports related injuries with a focus on care and treatment of common athletic injuries. (Fall) Prerequisite: PE 1306, Safety and First Aid

**PE 4305 Athletic Training II (3-0).** An advanced study of the care and prevention of athletic injuries with a focus of assessment and evaluation of sports related injuries. (Spring) Prerequisite: PE 4304

**PE 4306 Athletic Therapeutic Exercise (3-0).** The study of therapeutic exercises used in the rehabilitation of athletic injuries and clinical techniques involved in muscle testing including goniometry. (Spring-Every third year) Prerequisite: PE 4304

**PE 4307 Therapeutic Modalities of Athletic Training (3-0).** The study of sports therapy physical agents used in athletic training setting such as cryotherapy, hydrotherapy, and electrotherapy as mechanical therapy. (Spring-Every third year) Prerequisite: PE 4304

**PE 4308 Administration of an Athletic Training Program (3-0).** The study of the administration and management strategies in athletics. Functions such as record keeping, insurance, public relations, pre-participation examinations, facility and equipment. Maintenance and budgets will be discussed. (Fall-Every third year)
PHYSICAL SCIENCE (PHSC)  

**PHSC 1115 (PHYS 1115) Physical Science Lab (0-2).** Laboratory designed to accompany the lecture survey course which prepares education majors to teach physical science topics (physics, chemistry, astronomy, and geology) in grades K-6. Corequisite: PHSC 1315

**PHSC 1315 (PHYS 1315) Physical Science (3-0).** Survey course to prepare education majors to teach physical science topics (physics, chemistry, astronomy, and geology) in grades K-6. This course cannot be applied toward credit of a major or minor in Biology or Geology.

**PHSC 4401 Analytical Instrumentation Theory (3-3).** An interdisciplinary approach to the theory, application and use of modern analytical equipment including a scanning electron microscope (SEM), and X-ray fluorescence spectrometer, and ion chromatography (IC) unit. Prerequisite: CHEM 1311, CHEM 1111

PHYSICS (PHYS)  

**PHYS 1101 (PHYS 1101) College Physics Laboratory I (0-2).** This laboratory-based course accompanies PHYS 1301, College Physics I. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of classical mechanics and thermodynamics, including harmonic motion, mechanical waves and sound, physical systems, Newton Laws of Motion, and gravitation and other fundamental forces; emphasis will be on problem solving. Corequisite: Physics 1301

**PHYS 1102 (PHYS 1102) College Physics Laboratory II (0-2).** This laboratory-based course accompanies PHYS 1302, College Physics II. Laboratory activities will reinforce fundamental principles of physics, using algebra and trigonometry; the principles and applications of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, optics, and modern physics topics; with emphasis on problem solving. Corequisite: Physics 1302

**PHYS 1301 (PHYS 1301) College Physics I (3-0).** Non-calculus based survey course in general physics covering kinematics, dynamics, temperature, heat, thermal properties of matter, and wave phenomena. Emphasis is placed upon the concepts of physics rather than mathematical relationships. Prerequisite: Math 1314 or a satisfactory score on the algebra placement test.

**PHYS 1302 (PHYS 1302) College Physics II (3-0).** This non-calculus based survey course in general physics covers electricity, magnetism, electromagnetic waves, optics, atomic and nuclear physics, special relativity, and quantum chromo dynamics. Emphasis is placed on the concepts of physics rather than mathematical relationships. Prerequisite: Physics 1301

**PHYS 2125 (PHYS 2125) University Physics Laboratory I (0-2).** Basic laboratory experiments supporting theoretical principles presented in PHYS 2325 involving the principles and applications of classical mechanics, including harmonic motion and physical systems; experimental design, data collection and analysis, and preparation of laboratory reports. Corequisite: Physics 2325

**PHYS 2126 (PHYS 2126) University Physics Laboratory II (0-2).** Laboratory experiments supporting theoretical principles presented in PHYS 2326 involving the principles of electricity and magnetism, including circuits, electromagnetism, waves, sound, light, and optics; experimental design, data collection and analysis, and preparation of laboratory reports.
Corequisite: Physics 2326

**PHYS 2325 (PHYS 2325) University Physics I (3-0).** General physics for students who plan to do further work in engineering, mathematics, chemistry, geology or other related sciences. The course covers vectors, statistics, linear and rotational kinematics and dynamics and wave phenomena. Prerequisites: Math 1316 and Math 2413

**PHYS 2326 (PHYS 2326) University Physics II (3-0).** Continuation of Physics 2325 covering kinetic theory, thermal properties of matter, thermodynamics, electrostatic fields, potential, electric circuits, and magnetic fields. Prerequisites: Physics 2325 and Math 2414

**POLITICAL SCIENCE (PS)**

**PS 2305 (GOVT 2305) Federal Government (3-0).** A required course in United States Government.

**PS 2306 (GOVT 2306) State Government (3-0).** A required course in Texas Government.

**PS 2307 Women and the Law (3-0).** The legal status of women at national, state, and local levels, with particular emphasis on recent legislation and court cases.

**PS 2308 Readings and Research (0-3).** Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

**PS 3300 The Study of Politics (3-0).** An introduction to the major concepts that underlie politics. Topics include democracy, political ideologies, and regimes, structures of governments.

**PS 3301 Political Parties (3-0).** The development of the party system in the United States, with an emphasis on elections, campaigns, political behavior, public opinion, and the future of the major parties.

**PS 3302 American Constitutional Law (3-0).** A study of the Constitution of the United States judicial processes and the effect of leading Supreme Court decisions on the meaning of the United States Constitution. Emphasizes relationships between governments and between government and the individual.

**PS 3303 Public Policy (3-0).** An introduction to public policy making in the United States. Includes stages of the policy making process and theoretical basis of public policy as well as special focus on selected policies. May be repeated for credit when policy focus varies.

**PS 3305 Public Administration (3-0).** The development and role of administration in the governmental process; principles and problems of administrative organization and coordination, financial responsibility and personnel management, problems of administrative control and accountability.

**PS 3306 International Relations (3-0).** The theory and practice of international relations with particular attention to the forces and processes contributing to conflict and cooperation among nations.

