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. The Animal Health Technology program offered at Sul Ross State University is accredited by The Committee on Veterinary Technician Education and Activities of the American Veterinary Medical Association.

MEMBERSHIPS
Agricultural Consortium of Texas
American Association of State and Colleges of Agriculture and Renewable Resources American Association of State Colleges and Universities American Library Association American Southwest Conference Association of Texas Graduate Schools Hispanic Association of Colleges and Universities National Collegiate Athletic Association Texas Library Association Texas Space Grant Consortium

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 or conducted 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.

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.
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Official Academic Calendars, 2010-2012</td>
<td>4</td>
</tr>
<tr>
<td>Board of Regents and Administration</td>
<td>10</td>
</tr>
<tr>
<td>Faculty</td>
<td>12</td>
</tr>
<tr>
<td>General Information</td>
<td>26</td>
</tr>
<tr>
<td>Undergraduate Admissions</td>
<td>38</td>
</tr>
<tr>
<td>Determining Residence Status</td>
<td>46</td>
</tr>
<tr>
<td>Tuition and Mandatory Fees</td>
<td>49</td>
</tr>
<tr>
<td>Student Life Programs and Services</td>
<td>55</td>
</tr>
<tr>
<td>General Academic Regulations</td>
<td>69</td>
</tr>
<tr>
<td>Academic Organization and Degree Programs</td>
<td>93</td>
</tr>
<tr>
<td>Graduate Information</td>
<td>104</td>
</tr>
<tr>
<td>School of Agricultural and Natural Resource Sciences</td>
<td>114</td>
</tr>
<tr>
<td>Animal Science</td>
<td>116</td>
</tr>
<tr>
<td>Natural Resource Management</td>
<td>138</td>
</tr>
<tr>
<td>School of Arts and Sciences</td>
<td>155</td>
</tr>
<tr>
<td>Academic Center for Excellence</td>
<td>156</td>
</tr>
<tr>
<td>Behavioral and Social Sciences</td>
<td>161</td>
</tr>
<tr>
<td>Biology</td>
<td>195</td>
</tr>
<tr>
<td>Computer Science and Mathematics</td>
<td>208</td>
</tr>
<tr>
<td>Earth and Physical Sciences</td>
<td>223</td>
</tr>
<tr>
<td>Environmental Studies</td>
<td>241</td>
</tr>
<tr>
<td>Fine Arts and Communication</td>
<td>243</td>
</tr>
<tr>
<td>General Studies</td>
<td>280</td>
</tr>
<tr>
<td>Languages and Literature</td>
<td>282</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>296</td>
</tr>
<tr>
<td>School of Professional Studies</td>
<td>297</td>
</tr>
<tr>
<td>Business Administration</td>
<td>298</td>
</tr>
<tr>
<td>Criminal Justice</td>
<td>310</td>
</tr>
<tr>
<td>Law Enforcement Academy</td>
<td>322</td>
</tr>
<tr>
<td>Education</td>
<td>324</td>
</tr>
<tr>
<td>Industrial Technology</td>
<td>350</td>
</tr>
<tr>
<td>Physical Education</td>
<td>354</td>
</tr>
<tr>
<td>Vocational Nursing</td>
<td>364</td>
</tr>
<tr>
<td>Index</td>
<td>368</td>
</tr>
</tbody>
</table>
### UNIVERSITY CALENDAR

**OFFICIAL ACADEMIC CALENDAR, 2010-2011**

**Fall Semester: August 20-December 18, 2010**

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 20, Friday</td>
<td>Payment deadline for students who pre-registered, 4:00 p.m.</td>
</tr>
<tr>
<td>August 21, Saturday</td>
<td>Opening of Residence Halls</td>
</tr>
<tr>
<td></td>
<td>Late orientation for new and transfer students</td>
</tr>
<tr>
<td>August 23, Monday</td>
<td>Faculty Meeting, 9:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>School and Departmental Meetings, 10:30 a.m.</td>
</tr>
<tr>
<td></td>
<td>Late orientation for new and transfer students</td>
</tr>
<tr>
<td>August 24, Tuesday</td>
<td>Last day for regular registration</td>
</tr>
<tr>
<td></td>
<td>Late orientation for new and transfer students</td>
</tr>
<tr>
<td></td>
<td>Last day for students to register in Education block courses</td>
</tr>
<tr>
<td>August 25, Wednesday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>August 30, Monday</td>
<td>Last day for late registration and Schedule changes</td>
</tr>
<tr>
<td>September 2, Thursday</td>
<td>New Student Convocation, Marshall Auditorium, 10:15 a.m.</td>
</tr>
<tr>
<td>September 6, Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 10, Friday</td>
<td>Twelfth class day</td>
</tr>
<tr>
<td>September 17, Friday</td>
<td>Last day for students enrolled in Education block courses to</td>
</tr>
<tr>
<td></td>
<td>drop a course and receive a &quot;W&quot;</td>
</tr>
<tr>
<td>September 20, Monday</td>
<td>Deadline for applying to student teach during the</td>
</tr>
<tr>
<td></td>
<td>Spring Semester, 2011</td>
</tr>
<tr>
<td>September 24, Friday</td>
<td>Last day to apply for graduation in May, 2011</td>
</tr>
<tr>
<td>September 27, Monday</td>
<td>University as a Community Meal on the Mall</td>
</tr>
<tr>
<td>October 12, Tuesday</td>
<td>Mid-Semester</td>
</tr>
<tr>
<td>November 12, Friday</td>
<td>Last day to withdraw from the University or to drop courses</td>
</tr>
<tr>
<td></td>
<td>with grade of &quot;W.&quot; Drops must be processed and in the Registrar's</td>
</tr>
<tr>
<td></td>
<td>Office by 4:00 p.m.</td>
</tr>
<tr>
<td>November 20, Saturday</td>
<td>Residence Halls close, 9:00 a.m.</td>
</tr>
<tr>
<td>November 22-26, Monday-Friday</td>
<td>Thanksgiving Holiday (Begin after the last Sched</td>
</tr>
<tr>
<td></td>
<td>meets on November 21</td>
</tr>
<tr>
<td>November 28, Sunday</td>
<td>Residence Halls open, Noon</td>
</tr>
<tr>
<td>December 10, Friday</td>
<td>Last class day</td>
</tr>
<tr>
<td>December 13-16, Monday-Thursday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>December 18, Saturday</td>
<td>Fall Commencement, Pete P. Gallego Center, 10:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>Closing of Residence Halls</td>
</tr>
<tr>
<td>Date</td>
<td>Event</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>January 3 – 19</td>
<td>Inter-Term Semester</td>
</tr>
<tr>
<td>January 17, Monday</td>
<td>Martin Luther King, Jr., Holiday</td>
</tr>
<tr>
<td>January 18, Tuesday</td>
<td>Opening of Residence Halls, Noon</td>
</tr>
<tr>
<td>January 18, Tuesday</td>
<td>Faculty meeting, 9:00 a.m.</td>
</tr>
<tr>
<td>January 19, Tuesday</td>
<td>School and Departmental Meetings, 10:30 a.m.</td>
</tr>
<tr>
<td>January 19, Tuesday</td>
<td>Orientation for new and transfer students</td>
</tr>
<tr>
<td>January 19, Wednesday</td>
<td>Last day for regular registration</td>
</tr>
<tr>
<td>January 20, Thursday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>January 25, Tuesday</td>
<td>Last day for late registration and Schedule changes</td>
</tr>
<tr>
<td>February 4, Friday</td>
<td>Twelfth class day</td>
</tr>
<tr>
<td>February 9, Wednesday</td>
<td>Last day for students enrolled in Education block courses to drop a course and receive a “w”</td>
</tr>
<tr>
<td>February 16, Wednesday</td>
<td>Last day to apply for graduation in August or December 2011</td>
</tr>
<tr>
<td>February 25, Friday</td>
<td>Deadline for applying to student teach during the Fall Semester, 2011</td>
</tr>
<tr>
<td>March 4, Friday</td>
<td>Mid-Semester</td>
</tr>
<tr>
<td>March 12, Saturday</td>
<td>Residence Halls close, 9:00 a.m.</td>
</tr>
<tr>
<td>March 14 – 18</td>
<td>Spring Vacation. No Classes</td>
</tr>
<tr>
<td>March 20, Sunday</td>
<td>Residence Halls open, Noon</td>
</tr>
<tr>
<td>March 28, Monday</td>
<td>University as a Community Meal on the Mall</td>
</tr>
<tr>
<td>April 8, Friday</td>
<td>Last day to withdraw from the University or to drop courses with grade of “W.” Drops must be processed and in the Registrar’s Office by 4:00 p.m.</td>
</tr>
<tr>
<td>April 18, Monday</td>
<td>Honors Convocation, Marshall Auditorium, 7:30 p.m.</td>
</tr>
<tr>
<td>April 27, Wednesday</td>
<td>WOW! Banquet, University Center, 11:30 a.m.</td>
</tr>
<tr>
<td>May 6, Friday</td>
<td>Last Class Day</td>
</tr>
<tr>
<td>May 9-12</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>May 14, Saturday</td>
<td>Spring Commencement, Pete P. Gallego Center, 10:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>Closing of Residence Halls</td>
</tr>
</tbody>
</table>
## First Summer Term: May 30 - July 6, 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 30, Monday</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td></td>
<td>Opening of Residence Halls, Noon</td>
</tr>
<tr>
<td>May 31, Tuesday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>June 3, Friday</td>
<td>Last day for late registration and Schedule changes</td>
</tr>
<tr>
<td></td>
<td>Fourth Class Day</td>
</tr>
<tr>
<td>June 21, Tuesday</td>
<td>Last day to register for shortened format courses</td>
</tr>
<tr>
<td>June 22, Wednesday</td>
<td>Mid-Term; Shortened format classes begin</td>
</tr>
<tr>
<td>July 1, Friday</td>
<td>Last day to drop a course with a “W.” Drops must be processed and in the Registrar’s Office by 4:00 p.m.</td>
</tr>
<tr>
<td>July 4, Monday</td>
<td>Fourth of July Holiday</td>
</tr>
<tr>
<td>July 6, Monday</td>
<td>Final Examinations</td>
</tr>
</tbody>
</table>