**PS 3307 Contemporary American Foreign Policy (3-0).** This course involves the study of policies and problems in the foreign relations of the United States since World War II. Included
are studies in the politics, formulation, conduct, and consequences of American foreign policy.

**PS 3308 The Presidency (3-0).** This course involves studies in the nature and growth of executive power, the analysis of the many-faced role of the President, and attention to the types of performances of different men in the office. Also studied are the problems of staffing and advising activities, the decision-making process in foreign policy, domestic issues and budgeting, and the future of the Presidency.

**PS 3312 State and Local Government (3-0).** A study of the organization, functions and powers of state and county government in the United States, with particular reference to patterns of state and local government in Texas. Comparative focus on the state level. Emphasis may be on "politics" or "administration" or both. May include topics such as home rule, problems in International Relations, community power structures, change and reform efforts, politics of education and school districts, local government elites.

**PS 3314 Ethnic and Racial Politics (3-0).** A study of the relationship between selected ethnic and racial populations and governmental processes and policies. Attention will be given to the role of ethnic and racial populations in the public policy development process and the impact of public policy on these populations. May be repeated for credit when ethnic and racial population vary.

**PS 3315 Women and Politics (3-0).** Women’s roles in politics at national, state, and local levels as they reflect the economic, legal social status of women; also, an overview of related political issues, important concepts, events, and movements.

**PS 4303 Comparative Politics and Government (3-0).** Study of the politics and governments of nations other than the United States. Course may be repeated for credit when topic varies.

**PS 4308 Readings and Research (0-3).** Selected readings or research projects to be offered as individual study to meet student needs. May be repeated once for credit with departmental approval.

**PS 4311 Special Topics (3-0).** Special courses on topics not included in the regular curriculum. May be repeated for credit with departmental approval.

**PS 4312 Field Experience in Political Science (3-0).** In this course, the student is placed in a supervised setting within a government office or an agency with a governmental mission. Approval of department chair is required. May be repeated for credit with departmental approval.

**PS 5301 Seminar in Comparative Government (3-0).** An examination of various approaches to the study of comparative government with individual research problems designed to explore specific topics. May be repeated when topic varies.

**PS 5302 Seminar in International Relations (3-0).** An examination of key concepts and approaches to the study of international relations in connection with a study of recurrent issues and topics through individual research problems. May be repeated when topic varies.

**PS 5303 Public Administration Survey (3-0).** The conduct of public business by organized agencies at national, state and local levels. (Public Administration)
**PS 5305 Readings and Research in Government (3-0).** A readings and research course for graduate students in political science designated to meet needs not provided for in other available courses. May be repeated for credit with the approval of the department.

**PS 5307 Scope and Methods in Social Science (3-0).** An introduction to the subject matter of the social sciences and the major contemporary approaches to it. This course is cross referenced with Criminal Justice 5334

**PS 5308 Case Studies in Public Administration (3-0).** Case studies and readings in administration, organization, processes, and goals; the major and characteristic problems of public administration approached through analysis of actual incidents in various executive agencies and theoretical explanations of administrative behavior. Applicable to administration in education settings. (Public Administration)

**PS 5309 Internship in Public Administration (3-0).** Students who enroll in this course are involved in work experience in public or non-profit agencies. Permission of the department chairman required. Academic and work experience evaluations. Maximum of six semester credit hours allowed toward degree requirements. (Public Administration)

**PS 5310 Public Budgeting and Finance (3-0).** Focuses on the development and execution of various budgeting systems with special attention given to the political content of the budgetary process in the public sector. (Public Administration)

**PS 5311 Intergovernmental Relations (3-0).** A study of governmental relations among public administrators at various levels—national, state, regional, local—focusing on interactions among these public officials. (Public Administration)

**PS 5312 Agency Politics (3-0).** A seminar which deals with the several types of non-electoral politics in which public agencies are regularly involved: intra-organizational conflicts, accommodations, negotiations and competitions; and inter-organizational with other agencies, clientele-constituency groups, and legislative and executive entities. (Public Administration)

**PS 5313 Public Policy Analysis (3-0).** Focuses on techniques used in policy development, adoption, and evaluation in the public sector. Topics include policy reviews, needs assessment, the establishment of goals and objectives, and the analysis of benefits, costs, and risks. (Public Administration)

**PS 5315 Local Government Administration (3-0).** Administration of local government with particular reference to small cities in Texas. May also include counties, metro-systems, school districts, and other special purpose units. (Public Administration)

**PS 5316 Special Topics in Public Administration (3-0).** Special courses in Public Administration not included in the regular curriculum. May be repeated for credit with departmental approval. (Public Administration)

**PS 5317 Seminar in U.S. Government (3-0).** Course focuses on selected topics in U.S. Government. May be repeated when topic varies.
**PS 6301 Thesis (0-6).** Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee. The student will normally register for this course no earlier than the second semester of graduate study. The student will enroll each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made.

**PS 6302 Thesis (0-6).** The student will enroll in this course each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made. Satisfactory completion of this course will result in the completed thesis presented to the Graduate Committee, accepted by the Dean of the College, and filed in the Office of the Executive Vice President and Provost for Academic Affairs.

**PSYCHOLOGY (PSY)**

**PSY 1101 Scientific Foundations of Learning (1-0).** This course investigates the basic biological, psychological, and sociological determinates of adult learning. The relationships between individual behaviors and social processes that affect adult learning in the University community are studied utilizing theoretical frameworks and applied science. Prerequisite: Freshman classification.

**PSY 1302 (PSYC 2301) Introduction to Psychology (3-0).** Introduction to psychology as a scientific discipline. Required of all students who will major or minor in psychology. Recommended for students in other areas of behavioral science.

**PSY 2304 (PSYC 2319) Introduction to Social Psychology (3-0).** Introduction to social psychology; topics include affiliation, perceptions of others, liking for others, aggression, group structure and leadership, group dynamics, conformity, and attitude formation and change. Prerequisite: PSY 1302 or consent of instructor.

**PSY 2307 (PSYC 2317) Introductory Statistics for the Behavioral Sciences (3-0).** Descriptive statistics and inferential statistics through two-way analysis of variance. Includes both parametric and non-parametric statistics. Required of psychology majors.