## First Summer Term: July 6 – August 8, 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 7, Thursday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>July 13, Wednesday</td>
<td>Last day for late registration and Schedule changes for full-term classes</td>
</tr>
<tr>
<td></td>
<td>Fourth Class Day</td>
</tr>
<tr>
<td>July 21, Thursday</td>
<td>Mid-Term</td>
</tr>
<tr>
<td>August 4, Thursday</td>
<td>Last day to drop a course with a “W.” Drops must be processed and in the Registrar’s Office by 4:00 p.m.</td>
</tr>
<tr>
<td>August 11, Thursday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>August 13, Saturday</td>
<td>Summer Commencement, Pete P. Gallego Center, 10:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>Closing of Residence Halls</td>
</tr>
</tbody>
</table>
### UNIVERSITY CALENDAR

#### OFFICIAL ACADEMIC CALENDAR, 2011-2012

#### Fall Semester: August 29 - December 17, 2011

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 19, Friday</td>
<td>Payment deadline for students who pre-registered, 4:00 p.m.</td>
</tr>
<tr>
<td>August 21, Sunday</td>
<td>Opening of Residence Halls</td>
</tr>
<tr>
<td>August 22, Monday</td>
<td>Late orientation for new and transfer students</td>
</tr>
<tr>
<td>August 22, Monday</td>
<td>Faculty Meeting, 9:00 a.m.</td>
</tr>
<tr>
<td>August 23, Monday</td>
<td>School and Departmental Meetings, 10:30 a.m.</td>
</tr>
<tr>
<td>August 23, Tuesday</td>
<td>Last day for regular registration</td>
</tr>
<tr>
<td>August 23, Tuesday</td>
<td>Late orientation for new and transfer students</td>
</tr>
<tr>
<td>August 23, Tuesday</td>
<td>Last day for students to register in Education block courses</td>
</tr>
<tr>
<td>August 24, Wednesday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>August 29, Monday</td>
<td>Last day for late registration and Schedule changes</td>
</tr>
<tr>
<td>September 1, Thursday</td>
<td>New Student Convocation, Marshall Auditorium, 10:15 a.m.</td>
</tr>
<tr>
<td>September 5, Monday</td>
<td>Labor Day Holiday</td>
</tr>
<tr>
<td>September 9, Friday</td>
<td>Twelfth class day</td>
</tr>
<tr>
<td>September 18, Friday</td>
<td>Last day for students enrolled in Education block courses to drop a course and receive a &quot;W&quot;</td>
</tr>
<tr>
<td>September 19, Monday</td>
<td>Deadline for applying to student teach during the Spring Semester, 2012</td>
</tr>
<tr>
<td>September 23, Friday</td>
<td>Last day to apply for graduation in May, 2012</td>
</tr>
<tr>
<td>September 26, Monday</td>
<td>University as a Community Meal on the Mall</td>
</tr>
<tr>
<td>October 11, Tuesday</td>
<td>Mid-Semester</td>
</tr>
<tr>
<td>November 11, Friday</td>
<td>Last day to withdraw from the University or to drop courses with grade of &quot;W.&quot; Drops must be processed and in the Registrar's Office by 4:00 p.m.</td>
</tr>
<tr>
<td>November 19, Saturday</td>
<td>Residence Halls close, 9:00 a.m.</td>
</tr>
<tr>
<td>November 21-25, class</td>
<td>Thanksgiving Holidays (begin after the last Scheduled (meets on November 20))</td>
</tr>
<tr>
<td>November 27, Sunday</td>
<td>Residence Halls open, Noon</td>
</tr>
<tr>
<td>December 9, Friday</td>
<td>Last class day</td>
</tr>
<tr>
<td>December 12-15, Monday-Thursday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>December 17, Saturday</td>
<td>Fall Commencement, Pete P. Gallego Center, 10:00 a.m. Closing of Residence Halls</td>
</tr>
</tbody>
</table>
Spring Semester: January 16 – May 12, 2012

January 2 – 18
Inter-Term Semester

January 16, Monday
Martin Luther King, Jr., Holiday
Opening of Residence Halls, Noon

January 17, Tuesday
Faculty meeting, 9:00 a.m.
School and Departmental Meetings, 10:30 a.m.
Orientation for new and transfer students

January 18, Wednesday
Last day for regular registration
Orientation for new and transfer students
Last day for students to register in Education block courses

January 19, Thursday
Classes, late registration, and Schedule changes begin

January 24, Tuesday
Last day for late registration and Schedule changes

February 3, Friday
Twelfth class day

February 8, Wednesday
Last day for students enrolled in Education block courses to drop a course and receive a "w"

February 15, Wednesday
Last day to apply for graduation in August or December 2012

February 24, Friday
Deadline for applying to student teach during the Fall Semester, 2012

March 2, Friday
Mid-Semester

March 10, Saturday
Residence Halls close, 9:00 a.m.

March 12 – 16
Spring Vacation. No Classes

Monday-Friday
Residence Halls open, Noon

March 18, Sunday
University as a Community Meal on the Mall

April 6, Friday
Last day to withdraw from the University or to drop courses with grade of "W." Drops must be processed and in the Registrar's Office by 4:00 p.m.

April 16, Monday
Honors Convocation, Marshall Auditorium, 7:30 p.m.

April 25, Wednesday
WOW! Banquet, University Center, 11:30 a.m.

May 4, Friday
Last Class Day

May 7-10
Final Examinations

Monday-Thursday
Spring Commencement, Pete P. Gallego Center, 10:00 a.m.
Closing of Residence Halls
### First Summer Term: May 28 - July 3, 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>May 28, Monday</td>
<td>Memorial Day Holiday</td>
</tr>
<tr>
<td></td>
<td>Opening of Residence Halls, Noon</td>
</tr>
<tr>
<td>May 29, Tuesday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>June 1, Friday</td>
<td>Last day for late registration and Schedule changes</td>
</tr>
<tr>
<td></td>
<td>Fourth Class Day</td>
</tr>
<tr>
<td>June 18, Monday</td>
<td>Last day to register for shortened format courses</td>
</tr>
<tr>
<td>June 19, Tuesday</td>
<td>Mid-Term; Shortened format classes begin</td>
</tr>
<tr>
<td>June 28, Thursday</td>
<td>Last day to drop a course with a “W.” Drops must be processed and in the Registrar’s Office by 4:00 p.m.</td>
</tr>
<tr>
<td>July 3, Tuesday</td>
<td>Final Examinations</td>
</tr>
</tbody>
</table>

### First Summer Term: July 4 – August 11, 2012

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 4, Wednesday</td>
<td>Fourth of July Holiday</td>
</tr>
<tr>
<td>July 5, Thursday</td>
<td>Classes, late registration, and Schedule changes begin</td>
</tr>
<tr>
<td>July 10, Tuesday</td>
<td>Last day for late registration and Schedule changes for full-term classes</td>
</tr>
<tr>
<td></td>
<td>Fourth Class Day</td>
</tr>
<tr>
<td>July 17, Tuesday</td>
<td>Mid-Term</td>
</tr>
<tr>
<td>July 31, Tuesday</td>
<td>Last day to drop a course with a “W.” Drops must be processed and in the Registrar’s Office by 4:00 p.m.</td>
</tr>
<tr>
<td>August 9, Thursday</td>
<td>Final Examinations</td>
</tr>
<tr>
<td>August 11, Saturday</td>
<td>Summer Commencement, Pete P. Gallego Center, 10:00 a.m.</td>
</tr>
<tr>
<td></td>
<td>Closing of Residence Halls</td>
</tr>
</tbody>
</table>
BOARD OF REGENTS

TEXAS STATE UNIVERSITY SYSTEM
Charlie Amato, Chairman ................................................. San Antonio
Donna N. Williams, Vice Chairman ........................................ Arlington
Jaime R. Garza ................................................................. San Antonio
Kevin Lilly ........................................................................ Houston
Ron L. Mitchell ............................................................... Horseshoe Bay
David Montagne ............................................................ Beaumont
Trisha S. Pollard .............................................................. Bellaire
Rossanna Salazar ............................................................. Austin
Michael Truncale ............................................................ Beaumont
Christopher Covo, Student Regent ................................. San Marcos

SYSTEM ADMINISTRATION
Bryan McCall, Chancellor ...................................................... Austin
Diane Corley, Associate Vice Chancellor
for Governmental Relations .................................................. Austin
Sean Cunningham, Vice Chancellor
for Governmental Relations .................................................. Austin
Carole M. Fox, Director of Audits and Analysis ....................... Austin
Fernando C. Gomez, Vice Chancellor and General Counsel .... Austin
Peter E. Graves, Vice Chancellor for Contract Administration .. Austin
Rob Roy Parnell, Associate Vice Chancellor for Facilities ...... Austin
Roland K. Smith, Vice Chancellor for Finance ......................... Austin
Mike Wintemute, Director of Governmental Relations
and Communications .......................................................... Austin

CENTRAL ADMINISTRATION
Ricardo Maestas, Ph.D ............................................................... President
Don Coers, Ph.D ...................................................... Provost and Vice President
for Academic and Student Affairs
Cesario Valenzuela, M.B.A., C.P.A ............................... Vice President for
Finance and Operations

ACADEMIC ADMINISTRATION
J. Paul Sorrels, Ph.D., Associate Provost and Dean, Rio Grande
College
Jimmy D. Case, Ph.D., Dean, School of Arts and Sciences
Donald W. Dowdey, M.A., M.L.S., Dean, Library and Information
Technologies
Robert J. Kinucan, Ph.D., Dean, School of Agricultural and
Natural Resource Sciences
Melanie A. Croy, Ed.D., Dean, School of Professional Studies
ADMINISTRATIVE STAFF

C. Ross Burns, M.L.S., Director of Technical Services
Andrea V. Cancellare, M.S., Circulation Services Librarian
Jimmy W. Clouse, B.S., Associate Vice President of Facilities
Planning, Construction, and Operations
Michael Corbett, B.A., Executive Director for Enrollment Services
and Director of Financial Aid
Robert C. Cullins, M.Ed., Registrar
Leo G. Dominguez, M.A., Associate Vice President for Advancement
and Interim Dean of Student Life
Linda Epps, M.A., Inter-Library Loan Librarian
Renee C. Goodvin, M.S., User Education Librarian
Johnnie Holbrooks, M.A., Director of University Public Safety
Elizabeth Jackson, M.A., Director of Museum of the Big Bend
Stephen W. Lang, M.A., Director of News and Publications
Oscar Jimenez, M.B.A., Controller
Marilyn L. McGhee, M.G.A., Assistant to the President
Judy A. Perry, M.Ed., Director of Human Resources
Noe Hernandez, B.B.A., Director of Purchasing
Gregory M. Schwab, M.F.A., Interim Vice President for
Enrollment Management
David C. Wilson, M.B.A., Director, Big Bend Regional Minority and
Small Business Development Center
Barbara M. Williams, M.L.S., Serials Librarian
THE FACULTY