**PSY 2309 (PSYC 2306) Human Sexuality (3-0).** Fundamentals of human sexuality including biological, behavioral, and cultural aspects of sexuality.

**PSY 2310 (PSYC 2314) Developmental Psychology (3-0).** The study of the developing human from birth to death, including physical, cognitive, emotional, and moral development. Prerequisite: Psychology 1302 or consent of instructor.

**PSY 2311 Readings and Research (3-0).** Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

**PSY 2314 Multicultural Psychology (3-0).** Culture is examined as an environmental variable that contributes to growth and development, attitudes, sociability, emotional expression, parenting, psychological disorders, careers, individualism and collectivism. Prerequisite: PSY 1302

**PSY 3302 Theories of Personality Psychology (3-0).** Current scientific considerations in personality are pursued in the domains of the biological, consciousness, disposition, cognitive/experiential, socio-cultural and adjustment psychology. Several historic positions with
considerable contemporary influence are considered. Self-study and understanding are supported. Students may be asked to participate in a series of videotaped interviews to experience aspects of personality psychology in practice. Prerequisite: PSY 1302 or consent of instructor.

**PSY 3303 Theories of Personality (3-0).** An introduction to the principles of psychology that is most relevant to understanding one's own behavior, that of significant others and the interaction in modern society that is paradoxically technically advanced and yet more stress producing than in the past. Self-study activities are an important part of the course. Students may be asked to participate in a series of videotaped interviews to further explore life areas such as stressors/hassles, coping skills, etc.

**PSY 3304 Abnormal Behavior (3-0).** An investigation of behavioral disorders and the biological and social factors which may affect them. Prerequisite: PSY 1302 or consent of instructor.

**PSY 3308 Experimental Psychology (3-0).** Study of experimental methods and research findings in areas of psychophysics, sensory processes, learning and motivation. Development of experimental design. Prerequisite: PSY 1302 and PSY 2307 or consent of instructor.

**PSY 3309 The Psychology of Learning (3-0).** A review of animal and human research involving explanations of learning in everyday life which includes how the consequences of behavior affect future actions. Prerequisite: PSY 1302 or consent of instructor.

**PSY 3313 Social Attitudes (3-0).** An introduction to the study of political behavioral and attitude research focusing on problems of measurement, empirical findings, theories of acquisition and change, media effects, as well as political socialization and political personality. Prerequisites: PSY 1302 or permission of instructor.

**PSY 4109 Reading and Research (0-1).** Selected readings of research projects to be offered as individual study to meet student needs. May be repeated for credit when the topic varies with the approval of the major advisor.

**PSY 4209 Reading and Research (0-2).** Selected readings of research projects to be offered as individual study to meet student needs. May be repeated for credit when the topic varies with the approval of the major advisor.

**PSY 4306 Biopsychology (3-0).** A systematic review of the theories and research dealing with physiological correlates of learning, motivation, emotion and perception. Prerequisite: PSY 1302 or consent of the instructor.

**PSY 4308 Clinical Psychological Methods (3-0).** Theory and methods of clinical psychology; including theory and application of the counseling interview, therapeutic psychology, therapeutic techniques, and the therapeutic process. Prerequisite: PSY 1302 or consent of the instructor.

**PSY 4309 Readings and Research (3-0).** Selected readings or research projects to be offered as individual study to meet student needs. May be repeated for credit when the topic varies with the approval of the major advisor.

**PSY 4310 Special Topics (3-0).** Special course in Psychology on topics not included in
the regular curriculum, e.g. advanced statistics, comparative psychology, primate behavior, adult developmental psychology, sensation and perception. Prerequisite: PSY 1302 or consent of the instructor.

**PSY 4311 Community Experience in Psychology (0-3).** This course allows students to gain practical experience with human services agencies. Students are assigned to work with an area agency. May be taken only once to meet degree plan requirements. Prerequisite: Psychology major. Senior standing.

**PSY 4315 History of Psychology (3-0).** Students are introduced to the development of Psychology as a scientific discipline, beginning with a survey of ancient philosophical thought, and leading to the eventual combination of ideas and methods from physiology and philosophy. Current trends in contemporary psychological investigation are discussed in terms of persistent questions regarding, for instance, the mind/body question, nature vs. nurture, the correspondence between realities and understanding the nature of knowledge, and the place of humans in the universe.

**PSY 5140 Readings and Research in Graduate Psychology (0-1).** Selected readings and/or research at the graduate level in psychology offered as individual study. May be offered as variable credit to meet project requirements as determined by instructor. May be repeated with approval of instructor and/or major professor.

**PSY 5240 Readings and Research in Graduate Psychology (0-2).** Selected readings and/or research at the graduate level in psychology offered as individual study. May be offered as variable credit to meet project requirements as determined by instructor. May be repeated with approval of instructor and/or major professor.

**PSY 5301 Thesis (3-0).** Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee. The student will normally register for course no earlier than the second semester of graduate study. The student will enroll each semester or summer term in which assistance is provided by Committee members or when use of the library or other research facilities of Sul Ross State University is made.

**PSY 5302 Thesis (3-0).** Student will enroll in this course each semester or summer term in which assistance is provided by the Committee or when use of the library or other research facilities of Sul Ross State University is made. Satisfactory completion of this course will result in the completed thesis being presented to the Graduate Committee, accepted by the Dean of the School, and filed in the Office of the Provost and Vice President for Academic and Student Affairs.

**PSY 5313 Empirical Procedures for Human Services (3-0).** Statistics and research designs for understanding psychological literature and conducting basic research in human support settings. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5314 Multicultural Psychology, Ethics and Profession Problems for Human Services (3-0).** The ethics of professional psychological practice with special consideration of multicultural issues. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5321 Community Psychology: Trauma and Disaster (3-0).** Principles of community psychology, trauma and disaster applied to rural community intervention planning and implementation. Prerequisites: Psychology program graduate standing and/or permission of
instructor

**PSY 5322 Psychological Interventions (3-0).** Principles of psychotherapy for human services focusing on cognitive, existential/humanistic, psychodynamic and group techniques. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5325 Psychobiology for Human Services (3-0).** Brain and behavior relationships including drug effects on consciousness, therapeutic and detrimental effects of heredity and environment in the developmental context, and the ethics of animal research in these and related topics. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5326 Assessment of Psychopathology and Human Problems (3-0).** Interviewing and other assessment procedures to arrive at clinical diagnosis and the understanding of a human life. Documentation and report writing are considered. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5330 Humanistic Psychology (3-0).** Didactic and experiential introduction to the theory and practice of person-centered approaches. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5333 Teaching of Psychology Proseminar (3-0).** Introduction to the general theory and practice of teaching undergraduate psychology followed by consideration of applications in frequent undergraduate course topic areas. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5335 Psychobiology (3-0).** This course describes the relationship between the brain and behavior. Students will learn how certain drugs affect behavior and consciousness in detrimental of therapeutic ways. The student will also discuss the interaction between heredity and environment in the developmental context, the biology of Schizophrenia and depression, the ethics of animal research and the relevance of comparative psychology.

**PSY 5339 Topics in Graduate Psychology (3-0).** Special graduate courses in psychology not in the regular curriculum will be offered under this heading. May be repeated for credit with departmental approval.

**PSY 5341 Psychology Intervention Practicum (3-0).** Supervised experience working with clinical problems and populations including assessment, intervention, consultation and liaison. May be taken repeatedly for credit. Prerequisites: Psychology program graduate standing and/or permission of instructor

**PSY 5342 Teaching of Psychology Practicum (3-0).** Supervised experience in teaching psychology through assisting with introductory psychology discussion sections and supervised lesson planning, implementation and evaluation of segments of frequent undergraduate course offerings undertaken semi-independently. May be taken again for credit. Prerequisites: Psychology program graduate standing and/or permission of instructor

**SUSTAINABLE RANCH MANAGEMENT (RCH)**

**RCH 1301 Animal Husbandry I (2-2).** A hands on introductory course in applied animal husbandry that covers the basics of healthy and sustainable management of cattle, sheep, goats, and horses.
RCH 1302 Advanced Animal Husbandry II (2-2). An advanced course in applied animal husbandry that covers advanced practices includes basic veterinary skills for healthy and sustainable management of cattle, sheep, goats, and horses. Prerequisite: RCH 1301.

RCH 2101 Ranch Management Skills (0-2). This course covers basic skills necessary for successful ranch management, including communication, observation, record keeping, and basic implementation of ranch improvements. May be repeated for credit.

RCH 3301 Sustainability in Agriculture (2-2). This course provides an in-depth look at environmental, social, and economic sustainability on a global to local scale. Emphasis will be placed on how ranchers and land managers can provide for long-term sustainability through planning and implementation of sustainable practices.

RCH 3302 The Outdoor Hospitality Industry (2-2). An overview of the outdoor hospitality industry including ecotourism and hunting. The course will cover all aspects from guiding and interpretation to providing housing and meals as well as business analysis of cost benefit for providing different services within the framework of a ranch business and a stand-alone business.

RCH 4101 Advanced Ranch Management Skills (0-2). This course covers advanced skills necessary for successful ranch management, including communication, landscape level planning, long-term sustainability planning, and implementation of ranch improvements. May be repeated for credit.

RCH 4301 Ranch Ecosystem Management (2-2). This course covers ranch management through an ecosystem approach, with an emphasis on sustainable management of the entire system including abiotic factors such as soil and water; biotic factors such as plants, livestock, and wildlife, and social factors such as job satisfaction and economic benefit.

RCH 4302 Ranch Maps & Mapping (2-2). This course gives an overview of tools available for mapping a ranch to inform decision-making and maintaining records of capital equipment and range improvements. Emphasis will be placed on open source mapping solutions and mobile platforms.

RCH 4601 Ranch Internship (0-12). A directed internship course that will entail working on one or multiple working ranches. The experience will be directed by a faculty member who will aid the student in the selection of the ranch or ranches and ensure a broad range of experience through the internship.

SAFETY EDUCATION (SED)
**SED 4303 Methods of Teaching Driver and Safety Education (3-0).** A course designed to explore and demonstrate the various methods of teaching classroom driver education and of dealing with the problems and procedures to establish and conduct driver education program in the public schools. (Summer II) Prerequisites: Safety Education 4301

**SED 5301 Advanced Driver Education (3-0).** This advanced course in driver and traffic safety education places emphasis on advanced traffic strategy and techniques. (Summer I)

**SED 5302 Seminar in Safety Education (3-0).** A course on the survey of methods and materials as related to safety in the home, school, community, industry, traffic safety, and special vocations. (Summer I)

**SED 5303 New Concepts in Driver and Traffic Safety Education (3-0).** This course in driver and traffic safety education places emphasis on new methods, materials, and content that will be utilized in driver and traffic safety education programs. (Summer II)

**SOCIETY (SOC)**

**SOC 1313 Juvenile Justice System (3-0).** Study of the juvenile justice system and juvenile crime and delinquency. Theories of delinquency. This course is cross referenced with Criminal Justice 1313.

**SOC 2303 Introduction to Sociology (3-0).** A survey of the field of sociology. Introduction to basic terminology and fundamentals of sociology; and the application of sociological knowledge to problems in human societies.

**SOC 2305 (SOCl 2301) The Family (3-0).** Sociological analyses of the family as a social institution, its social-psychological processes, development, and cross-cultural variations.

**SOC 2306 Readings and Research (0-3).** Selected readings and research projects to be offered as individual study to meet student’s needs. May be repeated for credit.

**SOC 3301 Introduction to Social Research (3-0).** The nature of social research including research design, the preparation of data collection instruments, data analysis techniques, and research report writing. Emphasis will be placed on development of computer competencies in behavioral and social science research.

**SOC 3302 Victimology, Victims' Services, and Victims' Rights (3-0).** The history of victims' rights, services, and the victims' rights movement; the provision of services to victims, relevant legal developments; victim precipitation and victim self-help; prevention of victimization. This course is cross referenced with Criminal Justice 3302.

**SOC 3308 Minority Groups (3-0).** The study of the processes and effects of social discrimination in the creation and maintenance of minority groups.

**SOC 3309 The American Society (3-0).** A systematic study of current social institutions of the United States in terms of both structure and function as influenced by various aspects of our culture, including social changes. At times, a thematic approach may be employed with a detailed focus on one institution, such as education or religion.