Nancy M. Antrim, Associate Professor of English and Linguistics

Rafael Azuaje, Assistant Professor of Mathematics and Computer Science
B.S., 1979, Universidad Complutense de Madrid; M.S., 1998, St. Mary's University; Ph.D., 2004, Northcentral University

Rayford L. Ball, Associate Professor of Physics
B.S., 1972, University of Houston; M.A., 1972, University of Texas at Austin; Ph.D., 1994, New Mexico State University

Ira Y. Blanton, Jr., Associate Professor of English

John D. Bridges, Lecturer in Physical Education
B.S., 2001, Texas A&M University; M.Ed., 2004 Sul Ross State University

Brad W. Butler, Assistant Professor of English

Laura P. Butler, Associate Professor of English

Jimmy D. Case, Professor of Political Science and Dean of the School of Arts and Sciences

Sandra S. Chambers, Lecturer in Physical Education and Head Softball Coach and Lecturer in Physical Education

Travis L. Clark, Assistant Professor of Art

Amy M. Coburn, Assistant Professor of Animal Science
B.A., B.S., University of California-Irvine; M.S., Angelo State University; D.V.M., Ross University School of Veterinary Medicine

Donald Coers, Provost and Vice President for Academic and Student Affairs
B.A., 1963, M.A., 1969, University of Texas at Austin; Ph.D., 1974, Texas A&M University

Melanie A. Croy, Professor of Education and Dean, School of Professional Studies

James W. Downing, Professor of Psychology and Chair of the Department of Behavioral and Social Sciences
B.S., 1986, Indiana State University; M.A., 1989, Ph.D., 1991, University of Colorado
Mark C. Emerson, Assistant Professor of History
   B.A., 1992, M.A., 1994, University of New Mexico; Ph.D., 2004, University of California, Santa Barbara
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
Carol H. Fairlie, Professor of Art
   B.F.A., 1990, Texas Woman's University; M.F.A., 1993, University of North Texas
Donald C. Freed, Associate Professor of Music
   B.M., 1974, Nebraska Wesleyan University; M.M., 1978, Ph.D., 1991, University of Nebraska
Christopher Garcia, Lecturer in Reading
Ricardo Garcia, Lecturer in Physical Education and Head Volleyball Coach
Roger H. Grant, Professor of Physical Education and Chair of the Department of Physical Education
   B.S., 1968, Wayland Baptist College; M.S., 1973, University of North Texas; Ed.D., 1980, East Texas State University
Ilda N. Gonzalez, Lecturer in Spanish
William C. Green, Professor of Marketing
   B.S., 1973, M.B.A., 1975, California State University (Bakersfield); Ph.D., 1985, University of Houston
Louis A. Harveson, Professor of Natural Resource Management
   B.S., 1991, Texas Tech University; M.S., 1995, Ph.D., 1997, Texas A&M University - Kingsville
Patricia M. Harveson, Assistant Professor of Natural Resource Management
   B.S., 1992, Tarleton State University; M.S., 1996, Texas A&M Kingsville; Ph.D., 2006, Texas A&M
Jennifer M. Hayden, Lecturer in Physical Education and Head Women's Basketball Coach
   B.A., 1999, Oklahoma Panhandle State University; M.Ed., 2002, West Texas A&M University
James N. Hector, Associate Professor of Education and Interim Director of Teacher Education
   B.S., 1978, University of Texas at Austin; M.Ed., 1980, Sul Ross State University; Ed.D., East Texas State University
Sharon L. Hileman, Professor of English and Chair of the Department of Languages and Literature
   B.A., 1969, M.A., 1971, San Jose State University; Ph.D., 1985, University of New Mexico
Eric N. Holt, Assistant Professor of Mathematics
B.S., 2005, Indiana State University; M.S., 2007, Colorado State University; Ph.D., 2009, Colorado State University

Robert J. Hunter, Associate Professor of Criminal Justice and Chair of the Department of Criminal Justice
A.A.S., 1978, John Tyler Community Center; B.S., 1988, MA, 1990, Ph.D., 1993, Sam Houston State University

Ann K. Johnson, Lecturer in History and Women’s Studies
B.A., 1970, M.A., 1972, San Jose State University;
Ph.D., 1994, University of Denver

Kristofer D. Jorgenson, Associate Professor of Mathematics

Md. Abul Kalam, Assistant Professor of Chemistry

Ke Koa Kealoha, Lecturer in Physical Education and Assistant Football and Head Track Coach

Raymond G. Kessler, Professor of Criminal Justice and Chair of the Department of Criminal Justice
B.A., 1967, Allegheny College; M.A., 1971, University of Texas at El Paso; J.D., 1975, Temple University School of Law

Robert J. Kinucan, Professor of Natural Resource Management and Dean, School of Agricultural and Natural Resource Sciences
B.S., 1981, University of Idaho; M.S., 1983, University of Wyoming; Ph.D., 1987, Texas A&M University

Donna M. Kuenstler, Director of Vocational Nursing and Lecturer in Vocational Nursing
B.S.N., 1991, University of Texas Health Science Center at San Antonio; M.S.N., 2006, University of Phoenix

Jimmy T. LaBaume, Professor of Agricultural Business
B.B.A., 1972, University of North Texas; M.S., 1974, Sul Ross State University; Ph.D., 1979, Texas Tech University

Jason Leyva, Lecturer of Mathematics
B. S., 2007, Sul Ross State University

Erin R. Lippard, Assistant Professor of Music
B.M., 1996, James Madison University; M.M., 2000, Indiana University; D.M.A., 2008, University of Colorado

Michael S. Lippard, Assistant Professor of Music
B.M., 1996, James Madison University; M.M. 1997, Northwestern University; D.M.A., 2008, University of Colorado

Ricardo Maestas, President and Professor of Education
B.A., 1974, M.A., 1977, University of New Mexico;
Ph.D., 2000, University of Michigan

Tyra L. Manning, Associate Professor of Education
B.S., 1972, Washburn University; M.S., 1997, EdD., 1979, University of Kansas

David R. Martin, Assistant Professor of Mathematics and Chair of the
Department of Computer Science and Mathematics
B.A., 1997, California State University-Stanislaus; M.S., 2001, Ph.D., 2006, Texas Tech 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
Robert C. Matthews, Professor of Business Administration
B.B.A., 1972, University of Texas at Austin; M.B.A., 1976, Sul Ross State University; C.P.A., 1979, Texas
Linda S. McAnally, Lecturer in Business Administration
Elizabeth A. Measures, Associate Professor of Developmental Education
B.S., 1982, M.S., 1984, Sul Ross State University; Ph.D., 1992, The University of Idaho
Bobby S. Mesker, Lecturer in Physical Education and Head Baseball Coach
Amy Moreland, Assistant Professor of Political Science
Lloyd E. Moyo, Assistant Professor of Mathematics
B.Ed., 1992, University of Malawi; M.S., 1996, University of Sussex; M.S., 2004, Ph.D., 2006, New Mexico State University
Barbara J. Nelson, Associate Professor of English
B.S., 1971, M.A., 1990, Sul Ross State University; Ph.D., 1997, University of Nevada, Reno
Tamara Olive, Assistant Professor of Education
Judith A. Parsons, Associate Professor of History and Special Assistant to the President
B.A., 1963, West Texas State University; M.A., 1965, University of Texas at Austin
Jeffery S. Pendergraft, Associate Professor of Animal Science
Steven G. Platt, Associate Professor of Biology
B.Sc., 1985, Louisiana State University; M.Sc., 1990, Southeastern Louisiana University; Ph.D., 1996, Clemson University
Andrea L. Powers, Associate Professor of Psychology
B.A., 1985, Western State College; MA, 1988, Ph.D., 1990, University of Vermont
Charles D. Prude, Lecturer in Physical Education and Head Athletic Trainer
B.S.Ed., 1983, Southwest Texas State University; M.Ed., 1998, Sul Ross State University
Avinash K. Rangra, Professor of Chemistry
F.Sc, 1956, H.N. College, India; B.Sc. (Honors), 1959, M.Sc. (Honors), 1960, Panjab University, India; Ph.D., 1967, Oklahoma State University

Clay L. Rasmussen, Assistant Professor of Education
B.S., 2000, University of Arizona; M.Ed., 2005, Northern Arizona University; Ph.D., 2008, Utah State University

Robbie J. Ray, Lecturer in Mathematics

Christopher M. Ritzi, Associate Professor of Biology and Chair of the Department of Biology
B.A., 1996, Texas A&M University; M.S., 1999, Sul Ross State University; Ph.D. 2004, Indiana State University

David M. Rohr, Professor of Geology and Chair of the Department of Earth and Physical Sciences
B.S., 1969, College of William and Mary; M.S., 1972, Ph.D., 1977, Oregon State University

Dona W. Roman, Associate Professor of Theatre

Lorie L. Rubenser, Associate Professor of Criminal Justice
B.A., 1994, Central Washington University; M.S., 1996, Arizona State University; Ph.D., 2000, University of Nebraska, Omaha

Esther L. Rumsey, Associate Professor of Communication and Chair of Fine Arts and Communication
B.S., 1977, Willamette University; M.A., 1979, University of Northern Colorado; Ph.D., 2001, Rutgers University

Nelson C. Sager, Professor of English
A.B., 1960, M.A., 1965, Texas Tech University; Ph.D., 1974, University of California at Davis

Mark S. Saka, Professor of History

James R. Salazar, Professor of Art

Chester E. Sample, Professor of Physical Education

Jay Sawyer, Associate Professor of Theatre
B.M., 1982, East Texas Baptist University; MA, 1988, Southwestern Baptist Theological Seminary; M.F.A., 1999, Texas Tech University

Rebecca A. Schlosser, Ed.D., Assistant Professor of Education
B.A., 1976, University of Denver; J.D., 1983, University of Houston; M.Ed., 2003, Ph.D., 2006, Sam Houston State University

Wayne R. Schroeder, Lecturer in Physical Education and Head Football Coach
B.S., 1969, Texas State University-San Marcos; M.Ed., 2007, Sul Ross State University
Gregory M. Schwab, Professor of Theatre and Interim Vice President for Enrollment Management
B.A., 1979, Carroll College; M.F.A., 1981, Trinity University

Rita Patricia Seawell, Assistant Professor of Education
B.A., 1964, University of Texas at Austin; M.A., 1979, George Washington University; Ph.D., 1985, University of Texas at Austin

Michelle L. Selk, Assistant Professor of Communication

Beverly G. Six, Professor of Languages and Literature

Kathy K. Stein, Director of the Academic Center for Excellence and Assistant Professor of English

Kip Sullivan, Professor of Education
B.S., 1968, MA, 1971, Bradley University; Ed.D., 1985, Loyola University of Chicago

Martin K. Terry, Assistant Professor of Biology
A.B., 1971, Harvard University; D.V.M., 1976, Ph.D., 1981, Texas A&M University

Kevin M. Urbanczyk, Professor of Geology

Julie M. Vega, Lecturer in English

Joseph G. Velasco, Instructor in Communication
B.A., 2001, University of New Mexico; M.A., 2005, Texas A&M - Corpus Christi

Bonnie J. Warnock, Associate Professor of Natural Resource Management-Range Management and Chair of the Department of Natural Resource Management

David T. Watson, Instructor of Political Science
B.A., 2003, Midwestern State University; M.A., 2006, Texas Tech University

James L. Whitford-Stark, Professor of Geology
B.A., 1970, University of Keele; M.Sc, 1975, University of Lancaster; Ph.D., 1980, Brown University

Kay E. Whitley, Assistant Professor of Physical Education, Athletic Director and Head Tennis Coach
B.S., 1972, M.S., 1975, Sul Ross State University

Mazie E. Will, Associate Professor of Business Administration and Interim Chair of the Department of Business Administration
B.S., 1972, M.S., 1977, Oklahoma State University; C.P.S., 1976; CAP, 2009

Paul A. Will, Professor of Animal Science and Chair of the
Department of Animal Science
B.S., 1970, Texas A&M University; M.S., 1974, Ph.D., 1978, Oklahoma State University
Greg A. Wright, Lecturer in Physical Education and Head Men’s Basketball Coach
B.S., 1993, Texas A&M University; M.S., 2001, Texas A&M Corpus Christi
Kristin B. Wright, Instructor in Vocational Nursing
A.S.N., 1981, Angelo State University; B.S., 1975, Texas A&M University
Paul A. Wright, Professor of Geography and Sociology
B.A., 1967, Antioch College; MA, 1970, University of Chicago; Ph.D., 1979, University of Hawaii
Filemon Zamora, Assistant Professor of Spanish
B.A., 1990, San Diego State University; M.A., 1995, San Diego State University; Ph.D., University of California at San Diego
James C. Zech, Professor of Biology
RIO GRANDE COLLEGE FACULTY

Efrain Adames, Associate Professor of Business Administration
B.A., 1983, InterAmerican University; M.P.A., 1986, University of Texas at Austin

Clay E. Baulch, Assistant Professor of Education

Ferris R. Byxbe, Professor of Criminal Justice
B.S., 1988, M.S., 1989, Ph.D., 1998, University of Southern Mississippi

Terry C. Carson, Professor of Business Administration

Tiffany Culver, Assistant Professor of Psychology
B.A., 2000, New Mexico State University; M.S., 2002, Ph.D., 2008, Mississippi State University

Daniel H. Foley III, Associate Professor of Biology
B.S., 1991, M.S., 1994, Texas A&M University; Ph.D., 2002, Utah State University

Monica E. Gutierrez, Associate Professor of Education
B.S., 1988, University of Texas at Austin; M.Ed., 1991, Sul Ross State University; Ph.D., 2002, Texas A&M University

Jorge A. Hernandez, Professor of History

Sarah R. Moreman, Associate Professor of English
BA, 1985, University of the South; MA, 1989, Middle Tennessee State University; Ph.D., 1998, Texas A & M University

Dorman W. Moore, Associate Professor of Education and Director of Teacher Education
B.S., 1971, M.Ed., 1975, Angelo State University; Ph.D., 1987, University of Texas at Austin

Edison P. Moura, Associate Professor of Business Administration

Miriam Muniz-Quiz, Associate Professor of Education
B.S., 1983, University of Texas at Pan American University; M. Ed., 1995, Sul Ross State University; Ph.D., 2000, New Mexico State University

Patricia A. Nicosia, Associate Professor of Mathematics
B.S.E., 1980, M.S.E., 1982, University of Central Arkansas; Ph.D., 1990, University of Texas at Austin

Michael Ortiz, Assistant Professor of Mathematics
B.S., 2002, University of North Texas; Ph.D., 2009 University of Texas at Austin
Robert C. Overfelt, Jr., Professor of History, Chair of the Department of Liberal Arts
BA, 1967, MA, 1968, Baylor University; Ph.D., 1972, Texas Christian University

Paul R. Province, Assistant Professor of Education

Fernando Z. Quiz, Associate Professor of Education
B.B.A. 1983, Texas State University-San Marcos; M.Ed., 1996, Sul Ross State University; Ph.D., 2000 New Mexico State University

Francine R. Richter, Associate Professor of English

Todd T. Russell, Associate Professor of Education

J. Paul Sorrels, Professor of Psychology and Associate Provost and Dean
B.A., 1972, Howard Payne University; M.A., 1976, Ph.D., 1978, Texas Women’s University

Randal H. Stitts, Professor of Business Administration and Chair of the Department of Business Administration
B.B.A., 1974, M.P.A., 1986, University of Texas at Austin; Ph.D., 1990, Texas Tech University

Gina L. Stocks, Instructor in Education

Gregory B. Stone, Professor of Spanish and Linguistics
B.A., 1973, Ph.D., 1980, University of Texas at Austin William

William A. Tindol, Professor of Education and Mathematics
B.S., 1960, Sul Ross State University; M.N.S., 1964, University of Oklahoma; Ed.D, 1973, Texas A&M Commerce

Martin Urbina, Associate Professor of Criminal Justice
B.S., 1995, Sul Ross State University, M.C.J., 1997, New Mexico State University; Ph.D., 2000, Western Michigan University

Joel E. Vela, Professor of History
B.A., 1972, Incarnate Word College; M.A., 1974, Angelo State University; Ed.D., 1976, University of Wyoming

Donald W. Walden, Associate Professor of English
B.A., 1967, M.A., 1992, Ph.D., 2000, University of Texas at Austin

Timothy L.-Y. Wilson, Professor of Education

Hoi-Tay Wong, Professor of Business Administration

James A. Wood, Professor of Education
B.S., 1975, David Lipscomb University; B.A., 1979, M.A., 1979,
Southern Oregon State College; Ed.D, 1986, Texas A&M-Kingsville
Wesley D. Wynne, Assistant Professor of Psychology
B.A., 1988, University of Texas at Austin; M.S., 1990, University of Michigan; Ph.D., 2003, University of Texas at Austin
ADJUNCT FACULTY

Mark J. Arns, Adjunct Professor of Animal Science  
B.S., 1983, University of Wisconsin; M.S., 1986, Ph.D., 1989  
Texas A&M University  

Barry R. Behr, Adjunct Professor of Animal Science  
B.S., 1985, San Diego State University; M.S., 1988, Ph.D., 1991, University of Nevada-Reno  

Marilyn D. Brady, Adjunct Professor of History  

Bruce B. Carpenter, Adjunct Professor of Animal Science  
B.S., 1983, New Mexico State University; M.S., 1990, Ph.D., 1993, Texas A&M University  

Victoria G. Carpenter, Adjunct Professor of Psychology  
B.F.A, 1977, University of North Texas; D.O., 1987, University of Osteopathic Medicine and Health Sciences  

E. Julius Dasch, Adjunct Professor of Geology  
B.S., 1956, Sul Ross State University; MA, 1960, M.S., 1967, University of Texas-Austin; Ph.D., 1969, Yale University  

Mary Dodson, Adjunct Professor of Animal Science  
B.S., 1984, Sul Ross State University; B.S., 1994, D.V.M., 1994, Texas A&M University  

Alan M. Fedynich, Adjunct Professor of Natural Resource Management  
B.S., 1983, Kansas State University; M.S., 1987, Ph.D., 1993, Texas Tech University  

George K. Floro, Adjunct Professor of Sociology  
B.E., 1947, University of Toledo; M.A., 1948, Northwestern University; Ph.D., 1954, University of Chicago  

Ellen A. Kelley, Adjunct Assistant Professor of Archeology  
B.A., 1955, University of Illinois; MA, 1960, Southern Illinois University  

Lynn E. Loomis, Adjunct Professor of Natural Resource Management  
B.S., 1981, Oklahoma State University; M.S., 1984, New Mexico State University; Ph.D., 1989, Texas A&M University  

Roel R. Lopez, Adjunct Professor of Natural Resource Management  
B.S.F., 1993, Stephen F. Austin State University; M.S., 1996, Ph.D. 2001, Texas A&M University  

W. Allan McGinty, Adjunct Professor of Natural Resource Management  
B.S., 1974, Southwest Texas State University; M.S., 1976, Ph.D., 1979, Texas A&M University  

Reuben Osorio, Adjunct Professor of History  
M.D., 1953, University of Puebla
Paul R. Ramsey, Adjunct Professor of Biology  
B.A., 1989, Louisiana Tech University; B.S., 1976, M.S., 1969,  
Texas Tech University; Ph.D., 1974, University of Georgia  

Gerald G. Raun, Adjunct Professor of Biology  
B.A., 1954, Texas Tech University; M.A., 1958, Ph.D., 1961,  
University of Texas at Austin  

Charles A. Taylor, Jr., Adjunct Professor of Natural Resource  
Management  
B.S., 1971, M.S., 1972, Ph.D., 1983, Texas A&M University  

M. Eve Trook-White, Adjunct Professor of Criminal Justice  
B.A., 1961, University of California, Santa Barbara; M.A., 1974,  
Pacific Oaks College; J.D., 1980, University of San Diego;  
Ph.D., 1991, Sam Houston State University  