**SOC 3311 Rural Sociology (3-0).** A survey of rural problems and their relation to the
increasing urbanization of America, the social organization of rural life and power structures in small communities.

**SOC 3314 Sociology of Religion (3-0).** Topics covered include the reasons religions develop, religious organizations as institutions, the interplay between religion and societal values, and the role of religion in societal change.

**SOC 3315 Introduction to Professional Social Work (3-0).** This introductory course will enable students to become familiar with the profession of Social Work and its avenues of practice. Students will examine how social services enhance the well-being of people and promote social and economic justice. The history of the Social Work profession and exposure to a variety of current professional social workers working in diverse agencies and milieus will be part of the overall course content.

**SOC 3316 Domestic Violence (3-0).** This course is designed to give the student a basic knowledge of the issues surrounding victims and perpetrators of domestic violence. Topics covered will include victim and perpetrator characteristics, explanations for the violence, and explanations for the victim's behavior. Criminal Justice responses to domestic violence situations both currently and historically will also be covered. This course is cross-referenced with Criminal Justice 3316.

**SOC 4304 Criminology (3-0).** A study of the factors that contribute to crime, criminological theories, criminal types, research methods, types of crimes, and crime trends. This course is cross referenced with Criminal Justice 4304.

**SOC 4305 Social Deviance (3-0).** The study of nonconformity to social norms. The causes of deviance and the role the deviant plays in society.

**SOC 4307 Social Welfare Programs, Policies and Issues (3-0).** Social Work education includes an understanding of the forms and mechanisms of oppression and discrimination and the strategies of change that advance social and economic justice. This course will enable students to analyze the impact of social policies on client systems, workers and agencies.

**SOC 4309 Readings and Research (3-0).** Selected readings or research projects to be offered as individual study to meet student needs. May be repeated once for credit with departmental approval.

**SOC 4310 Special Topics in Sociology (3-0).** Selected topics in Sociology. May be repeated for credit when the topic varies.

**SOC 5303 Multicultural Society (3-0).** Analysis of the concepts of "culture" and "social system" as treated in sociological literature combined with the study of social behaviors of distinct culture groups in the United States.

**SOC 5304 Readings and Research in Sociology (3-0).** A reading and research course for graduate students. May be repeated for credit with the approval of the department.

**SOC 5305 Special Topics in Sociology (3-0).** Selected topics in the area of Sociology. May be repeated when topic varies.
**SPAN 1411 (SPAN 1411) Beginning Spanish I (4-0).** This is an introductory course intended for students with little or no previous exposure to the Spanish language. Its main emphasis is to present essential vocabulary and grammar and to develop communicative and comprehension skills in listening, speaking, reading, and writing. The course includes an introduction Hispanic culture.

**SPAN 1412 (SPAN 1412) Beginning Spanish II (4-0).** This course is a continuation of Spanish 1411. It introduces new grammatical structures, idiomatic expressions, and topics which include new vocabulary. It continues to build the foundational skills of listening, speaking, reading, writing, and cultural awareness with emphasis on conversation, pronunciation, fluency, and vocabulary. Prerequisite: SPAN 1411 or equivalent.

**SPAN 2305 (SPAN 2321) Introduction to Spanish Literature (3-0).** An introduction to Spanish literature, covering such areas as literary style, figurative language, literary genres, versification, aesthetics, and text analysis. Prerequisite: Spanish 2311 or consent of instructor.

**SPAN 2311 (SPAN 2311) Intermediate Spanish I (3-0).** For the non-native speaker of Spanish, Spanish 2311 is the continuation of Spanish 1411 and 1412. Native speakers should begin their study of Spanish with 2311. This course includes a review of grammatical patterns and development of speaking, listening, reading, and writing skills through exploring the many facets of Hispanic culture.

**SPAN 2312 (SPAN 2312) Intermediate Spanish II (3-0).** This course is a continuation of Spanish 2311. It provides additional study of grammar and Hispanic culture with emphasis on written composition and oral presentations. NOTE: Those whose native language is Spanish, or those who have otherwise acquired a speaking knowledge of Spanish, should begin their study of Spanish with 2311. The course will meet the needs of those who have obtained a speaking knowledge of Spanish with little or no formal study. Successful completion of such a course will prepare the student to register for 2312.

**SPAN 3301 Spanish Grammar and Composition (3-0).** A comprehensive review of Spanish grammar and composition designed (1) to further develop the student's comprehension and command of spoken Spanish, (2) to expand the student's vocabulary, and (3) to provide practice in formal written Spanish. Prerequisite: Spanish 2312 or consent of instructor.

**SPAN 3308 Studies in Spanish (3-0).** Mexican literature from pre-Columbian times to the present. Representative literacy works of major literary currents (Neoclassicism, Romanticism, Modernism, etc.) will be read and analyzed. May be repeated for credit when course subject content varies.

**SPAN 3310 Spanish Literature I (3-0).** A survey of major Spanish authors and works from the 11th to the 17th centuries. Prerequisite: Spanish 2312 or consent of the instructor.

**SPAN 3311 Spanish Literature II (3-0).** A survey of major Spanish authors and works from the 18th to the 20th centuries. Prerequisite: Spanish 2312 or consent of the instructor.

**SPAN 3315 Hispanic Civilization and Culture: Spain (3-0).** An overview of the development of Spanish culture from ancient times to the present, using the perspectives of history, art, and literature. Prerequisite: Spanish 2312 or consent of the instructor.
SPAN 3316 Hispanic Civilization and Culture: Latin America (3-0). An overview of the development of cultures in Mexico, Central America, and South America, stressing comparisons and contrasts between countries. Prerequisite: Spanish 2312 or consent of the instructor.

SPAN 3317 Modern Spanish Civilization (3-0). This course deals with the study of Spanish civilization since the XVI century to modern day Spain. The concentration will be in the Spanish presence in the Americas. Prerequisite: Spanish 2312 or consent of instructor.

SPAN 3318 Contemporary Latin American Civilization (3-0). This course will study the development and growth of Latin American countries from the XIX century to present day. A socio-economic, literary and political view of contemporary Latin America will be presented. Prerequisite: Spanish 2312 or consent of instructor.

SPAN 4303 History of Spanish (3-0). The sounds, words, and sentence structure of Spanish with an overview of how the language developed and how it varies within Spanish-speaking countries. Prerequisite: Spanish 2312

SPAN 4306 Modern Drama (3-0). A study of the Spanish drama of the 19th and 20th centuries. The student will read dramas representative of the different types and movements of the period and will discuss them in class and in written form. Class discussion conducted in Spanish. Prerequisite: Spanish 2312 or consent of the instructor

SPAN 4307 Readings and Research (3-0). Directed studies on specific topics of Spanish language, Spanish literature and Spanish American literature. May be repeated for credit when the topic varies. Prerequisite: Spanish 2312 or consent of instructor.

SPAN 4310 Spanish American Literature I (3-0). A survey of major Spanish American authors and works from 1492 to 1830. Prerequisite: Spanish 2312 or consent of the instructor.

SPAN 4311 Spanish American Literature II (3-0). A survey of major Spanish American authors and works from 1830 to the present. Prerequisite: Spanish 2312 or consent of the instructor.

SPAN 4312 Teaching Spanish (3-0). A study of methods and materials used in teaching Spanish from Grades K - 12. The course presents ideas and techniques for teaching grammar, composition, literature, and culture. Prerequisite: Spanish 2312 or consent of the instructor.

SPAN 4315 Introduction to Translation (3-0). Introduction to the theory, methods and practice of Spanish-English translation and English-Spanish translation. The student will learn how to address translation problems related to culture and language as well as the fundamentals of translating general material from different fields, such as journalism, advertising, tourism, the law, health, business, etc. Prerequisite: Spanish 2312 or consent of the instructor.

SPAN 5303 Studies in Spanish American Literature (3-0). Selected authors, works, and genres from Central American, South American, and Mexican literature, including such periods as Colonial, Nineteenth Century, and Modern. Course may be repeated for credit when topic varies.
**SPAN 5309 Readings and Research (3-0).** Individually guided research in Spanish or Spanish-American literature or in Spanish language and linguistics study. May be repeated for credit when the topic varies.

**SRSU FIRST YEAR SEMINAR (SRSU)**  
**SRSU 1101 First Year Seminar (1-0).** This course focuses on (1) the psychology of learning, cognition, and motivation, (2) factors that impact learning, and (3) application of learning strategies. Students use assessment instruments (e.g. learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Additional topics include goal-setting, motivation, educational and career planning, time-management, note-taking, preparing for exams, and utilizing learning resources. Students developing these skills should be able to continually draw from this course.

**THEATRE (THEA)**  
**THEA 1112 Musical Theatre Performance (0-2).** Theatrical instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester.

**THEA 1120 (DRAM 1120) Theatre Practicum I (0-3).** Practical course designed for freshman students who do acceptable work in the dramatic productions of the department. Non-theatre major and minors must receive permission from the instructor to enroll.

**THEA 1121 (DRAM 1121) Theatre Practicum II (0-3).** Practical course designed for freshman students who do acceptable work in the dramatic productions of the department. Non-theatre major and minors must receive permission from the instructor to enroll.

**THEA 1149 (DANC 1149) Ballet Folklorico (0-1).** Sul Ross Ballet Folklorico de las Americas celebrates Mexican cultural heritage via the performance of a variety of Mexican regional dances, both ritual and secular. The Ballet Folklorico serves as a cultural and educational ambassador for the University. Maybe repeated for credit.

**THEA 1305 (DANC 1305) Ballet I (2-2).** This course is an introduction to classical ballet techniques and terminology including barre exercise, center floor work, and across-the-floor combinations.

**THEA 1310 (DRAM 1310) Introduction to the Theatre (3-0).** A survey of the elements of theatre and how they were formed. What makes theatre? Where has it come from and what is the future?

**THEA 1322 (DRAM 1322) Stage Movement (1-2).** Examination and practical application of the styles of movement for the performing artist. Activities and exercises for the performing artist. Activities and exercises to improve posture, agility, vision, endurance and personal awareness.

**THEA 1351 (DRAM 1351) Acting I (2-2).** A practical laboratory of the principles and technique of acting for the stage.

**THEA 1352 Acting II (2-2).** Study and practice of intermediate and advanced techniques used by actors in the development of good stage habits and character development. Prerequisite: Theatre 1301, 1302 or instructor's permission

**THEA 1372 Costume Construction (2-2).** A beginning overview of the vocabulary and basic
sewing methods of theatrical costuming. TCCNS Equivalent: DRAM 1342

**THEA 2112 Musical Theatre Performance (0-2).** Theatrical instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sign confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

**THEA 2120 (DRAM 2120) Theatre Practicum III (0-3).** Practical course designed for sophomore students who do acceptable work in the dramatic productions of the department. Non-theatre major and minors must receive permission from the instructor to enroll.

**THEA 2121 (DRAM 2121) Theatre Practicum IV (0-3).** Practical course designed for sophomore students who do acceptable work in the dramatic productions of the department. Non-theatre major and minors must receive permission from the instructor to enroll.

**THEA 2304 Oral Interpretation (3-0).** A course in the development and use of oral communication performance skills in theatre or communication secondary education, with emphasis on script development for prose, poetry and one-act play UIL competition. Additional emphasis on projection, articulation, breath control, resonance, variety, interpretation and body movement.

**THEA 2305 Topics in Theatre (3-0).** A course dealing with topics in the study of theatre, such as "Women in Theatre," "Introduction to Design," and "Stage Management," etc. May be repeated when the topics vary.

**THEA 2307 Stage Combat (1-2).** The practical application of the techniques used in the choreography of stage combat, including unarmed combat techniques and various style of weaponry.

**THEA 2310 Introduction to Theatrical Design (2-2).** A fundamental course in the basic aspects of all theatrical design: including scenic, costume, lighting, sound and property design. Course projects may include fabrication, modeling, computer-aided design, rendering, and construction.

**THEA 2311 Stage Management (2-1).** A course encompassing the basic theatrical stage management skills and procedures, such as budgeting scheduling and personnel management, for the pre-rehearsal, rehearsal and performance periods of a production.