Billie Lee Turner, Adjunct Professor of Biology  
B.S., 1948, M.S., 1949, Sul Ross State University; Ph.D.,  
1953, Washington State University  

James T. Walker, Adjunct Professor of Psychology  
B.S., 1950, Oklahoma University; M.A., 1965, Ph.D., 1966,  
University of Colorado at Boulder
RETIRED FACULTY AND ADMINISTRATIVE STAFF

Frank W. Abbott, Professor of History at Rio Grande College
Mary Nan Aldridge, Ph.D., Professor of Education
Allen Anthony, Ph.D., Professor Emeritus of Geography and History
Elbert F. Bassham, M.A.T., Director of Institutional Research
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
Peter P. Chase, M.S., Lecturer in Computer Science
Dale B. Christophersen, Professor Emeritus of Political Science
James L. Cook, Provost Emeritus and Vice President for Academic and Student Affairs and Professor of Psychology
Thomas M. Connor, M.A., Assistant Professor of Political Science
J. David Corbin, Ph.D., Professor of Physics
William K. Daugherty, Ph.D., Professor of Business Administration
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
Lawrence J. Francell, M.A., Director of the Museum of the Big Bend
Rowena B. Gallego, M.Ed., Director of Financial Assistance
Bruce A. Glasrud, Ph.D., Professor of History and Dean, School of Arts and Sciences
Mickey C. Havens, M.B.A., C.P.A., Vice President for Administrative Services
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
Elmer J. Ireton, Ed.D., Professor Emeritus of Education at Rio Grande College
Dorothy M. Leavitt, M.A., Dean of Admissions and Records
Paul A. Lister, Ph.D., Professor Emeritus of English
Daniel L. Logan, Professor of Education
Mary H. Lomax, M.L.S., Reference Librarian
Miriam A. Lowrance, M.A., Associate Professor of Art
Juan R. Lujan, Ph.D., Associate Professor of Education at Rio Grande College
Edward R. Marcin, Ph.D., Professor of Business Administration
R. Vic Morgan, President Emeritus and Professor of Mathematics
Julia N. Moss, B.S., Catalog Librarian
Phyllis Musgrove, Ed.D., Professor of Education
Felipe de Ortego y Gasca, Ph.D., Professor of English
Mike G. Pallanez, M.Ed., Lecturer in Physical Education
Bob D. Pannell, Ed.D, Professor Emeritus of Education at Rio Grande College
Sue K. Pannell, Ph.D., Professor Emeritus of Education at Rio Grande College
Kenneth D. Perry, M.A., Director of the Museum of the Big Bend
A. Michael Powell, Ph.D., Distinguished Professor Emeritus of Biology
Ernest O. Reesing, Jr., D.V.M., Professor Emeritus of Veterinary Technology and Animal Science
Barbara A. Richerson, M.A., Lecturer in Journalism and Assistant Director of New and Publications
Donald O. Robertson, M.S.W., Director of Counseling and Prevention Services
Juliette Forchheimer Schwab, M.A., Lecturer in Reading
Wayne J. Sheehan, Ph.D., Distinguished Professor Emeritus of History
Delores J. Smith, Ed.D., Professor of Education
Donald E. Smith, Ed.D., Distinguished Professor Emeritus of Education at Rio Grande College
Roy L. Smith, Ed.D., Professor Emeritus of Industrial Technology
Metha M. Sprinkle, M.A., Assistant Professor of Education
Helen C. Stockebrand, Ed.D., Associate Professor of Education
William J. Stockebrand, Ed.D., Associate Professor of Education
Benny P. Tanksley, Ph.D., Professor of Business Administration
Barbara J. Tyler, Professor of Education and Director of Teacher Education at Rio Grande College
Shirley J. Watts, Associate Professor of Education at Rio Grande College
Mary Ann Weinacht, Ed.D., Professor Emeritus of Education
Paul R. Weyerts, Ph.D., Professor Emeritus of Range Animal Science
Jack W. Whisenhunt, Ed.D., Associate Professor of Business Administration
Ben Wilson, Jr., Ed.D., Professor Emeritus of Education at Rio Grande College
Eleanor A. Wilson, M.L.S., Director of Library Collection Development
T. Rex Wilson, Ph.D., Professor Emeritus of Music
Darwin R. Yoder, D.V.M., Professor of Animal Science-Veterinary Technology
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. Ten 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, and Ricardo Maestas who assumed office in November 2009.

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 the University Center. 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

The ultimate goal of higher education is to produce graduates who will be effective leaders in their chosen professions, valued members of their communities, and responsible citizens of the world.

As a coeducational, comprehensive, public institution of higher education offering certificate programs and associate, baccalaureate, and master's degree programs, the mission of Sul Ross State University and Sul Ross State University-Rio Grande College is to include the following structure in all of its academic programs:

From the core curriculum, students will acquire a common set of intellectual, physical, and aesthetic experiences designed to foster a broad appreciation for the human experience. Graduates will be expected to demonstrate the critical thinking skills, oral and written communication skills, and quantitative literacy that will be required for them to become effective leaders. Moreover, graduates will possess the in-depth knowledge necessary to either enter
professions that are related to their areas of specialization, to achieve advanced levels of professional development, or to enter and successfully complete graduate programs of study.

As part of their education, students will develop qualities of good citizenship, including an appreciation for and commitment to performing their work conscientiously; learning to recognize, respect and understand cultural diversity; and learning to recognize the implications of what they believe. Most importantly, they will acquire the skills and techniques which enable them to engage in self-learning, and spirit of intellectual curiosity leading to independent and purposeful life-long learning.

In order to guarantee that this mission is carried out in the spirit of the goals of higher education, Sul Ross State University has three major functions:

- **To enable optimal teaching and learning** through quality faculty and staff, exceptional facilities, technology, and instructional resources, and effective student support services.
- **To support research** which advances knowledge, enriches teaching, encourages professional development, and utilizes the distinctive environment of the Big Bend and Middle Rio Grande areas of Texas;
- **To serve as a resource for enrichment** of the cultural, intellectual, social and economic life of citizens of the region.

### 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.

### 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 well being 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:
   
   - **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.
   
   - **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.
   
   - **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.

3. **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.

4. **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.

5. **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.

6. **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 Archives of the Big Bend. The purpose 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.

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, and publications from the agencies of the State of Texas, periodicals, 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. Provides 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.

Specific objectives of the Library are to provide the following resources and services:

A strong, well-balanced core collection of materials in a variety of formats to support the teaching function of the University.

- In-depth collections in disciplines offering Master’s degrees.
- 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.

- Serve as a depository of Texas State Documents.
- Convenient bibliographic and, where feasible, full-text access to all collections for both on-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 for both individuals and classes.
- 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.

MEDIA & INSTRUCTIONAL TECHNOLOGY SERVICES (MITS)

The Media and Instructional Technology Services area (MITS), located on the first floor of the Wildenthal Memorial Library, provides technology training, presentations, workshops, online tutorials and technology support for SRSU-RGC faculty, staff, and students. MITS also provides support for our online course management system (Blackboard). In addition there are two PC workstations available, both equipped with scanners and software for multimedia development.

Please check out our Media & Instructional Technology Services web page at www.sulross/mits for our hours, staff, and a full range of services, or call MITS at 432.837.8668

MITS Services for the General Public

- Book & Magazine Rack containing Teaching with Technology Resources
- Computer Lab Support (2nd Floor Library)
- Copy Machine Support
- Lamination Services
- Microform Reader Support
MITS Services for the Sul Ross Community:

Audio-Visual & Multimedia Equipment Setups/Support

- MITS staff will deliver and set up SRSU-owned audiovisual equipment on campus property only between the hours of 8 a.m. and 5 p.m. Monday through Friday.
- Equipment setup requests must be received at least three (3) business days prior to the date needed.
- Equipment may be charged out to departments at their request or the determination of MITS as needed to meet the demands for equipment requests in that building. Departments should provide access to the equipment at the end of each spring and fall semester and summer session II for routine maintenance, inspection and inventory.
- MITS will provide initial training on equipment by request, but personnel are generally not provided for the operation of equipment outside the MITS area.

- Blackboard Support
- CD Burning Assistance
- Instructional Technology Workshops (Schedule, Registration Forms and Handouts)
- Interactive TV/Videoconferencing Support
- Online Software & Equipment Tutorials
- Scanning Assistance
- Sound Setup assistance for University-related Events
- Viewing Room Setups – Viewing Rooms are available to Sul Ross students, faculty and staff for viewing Sul Ross audiovisual materials. Persons wishing to schedule time in a Viewing Room should present a current Sul Ross ID card.

MITS Services for Sul Ross Faculty & Staff:

- Individual & Small Group Consultations
- Digital Video Clip Creation
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 a.m. – 5 p.m. Monday through Friday and by appointment.

SYSTEMS OFFICE

The Sul Ross State University Systems Department is located in the Bryan Wildenthal Memorial Library and serves as the Internet POP (Point Of Presence) for Sul Ross State University. The Systems Specialist serves as Systems Administrator for many central university servers, including the central email server, authentication and authorization servers, domain name servers, the student file server LYRA, the Library and Information Technologies server, and Webcat, the Library catalog server. This department is also charged with administration of the domain firewall, routers, csu/dsu's, modem pool and the library local area network.

Most recently, the Systems Department has added a Wide-Area Network to our Rio Grande College campuses using Williams Telecommunications Passport devices and Frame-Relay to provide Internet/Intranet data, Telephone Services and two-way audio-video conference capabilities. Monitoring and administration of the Wide-Area Network is done using a Sun SparcStation/Solaris with HP Openview software.

MUSEUM OF THE BIG BEND

The new Museum of the Big Bend opened in August 2007 in 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 numerous videos and interactives. 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. Each summer an exhibit from the collection is presented in the museum’s temporary gallery. 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. The Museum has a program of changing exhibits that includes research opportunities for both graduate and undergraduate students. Each spring the Museum hosts Trappings of Texas one of the oldest presentations of contemporary cowboy art and crafts.