**THEA 2331 (DRAM 2331) Stagecraft (2-2).** A lecture-laboratory course designed to give the student a fundamental knowledge of the theory and techniques of scenic construction and lighting.

**THEA 2336 (DRAM 2336) Voice for the Theatre (3-0).** Vocal techniques, including diction and dialect, for performing on the stage.

**THEA 3101 Theatre Workshop (0-3).** Practical courses designed for junior students who do acceptable work in the dramatic productions of the department. Non-theatre majors and minors must receive permission from the instructor to enroll.

**THEA 3102 Theatre Workshop (0-3).** Practical courses designed for junior students who do
acceptable work in the dramatic productions of the department. Non-theatre majors and minors must receive permission from the instructor to enroll.

**THEA 3112 Musical Theatre Performance (0-2).** Theatrical instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

**THEA 3113 Ballet Folklorico de las Americas Ensemble (0-1).** Sul Ross Ballet Folklorico de las Americas Ensemble celebrates Mexican cultural heritage via the performance of a variety of Mexican regional dances, both ritual and secular. The Ballet Folklorico serves as a cultural and educational ambassador for the University. May be repeated for credit.

**THEA 3302 The History of Theatre I: Greek Theatre through Renaissance Theatre (3-0).** A survey of the important people, works, and developments in theatre history from the ancient Greeks through the European Renaissance.

**THEA 3303 Repertory Theatre. (0-5).** Practice and theory in the problems of management, production, and acting in repertory theatre. May be repeated for credit, but not more than once for theatre majors or minors.

**THEA 3304 Special Topics (3-0).** A course dealing with topics in the study of theatre, such as theatrical design, mask characterizations, specialized acting methods or regional theatre history, etc. May be repeated when topic varies.

**THEA 3305 Theatrical Design Research (0-3).** Individual research on selected subjects to meet student needs and interests in theatre. May be repeated when topic varies.

**THEA 3306 The History of Musical Theatre (3-0).** The history of the musical theatre from operetta to contemporary musicals. Exposure and study of major and minor works of the musical stage.

**THEA 3307 Musical Comedy Workshop. (0-5)** Practical training in the technique and style of performing scenes and songs from musical theatre. May be repeated for credit, but not more than once for theatre majors or minors.

**THEA 3308 Acting III: Styles (2-2).** An advanced study of acting styles and periods for the stage. Prerequisite: THEA 3301

**THEA 3309 Stage Make-up (1-2).** A practical laboratory of the principles and techniques of stage and film make-up.

**THEA 3310 Creative Dramatics and Children's Theatre (2-1).** The study of the effects and techniques of creative dramatics in the classroom and the study and understanding of children’s theatre.

**THEA 3311 Playwriting (1-2).** The study and practice of the techniques of playwriting from scene work to the completion of a long one-act play.

**THEA 3312 Script Analysis (3-0).** A study of the principles of various styles and periods of
dramatic literature, involving a history of criticism from Aristotle to the present. Representative plays will be analyzed for theme, structure, characterization and dialogue with a view to their influences on contemporary theatre. Emphasis is placed on written student criticism and evaluation of plays. Writing enhanced course. Prerequisite: English 1302

**THEA 3313 Scenic Design (2-1).** The theory and practical application of the scenic designer's process from conception to presentation of design and an understanding of the scenic designer's responsibilities and duties as a member of the production team and as the head of the scenic design team. Prerequisite: Theatre 2310

**THEA 3314 Costume Design (2-1).** The theory and practical application of the costume designer's process from conception to presentation of design and construction and an understanding of the costume designer's responsibilities and duties as a member of the production team and as the head of the costume design team. Prerequisite: Theatre 2310

**THEA 3315 Lighting and Sound Design (2-1).** The theory and practical application of the lighting and sound designer's process from conception to presentation of design and an understanding of the designer's responsibilities and duties as a member of the production team and as the head of the lighting or sound design team.

**THEA 3316 The History of Theatre II: The Theatre of the English Restoration through Contemporary Theatre (3-0).** A survey of the important people, works, and developments in theatre history from the English Restoration through contemporary theatre.

**THEA 3317 Acting IV: Improvisation (0-6).** In this lab, students develop improvisational skills including plot, character, and dialogue. Students will learn approaches to assist with listening and spontaneity. Prerequisite: THEA 1351

**THEA 3318 Directing I (2-1).** The technology and application of directing for the stage. Prerequisite: THEA 3312.

**THEA 3319 Producing (2-2).** A comprehensive study of the theory and practice of film/video production.

**THEA 3320 Regional Dances of Mexico (2-1).** This lecture/participation course introduces the student to the Mexican folkloric dance tradition, with focus on learning the regional dances, culture and costuming for regions performed by the Sul Ross Ballet Folklorico de las Americas and gaining an understanding and appreciation of Mexican culture and history. May be repeated for credit.

**THEA 3321 Screenwriting (3-0).** An introduction to screenwriting format, craft, & technique, with an emphasis on the fundamentals of storytelling. Prerequisite: ENG 1302

**THEA 4101 Theatre Workshop (0-3).** Practical courses designed for senior students who do acceptable work in the dramatic productions of the department. Non-theatre majors and minors must receive permission from the instructor to enroll.

**THEA 4102 Theatre Workshop (0-3).** Practical courses designed for senior students who do acceptable work in the dramatic productions of the department. Non-theatre majors and minors must receive permission from the instructor to enroll.
**THEA 4112 Musical Theatre Performance (0-2).** Theatrical instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

**THEA 4304 Directing II (2-1).** Continued study of the theory and application of directing for the stage from the directorial vision to the production of a one-act play.

**THEA 4305 Studies in Drama (0-3).** Directed individual study and practice in a selected area of drama. May be repeated for credit when topic varies.

**THEA 4306 Acting V: Acting for the Camera (2-2).** An study of acting styles specific to film and television. Emphasis on sense memory, scene work, audition techniques and preparation to enter the industry. Prerequisite: Theatre 3301

**THEA 4307 Senior Project (0-4).** An intensive, independent study of a selected area of theatre, such as directing, writing, or designing of a full-length play or acting in a one-person show, by those seeking a theatre degree or theatre certification. An oral comprehensive examination and exit survey are additional requirements.