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.sulross.edu/museum under Special Interest. 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 Acuna 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 www.sulross.edu/cbbs 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 School of Agricultural and Natural Resource Sciences at Sul Ross State University in Alpine, Texas. The School of Agricultural and Natural Resource Sciences and the Borderlands Research Institute are housed in the newly renovated 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) is housed in the Academic Computer Resource Center (ACRC). This facility includes five labs and an auditorium-style classroom. The ACRC provides computing services to students, faculty, staff and administration of Sul Ross State University. Internet access is available on all computers in the labs.

The services provided by the OIT to the Sul Ross State University community include seminars on various software packages, consulting on systems purchases, maintenance and repair of Sul Ross hardware, and assistance with software related problems.

The ACRC Lab in room 106 is open seven days a week, providing ample access to all students. Lab Consultants are available at all times to assist users and maintain lab equipment. The labs are used by a variety of academic departments including Business Administration, Political Science, History, Languages and Literature, and Computer Science. Software provided includes word processing, spreadsheet, data base, and statistics. Available programming languages include C++, JAVA, Assembler and DELPHI. High-quality laser printers are available.

The Software Engineering Lab in room 206 is operated by the Department of Computer Science and Mathematics to support majors in these fields. It is equipped with powerful PCs, a color laser printer, and many major software packages for both Computer Science and Mathematics.
RIO GRANDE COLLEGE

The Sul Ross State University Rio Grande College has offices on the campus of Southwest Texas Junior College in Uvalde and at locations in Del Rio and Eagle Pass. Upper-level and graduate courses are offered for resident credit in teacher education, business administration, and liberal arts. Undergraduate students who enroll in the Rio Grande College must have earned a minimum of fifty-four (54) transferable semester credit hours of lower level college work. All students who enroll in the Rio Grande College must fulfill requirements for admission and comply with academic regulations stated in the Catalog. Unless otherwise published in the schedule of classes for the Rio Grande College, the deadlines for withdrawing from classes and applying for graduation for students enrolled in the Rio Grande College are the same as for students enrolled on campus in Alpine and as stated in the Calendar in this Catalog.

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

Director of Admissions and Records
Sul Ross State University Rio Grande College
Rt. 3, Box 1200
Eagle Pass, Texas 78852
Telephone (830) 758-5005

Associate Provost and Dean of the Rio Grande College
Sul Ross State University Rio Grande College
400 Sul Ross Drive
Uvalde, Texas 78801
Telephone (830) 279-3036

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 www.applytexas.org 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 must graduate from an accredited high school, recommended or higher curriculum, take the ACT or new SAT I and effective with enrollment for the Spring 2010, the following test scores for beginning freshman will be required.

Note: The old SAT I test contains Verbal and Quantitative sections

Top 10%: no minimum score on ACT or new SAT I Total (Critical Reading + Math)

Top 11% - 25%: no minimum score on ACT or new SAT I (Critical Reading + Math)

Second Quartile: no minimum score on ACT or new SAT I Total (Critical Reading + Math)

Third Quartile: a minimum score of 21 on ACT Composite or a minimum score of 1010 on new SAT I Total (Critical Reading + Math)

Fourth Quartile: a minimum score of 22 on ACT Composite or a minimum score of 1030 on new SAT I Total (Critical Reading + Math)

Score does NOT include writing portion.

A beginning freshman student must 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 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 transferable academic hours (excluding developmental, remedial, vocational/technical, continuing education, or lifelong learning courses).

PROBATIONAL 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 I

Each probationally admitted student will be required to participate in programs designed to assist the student in gaining needed skills. Probationally admitted students will be assigned to an advisor by the Student Success Center.

GRADUATES OF A NONACCREDED HIGH SCHOOL INCLUDING HOME SCHOOL

Sul Ross State University admits qualified students graduating from nonaccredited high schools of home schooled graduates who meet the following criteria:

Score at least 21 on the ACT Composite or 1010 on the SAT I Total (Critical Reading + Math)

Present a 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 nonaccredited 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.

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.

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 transferable academic hours (excluding developmental, remedial, vocational/technical, continuing education, or lifelong learning courses).

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:

<table>
<thead>
<tr>
<th>Total College Hours</th>
<th>Minimum Grade Point Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undertaken:</td>
<td>Required for Admission:</td>
</tr>
<tr>
<td>Below 15</td>
<td>1.00</td>
</tr>
<tr>
<td>15-44</td>
<td>1.25</td>
</tr>
<tr>
<td>45-59</td>
<td>1.50</td>
</tr>
<tr>
<td>60-74</td>
<td>1.75</td>
</tr>
<tr>
<td>75 or above</td>
<td>2.00</td>
</tr>
</tbody>
</table>

Sul Ross State University accepts a maximum of sixty academic hours plus four hours of activity physical education for a total of sixty-four semester hours from the accredited community colleges attended.
Courses taken at community colleges do not satisfy the advanced hours required at Sul Ross State University.

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

All academic courses (excluding developmental, remedial, vocational/technical, continuing education, or lifelong learning courses) attempted at a four-year regionally accredited U.S. college or university will be transferred. Sul Ross State University reserves the right to accept courses taken at U.S. schools other than regionally accredited colleges or universities.

VI. 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. include 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

d. 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,

e. involve theoretical or analytical specialization beyond the introductory level, or

f. require 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 submitted to the student. 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 Center. If, after research by admissions personnel, the problem
resolution results in a change to the evaluation, the evaluation will be adjusted and the student sent a revised copy. 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 Center. 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 and a $25 Re-application fee in order to re-enter Sul Ross State University. Any former SRSU student who attend 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 $50.00 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:
International students who are beginning freshmen graduating from a high school in the U.S. must provide the following:

1. A final high school transcript showing the date of graduation and class ranking and submit satisfactory ACT or SAT scores. Effective with enrollment for the Spring 2010 Semester 2002, the admissions requirements for beginning freshmen graduating from U.S. high schools is:

- **Top 10%**: no minimum score on ACT or new SAT I Total (Critical Reading + Math)
- **Top 11% -25%**: no minimum score on ACT or new SAT I Total (Critical Reading + Math)
- **Second Quartile**: no minimum score on ACT or new SAT I Total (Critical Reading + Math)
- **Third Quartile**: a minimum score of 21 on ACT Composite or a minimum score of 1010 on new SAT I Total (Critical Reading + Math).
- **Fourth Quartile**: a minimum score of 22 on ACT Composite or a minimum score of 1030 on new SAT I Total (Critical Reading + Math).

Note: The old SAT I test contains Verbal and Quantitative sections. Score does NOT include writing portion.

Support documents (see Requirements for Registration by Undergraduate International Students listed below)

Copies of all immigration documents

International students who are transfer students who attended a college or university outside the U.S. must provide the following:

- TOEFL score of 550 or 213 (computer version) if English is not their first language
- Official transcripts from all colleges/universities attended
- Evaluation of all transfer work from an accredited evaluation company
- Support documents (see Requirements for Registration by Undergraduate International Students listed below)

International students who are transfer students who attended a college or university in the U.S. and have obtained 60+ hours or an associate degree
must provide the following:

- Official transcript from all colleges/universities attended
- Support documents (see Requirements for Registration by Undergraduate International Students listed below)
- Advisor’s report
- Copies of all immigration documents

International students who are transfer students who attended a college or university in the U.S. and have obtained less than 60 hours must provide the following:

- TOEFL score of 550 or 213 (computer version) if English is not their first language
- Official transcript from all colleges/universities attended
- Support documents (see Requirements for Registration by Undergraduate International Students listed below)
- Advisor’s report
- Copies of all immigration documents

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. Telephone (432) 837-8052 or email coleman@sulross.edu

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:

1. TOEFL score of 550 or 213 (computer version) if English is not their first language; 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 School 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 to be satisfactory.
English proficiency adequate to successfully complete the program. The interview panel will file the results of the assessment in the Center for Enrollment Center. The Registrar will notify the student of the decision in writing.

C. An application fee of $50 in U.S. currency (non-refundable).

D. A housing deposit of $100 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 hours credit. 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 application for admission
- Submit an official transcript of high School records showing evidence of having completed the junior year
- Be in the top 25% of his/her class
- Submit a letter of recommendation from the high School principal or counselor
- Submit a letter from a parent or guardian acknowledging an understanding of the program and granting approval for participation

The requested documents and supporting material must be on file in the Center for Enrollment Center no later than the official reporting date 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 Center, Box C-108, Alpine, Texas 79832.

NEW STUDENT ORIENTATION
New Student Orientation Programs offer beginning freshmen and transfer students the opportunity to learn about SRSU. All incoming freshmen are required to attend a Freshmen Orientation program. Each program will highlight the range of support services available across campus and allow students to start making connections with other beginning and current students. Available during the summer, these sessions provide students time to meet academic advisors, register for classes, and handle campus business. A mini-orientation program is offered for new students at the start of the spring semester. Please call (432) 837-8050 or visit the New Student Orientation website at www.srsu.edu/pages/4489.asp for information on each of the sessions offered throughout the year.

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 are published in the Class Schedule for each long semester and the summer session. Copies of the Class Schedule may be obtained from the Center of Enrollment Services. Registration questions should be directed to the Center of Enrollment Services. Questions for specific courses should be directed to the Academic Departments.

RESIDENCE STATUS
An individual seeking information or advice for determining residence status should contact the Center for Enrollment Center at (432) 837-8050 or Box C-2, Sul Ross State University, Alpine, Texas 79832.

Under state statutes and Coordinating Board rules and regulations interpreting those statutes, a prospective student will be classified as a resident, non-resident, or foreign student.

A person who lived in the state under circumstances specified in the rules available in the Center for Enrollment Services will be eligible for classification as a resident. A citizen, a national, or a permanent resident of the United States who does not meet resident criteria will be classified as a non-resident.

An alien who is not a permanent resident of the United States and has not been permitted by Congress to adopt the United States as his/her domicile while he/she is in this country will be classified as foreign student.
An individual classified as a non-resident or as a foreign student may qualify for resident tuition rates and other charges while continuing to be classified as a non-resident or a foreign student, under the certain exceptions specified in these rules.

It is the duty of each student to register under the proper residence and pay the appropriate tuition fees. If there is any possible question whether or not a student qualifies as a resident of Texas, he or she should consult the Registrar.

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, assuring the right of a student to review his or her educational records upon request. For more information please inquire at the Registrar’s Office.

CONFIDENTIALITY OF 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, Degrees, Certificates, or Formal Awards, Address, E-Mail Address, Previous Institutions Attended, Telephone Number, Participation in Officially Recognized Activities or Sports, Field of Study, Dates of Attendance, Height and Weight of Athletes.

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 Registrar’s
Office.

**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
- Social Security Number
- Date and location of birth
- Gender
- Financial Status
- Salary History
- Personal Check Information
- Credit Card Numbers
- Drivers 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. Appropriate administrative, technical and physical security of this information is identified in a plan maintained by the Center for Enrollment Services on campus and available to all employees.

**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.

**HEALTH INSURANCE PORTABILITY AND ACCOUNTABILITY ACT OF 1996 (HIPAA)**
Sul Ross State University endeavors to preserve the privacy and confidentiality of the protected health information and medical records maintained by its various departments. It strives to fulfill this responsibility in accordance with state and federal statutes and regulations. Further, SRSU acknowledges its general obligations of trust and confidentiality reposed in its employees and students who are responsible for medical or mental health treatment at the University. As a hybrid entity under the Health Insurance Portability and Accountability Act of 1996 (HIPAA), SRSU will ensure that its designated "covered components" comply fully with the requirements of 45 C.F.R. Parts 164, which are the HIPAA Privacy Regulations.
TUITION AND FEES
TUITION AND MANDATORY FEES
FALL 10 - SPRING 11

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 2010-11 academic year and the 2011 summer terms may be determined by using the following table. Laboratory and individual instruction fees will be in addition to these amounts.

<table>
<thead>
<tr>
<th>Fall and Semester Credit Hrs</th>
<th>Fall Semester Texas Resident</th>
<th>Fall Semester Non-Resident</th>
<th>Spring Semester Texas Resident</th>
<th>Spring Semester Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$285.00</td>
<td>$595.00</td>
<td>$241.50</td>
<td>$551.50</td>
</tr>
<tr>
<td>2</td>
<td>470.00</td>
<td>1,090.00</td>
<td>426.50</td>
<td>1,046.50</td>
</tr>
<tr>
<td>3</td>
<td>655.00</td>
<td>1,585.00</td>
<td>611.50</td>
<td>1,541.50</td>
</tr>
<tr>
<td>4</td>
<td>840.00</td>
<td>2,080.00</td>
<td>796.50</td>
<td>2,036.50</td>
</tr>
<tr>
<td>5</td>
<td>1,025.00</td>
<td>2,575.00</td>
<td>981.50</td>
<td>2,531.50</td>
</tr>
<tr>
<td>6</td>
<td>1,210.00</td>
<td>3,070.00</td>
<td>1,148.50</td>
<td>3,008.50</td>
</tr>
<tr>
<td>7</td>
<td>1,395.00</td>
<td>3,565.00</td>
<td>1,306.50</td>
<td>3,476.50</td>
</tr>
<tr>
<td>8</td>
<td>1,580.00</td>
<td>4,060.00</td>
<td>1,464.50</td>
<td>3,944.50</td>
</tr>
<tr>
<td>9</td>
<td>1,765.00</td>
<td>4,555.00</td>
<td>1,622.50</td>
<td>4,412.50</td>
</tr>
<tr>
<td>10</td>
<td>1,950.00</td>
<td>5,050.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2,126.00</td>
<td>5,536.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2,284.00</td>
<td>6,004.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2,442.00</td>
<td>6,472.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2,600.00</td>
<td>6,940.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>2,758.00</td>
<td>7,408.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>2,916.00</td>
<td>7,876.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>3,074.00</td>
<td>8,344.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>3,232.00</td>
<td>8,812.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>3,390.00</td>
<td>9,280.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>3,548.00</td>
<td>9,748.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>3,706.00</td>
<td>10,216.00</td>
<td></td>
<td></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 2010-11 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 2010-11, this amount is $360 per semester credit hour. See Residence Status in this catalog.
Designated Tuition
A mandatory Designated Tuition Fee of $78 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 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 $56 per semester for the long semester or $28 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 $6 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 $31 per long semester or $15.50 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.
TUITION AND FEES
TUITION AND MANDATORY FEES
FALL 11 - SPRING 12

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 2011-12 academic year and the 2012 summer terms may be determined by using the following table. Laboratory and individual instruction fees will be in addition to these amounts.

<table>
<thead>
<tr>
<th>Fall and Semester Credit Hrs</th>
<th>Spring Semesters *Texas Resident</th>
<th>*Non-Resident</th>
<th>Summer Terms *Texas Resident</th>
<th>*Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$285.00</td>
<td>$595.00</td>
<td>$241.50</td>
<td>$551.50</td>
</tr>
<tr>
<td>2</td>
<td>470.00</td>
<td>1,090.00</td>
<td>426.50</td>
<td>1,046.50</td>
</tr>
<tr>
<td>3</td>
<td>655.00</td>
<td>1,585.00</td>
<td>611.50</td>
<td>1,541.50</td>
</tr>
<tr>
<td>4</td>
<td>840.00</td>
<td>2,080.00</td>
<td>796.50</td>
<td>2,036.50</td>
</tr>
<tr>
<td>5</td>
<td>1,025.00</td>
<td>2,575.00</td>
<td>981.50</td>
<td>2,531.50</td>
</tr>
<tr>
<td>6</td>
<td>1,210.00</td>
<td>3,070.00</td>
<td>1,148.50</td>
<td>3,008.50</td>
</tr>
<tr>
<td>7</td>
<td>1,395.00</td>
<td>3,575.00</td>
<td>1,306.50</td>
<td>3,476.50</td>
</tr>
<tr>
<td>8</td>
<td>1,580.00</td>
<td>4,060.00</td>
<td>1,464.50</td>
<td>3,944.50</td>
</tr>
<tr>
<td>9</td>
<td>1,765.00</td>
<td>4,555.00</td>
<td>1,622.50</td>
<td>4,412.50</td>
</tr>
<tr>
<td>10</td>
<td>1,950.00</td>
<td>5,050.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>2,126.00</td>
<td>5,536.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>2,284.00</td>
<td>6,004.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>2,442.00</td>
<td>6,472.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>2,600.00</td>
<td>6,940.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>2,758.00</td>
<td>7,408.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>2,916.00</td>
<td>7,876.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>3,074.00</td>
<td>8,344.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>3,232.00</td>
<td>8,812.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>3,390.00</td>
<td>9,280.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>3,548.00</td>
<td>9,748.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>3,706.00</td>
<td>10,216.00</td>
<td></td>
<td></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 2011-12 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 2011-12, this amount is $360 per semester credit hour. See Residence Status in this catalog.

**Designated Tuition**
A mandatory Designated Tuition Fee of $78 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 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 $56 per semester for the long semester or $28 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 is 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 $6 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 $31 per long semester or $15.50 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.

**Other Mandatory Fees - Fall 2010 through Summer 2011**

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Biology Lab Fee</td>
<td>8.00</td>
</tr>
<tr>
<td>Chemistry Lab Fee</td>
<td>8.00</td>
</tr>
<tr>
<td>Distance Learning per SCH</td>
<td>45.00</td>
</tr>
</tbody>
</table>
(Includes waiver of certain fees)

Education (Student Teaching/Internship Fee) ................ 125.00-150.00
Geology Lab Fee ................................................................. 8.00
Industrial Arts ................................................................. 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 ................................................................... 50.00-100.00
Farrier Training (all courses) .................................................... 25.00

Field Schools .................................................................. 175.00-450.00

LVN ...........................................................................To Be Determined

Audit Fee (per course) ................................................................... 50.00
Permission must be obtained from the instructor of the course to be audited and from the Registrar’s Office prior to paying this fee. Also, 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 the time the service is rendered or contracted for.)

PARKING FEE:
All faculty, staff and students who expect to operate a vehicle on University property:
Yearly (September 1 -August 31) ........................................................... $20.00
Summer (May 31 - August 31) ....................................................... 11.00
Additional Vehicle ...................................................................................... 5.00

POST OFFICE BOX RENTAL:
Per long semester ................................................................. 6.00
Per summer term ................................................................. 3.00
Entire year ............................................................................. 17.00

GRADUATING “In Absentia” ................................................................. 20.00

GRADUATION, by deadline ................................................................. 30.00

GRADUATION, after deadline ................................................................. 55.00

DIPLOMA INSERT FEE ................................................................... 3.00

LATE REGISTRATION .................................................................... 25.00

THESIS BINDING FEE ($15.00 plus shipping per extra copy) ............. 200.00

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:

- Property Deposit .................................................. $10.00
- Housing Deposit ................................................... 200.00

Orientation Fee (new students)

Fall (August) and Spring (January) Sessions ......................... 50.00

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 card and registration receipt to the Cashier's Office is entitled to a refund of tuition and fees as follows:

**Regular Session**
- 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

**Summer Session**
- 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

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

**Regular Session**
- During the first twelve class days .................................... 100%
- After the twelfth class day ............................................. None

**Summer Session**
- During the first four class days ....................................... 100%
- After the fourth 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.
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.

Student Life Programs

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 restaurant 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. The restaurant 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 hall and the retail outlets. This committee also assists in planning special events throughout the semester.

COUNSELING AND DISABILITIES SERVICE

Entering college and becoming a successful student requires significant adaptations on the part of the student. Effective advisement can help students to adjust to university life and to learn effective self-management and decision-making skills. Academic advising is designed to assist in educational planning, including clarification of career and educational goals, curriculum planning, and short-term course selection.

The Counseling and Disabilities Office is located in Ferguson Hall, Room 112, (432) 837-8203.

COUNSELING

Counseling is an integral part of The Counseling and Disabilities Office and the student-centered educational mission at Sul Ross State University. Services are provided in a safe environment where personal, social, academic, nonacademic, career and relationship concerns can be addressed with licensed professional counselors.

Any problem which is interfering with a person's ability to function well in the academic or nonacademic environment is appropriate for counseling. These may include but are not limited to: stress, depression and anxiety, problem-solving and decision making difficulties, adjustment problems, family/relationship issues, test anxiety, domestic violence, sexual assault and drug and alcohol screening.

All students and their spouses/partners and children, faculty members and staff of Sul Ross State University are eligible to receive counseling services. Services provided include:

• Confidential, short-term counseling based on empathy, respect and unconditional positive regard in the following areas:
  • Individual counseling
  • Marriage, family, or group counseling

• A comprehensive referral network to off-campus providers
• Crisis intervention
• Outreach and prevention services through workshops, seminars and presentations which offer students, faculty and staff the opportunity to gain insight and knowledge.