**THEA 4308 Acting VI: Advanced Acting for the Camera (0-6).** This lab explores acting techniques affiliated with mixed media: film, video, and game design development. Prerequisite: THEA 3308.

**THEA 5112 Musical Theatre Performance (0-2).** Advanced instruction in the preparation and performance music of the musical theatre idiom. Performances may be staged or sung in a concert setting, depending on the repertoire for the given semester. Prerequisite: Students must be able to accurately match pitch and sing confidently alone or with a group. Placement auditions may be held at the beginning of the semester.

**THEA 5303 Seminar in Theatre (2-2).** An advanced study of problems of analysis, design, rehearsal and performance in theatre. May be repeated for credit when topic varies.

**THEA 5304 Theatre Workshop (1-4).** An advanced study of problems of analysis, design, rehearsal and performance in modern theatre and classic revivals. May be repeated for credit.

**THEA 5305 Individual Research (0-4).** Directed individual research in selected areas of theatre and dramatic arts. May be repeated for credit when topic varies.

**VOCATIONAL NURSING (VNSG)**

**VNSG 1219 Professional Development (2-0).** Study of the importance of professional growth. Topics include the role of the vocational nurse in the multi-disciplinary health care team, professional organizations and continuing education. Basic concepts of management, motivation, and collegial practice are included. Incorporates knowledge necessary to make the transition from student to graduate vocational nurse. (Fall)

**VNSG 1227 Essentials of Medication Administration (2-1).** General principles of medication administration including determination of dosage, preparation, safe administration, and documentation of multiple forms of drugs. Instruction includes various systems of measurement. (Spring)
VNSG 1238 Mental Illness (2-0). Study of human behavior with emphasis on emotional and mental abnormalities and modes of treatment incorporating the nursing process. (Fall)

VNSG 1330 Maternal-Neonatal Nursing (3-2). A study of the biological, psychological, and sociological concepts applicable to basic needs of the family including childbearing and neonatal care. Utilization of the nursing process in the assessment and management of the childbearing family. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium.

VNSG 1334 Pediatric Nursing (3-1). A study of the pediatric patient and family during health and disease. Emphasis on growth and developmental needs utilizing the nursing process.

VNSG 1360 Clinical - Practical Nurse 1 (0-16). On-site clinical instruction, supervision, evaluation and placement by Clinical Instructor. Processing from simple to complex, the student will apply theory, concepts and skills involving specialized material, equipment and procedures using the nursing process. (Spring)

VNSG 1405 Health Science (3-3). An introduction to the general principles of anatomy and physiology with a focus on pathophysiology, nutrition and microbiology with a focus on infection control principles. These concepts are necessary for understanding body processes and basic principles underlying health promotion and therapeutic interventions. (Spring)

VNSG 1410 Nursing in Health and Illness III (2-6). Continuation of Nursing in Health and Illness II. Reviews nursing theories of nursing practice by describing application of the nursing process to selected complex medical/surgical conditions. Incorporates knowledge of pharmacological and nutritional interventions for selected complex medical/surgical conditions. (Fall)

VNSG 1460 Clinical - Practical Nurse III (0-23). Continuation of clinical 2331. Instruction provides detailed education, training and work-based experience and direct client care at a tertiary hospital. Includes specific learning objectives with on-site instruction, supervision and evaluation by Clinical Instructor. Pediatric nursing, preceptorship experience, and psychiatric nursing experience available. (Fall)

VNSG 1461 Clinical - Practical Nurse II (0-16). A method of instruction providing detailed education, training and work-based experience and direct patient/client care, generally at a clinical site. Specific detailed learning objectives are developed for each course by the faculty. Clinical experiences are unpaid, external learning experiences. On-site instruction, supervision and evaluation are done by the Clinical Instructor. (Summer)

VNSG 1500 Nursing in Health and Illness I (4-4). Introduction to and application of primary nursing skills. Emphasis on utilization of the nursing process and related scientific principles for selected medical/surgical conditions of the adult and geriatric client. (Spring)

VNSG 1502 Applied Nursing Skills I (3-4). Introduction to and application of nursing skills. This course introduces nursing fundamentals presented in a simple to complex format, utilizing the nursing process. Concepts are applied in a skills laboratory, community setting and/or health care agency. (Spring)

VNSG 1509 Nursing in Health and Illness I (5-1). Continuation of Nursing in Health and
Illness I. Introduction of theories of nursing practice by describing the application of the nursing process to selected medical/surgical conditions; incorporates nutrition and drug therapy and nursing interventions in the care of adults. (Summer)

**VNSG 2331 Advanced Nursing Skills (3-0).** Introduction and mastery of advanced nursing skills; and competencies in a variety of health care settings utilizing the nursing process as a problem solving tool. Concepts are applied in a lab or clinical experience including care of adult, geriatric, neonatal and pediatric clients in a variety of health care settings. (Fall)

**WOMEN’S STUDIES (WS)**

**WS 2301 Introduction to Women's Studies (3-0).** This course is an introduction to the study of women and gender using interdisciplinary and cross-cultural approaches. The roles and experiences of women of different nationalities, ethnicities, and cultures will be studied.

**WS 3301 Topics in Women’s Studies (3-0).** Studies of specific topics in Women's Studies, such as Hispanic Women, Women in Culture and Society, Women in Modern America. May be repeated for credit when topic varies.

**WS 4310 Senior Colloquium in Women's Studies (3-0).** Required capstone course for the Women's Studies minor. Students consult with Women's Studies Coordinator to select an internship, mentoring project, portfolio, or other special project for the course. Prerequisite: WS 2301, six additional semester hours in Women’s Studies, approval of Women's Studies Coordinator.

**WS 5301 Introduction to Women's and Gender Issues (3-0).** An interdisciplinary approach to women's and gender studies including historical, legal, psychological, political, scientific, and aesthetic issues.

**WS 5302 Topics in Women's Studies (3-0).** Studies of specific topics such as Women’s Autobiographical Writing, Communication and Gender, Women and the Arts, Comparative Women’s History, Gender and Criminal Justice, Postcolonial Women Writers, Global Feminisms. May be repeated for credit when topic varies.
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