Services may be obtained by calling (432) 837-8203 or coming by Ferguson Hall Room 112, Monday through Friday, 8:00 a.m. - 5:00 p.m.

STUDENT DISABILITY AND 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 and academic advising 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, dodge ball, 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.

**Outdoor Recreation** is geared towards providing opportunities to experience the great outdoors elements we have in our part of the country. Offerings include overnight camping trips, rafting trips, day hikes, 4x4 back country tours, and skydiving! Experience is not necessary to participate and in most instances we provide all the gear you will need. We can also outfit your weekend camping trip with rentals for tents, sleeping bags, backpacks, gas stoves, and many other necessities for your safety and comfort.

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, computer training, 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 Service office in Ferguson Hall 105 or by calling the office at (432) 837-8118.

**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. All students living in a residence hall are required to be on one of the University meal plans. Exceptions to this policy are made for students who: (1) live at home 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. 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 eligible to live off-campus. 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.

1. 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 a $200 housing deposit. Suite mate requests are granted when space is available and both applications indicated 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).

2. EFFICIENCY APARTMENTS: Individual students who have satisfied, or are exempt from, the residential living requirement, 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 a $200 housing deposit. 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.

3. 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 $200 deposit. A spouse or children must be living with the student in order to obtain family housing and only immediate /dependant members of the same family may reside in a unit. The marriage certificate and/or proper identification 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 deposit is received by Residential Living.

4. 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.

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 received 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 the Resident Director or Resident Assistant. 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. The living quarters must be clean and the key must be returned. 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:

Prior to the first regularly Scheduled class day ................................. 100%
During the first five class days ......................................................... 80%
During the second five class days ...................................................... 70%
After the second five class days until first installment plan due date...... 50%
After the first installment due date until the second installment due date. 25%
After the second installment plan due date ........................................ none

FAMILY HOUSING AND APARTMENTS: Rent is due at the beginning of each semester. 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 check-out 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.

STUDENT HEALTH SERVICE
Student Health Service is located in the University Center, Suite 211. A registered nurse is available to assess student health needs, treat simple injuries, and give over-the-counter medications when appropriate for symptomatic relief of minor ailments.

In addition to the on-campus service, the student health fee pays for limited off-campus medical care through a university-contracted provider. Routine tests such as strep throat screening, pregnancy testing, urinalysis, blood
sugar and anemia testing are covered. Students are responsible for payment of any other diagnostic test, procedures prescription medications and all non-contracted care. For more information about health services, phone (432) 837-8102 or go to http://www.sulross.adv/health.

Immunization Status
Students are encouraged to have their immunization status reviewed and updated. They also need to check with their academic advisor about specific program vaccination requirements. International students must show evidence of childhood immunizations and have a recent tuberculin skin test with a negative result or proof of medical clearance.

Meningococcal is a serious bacterial infection that can rapidly lead to permanent disability and death. Adolescents, young adults and students living in residential housing are at increased risk. A vaccine is available to prevent most common types of this disease. Check with your provider or contact health services at (432) 837-8102 to learn more.

STUDENT HEALTH INSURANCE
The health fee does not pay for health insurance and the university does not currently offer a group plan. For this reason and with the high cost of medical care, it is strongly recommended that students purchase comprehensive health coverage. International students are required by the university to maintain a healthcare and repatriation policy that is good in the United States. Brochures advertising various college health insurance products are available through health services (432) 837-8102 and student life (432) 837-8037. Additional information about college health insurance may be found at http://www.sulross.edu/pages/4398.asp. University athletes have limited supplemental accident coverage through the Athletic Department, call (432) 837-8226 for details.

CAREER LIFE CENTER
Career Services is located in the University Center, Room 211B (432-837-8178). 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, preparing a credential file, writing a resume and cover letters, preparing for interviews, and planning job search strategies;
*Graduating students and alumni, in accessing job openings and sending out credential packets.

Individual consultations are available to assist students with college and career related concerns. A professional credential mailing service is available on request to graduating students and alumni. 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 also available.

A Web Page is maintained by the office as a starting point for conducting job searches via the internet, www.sulross.edu/pages/4514.asp.

A campus newsletter, CAREER CURRENTS, is published biannually and contains articles on up-to-date job market trends, job search strategies and calendars of upcoming events.

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 www.sulross.edu/pages/3927.asp. The following tests are Scheduled for administration on campus on selected national test dates:

- **ACT** (American College Test)
- **GRE** (Graduate Record Examination), subject tests only
- **LSAT** (Law School Admission Test)
- **MCAT** (Medical College Admission Test)
- **SAT** (Scholastic Assessment Test)
- **THEA** (Texas Higher Education Assessment)
  Other tests administered by arrangement/appointment include:
  - **SAT-INSTITUTIONAL** (scores reported only to School administering the test), administered one week prior to registration periods.
  - **COMPASS** (an approved alternative to the THEA); administered one week prior to registration periods.
  - **Quick THEA** (administered at the end of each semester)
  - **CLEP** (College Level Examination Program)
  - **DANTES** (Defense Activity for Nontraditional Education Support)
  - **GED** (General Educational Development); high School equivalency.
  - **NET** (Nursing Entrance Test)
  * Correspondence course exams
  - **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 (http://www.sulross.edu/pages/3343.asp).

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, air hockey and table soccer, 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 website www.sulross.edu/pages/4461.asp.

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 Barnes & Noble College Bookstores, Inc. 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, ice cream, souvenirs, novelties, first-aid supplies, drug items, and University imprinted clothing. Books may also be special ordered through the Bookstore.

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 THE FIRST WEEK OF CLASS, WITH A RECEIPT.
• 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. (Open software may be exchanged for the identical item only.)
• No refunds given on magazines or prepaid phone cards.
• Without a receipt, a merchandise credit will be issued at the current selling price.
• Cash back on merchandise credits will not exceed $5.
• 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 can’t 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-Sunday 6:00 a.m. to 12:00 a.m. (Midnight). 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 ASSISTANCE
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 assistance and giving financial assistance talks to area high schools. This office strives to maintain good public relations with high schools through regular visitation. The Office of Financial Assistance also serves as a liaison between parents and other University offices. It 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 Office of Financial Assistance at Sul Ross State University to assist students in obtaining financial assistance 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 call or write the Office of Financial Assistance at (432) 837-8055 or Box C-113, Alpine, Texas 79832.
ORIENTATION PROGRAMS

Orientation programs are coordinated through the Office of Enrollment Management to help beginning and transferring students adjust more easily and successfully to Sul Ross State University. Participation in any of the orientation programs helps students and their parents better understand the University's expectations for its students, available programs, as well as co-curricular, social, and recreational activities.

All new students are required to participate in one of the designated orientation programs or to enroll in COMM 1101 Orientation Class.

For additional information about Orientation, contact the Office of Enrollment Management at (432) 837-8432 or Box C-119, Alpine, Texas 79832.

NEW STUDENT ORIENTATION/TRANSFER ORIENTATION

At New Student Orientation and Transfer Student Orientations, students meet with academic advisors for academic advisement and selection of courses. Orientation acquaints students with traditions, student life activities and services available at Sul Ross State University.

Students attending New Student Orientation may stay in on-campus housing and will need to bring: extended twin size sheets, pillows, towels, alarm clocks, soap, personal necessities, etc.

Parent sessions will be available for parents who attend. Sessions will be provided for parents regarding services and student life.

PASS PROGRAM

The Pathway to Academic Socialization and Success Program (PASS) is aimed at helping entering freshmen succeed in college. The PASS Program consists of two major activities: a two-week summer program on campus to develop study skills and to review for the Texas Higher Education Assessment (THEA) examination and a learning communities program in the fall semester.

Participants attend classes geared to bridge the gap and ease the transition between high School and college. PASS also provides instructional assistance to students who have not passed the THEA. The students do career exploration by visiting all areas of the university and by taking an aptitude test. Recreational and/or social activities take place each evening, utilizing facilities both on and off campus. Participants experience college life by living in the dorms and eating at the Food Court. Peer mentors assist with the planning and implementation of the program. At the end of the summer portion of the program those participants who have not passed the THEA take the COMPASS, an approved alternative.

During the fall, participants have the opportunity to enroll in learning community courses whose enrollment is restricted to PASS participants. The duty of the PASS coordinator is to serve as student advisor, keep in touch with instructors and provide intervention and referrals.
ALUMNI AFFAIRS OFFICE
Sul Ross State University maintains an Alumni Affairs office. Its primary function is to act as a liaison between University Administration and former Sul Ross students. The office keeps alumni posted on the whereabouts of former students, answers questions about the University, and informs Alumni Association members about area meetings and changes on campus. This office publishes the *Lobo Legacy* an annual magazine about former students. The Office Director serves as the Alumni Association Executive Director.

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 Financial Assistance Office at (432) 837-8059 or Box C-113, Alpine, Texas 79832.
GENERAL ACADEMIC REGULATIONS

GENERAL INFORMATION

STUDENT RESPONSIBILITY
All students are responsible for knowing the academic regulations stated in this catalog, and unfamiliarity does not constitute a valid reason for failure to fulfill them. Students are responsible for determining their eligibility to register each semester. Academically ineligible students who register without approval of the Provost and Vice President for Academic and Student Affairs will be dismissed from the University.

Students who change their home or local addresses or change their phone number must notify the Center for Enrollment Center. Students are responsible for any communications from any university official sent to them at the address last given to the Center for Enrollment Center.

All students are required to maintain an @sulross.edu computer account. This account provides both an online identification key and a University Official 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

Undeclared Majors. Students who are undecided about a major or who would like additional information on current occupational outlooks, employment possibilities, and job descriptions can receive assistance from the Lobo Den. Any student who is undecided about a major will be assigned to an advisor who will provide advice and counsel concerning academic regulations, general degree requirements, course Schedules, special services available at the University, and assistance in selecting a major. All students should Schedule meetings with their advisors each semester to review progress and to plan for the succeeding semesters.

Major Advisors. Students who enroll in Sul Ross State University are assigned a major advisor who will advise and counsel those concerning academic regulations, general degree requirements, and course Schedules, preparation of degree plans, career choices, and special services available in the University. Students should Schedule meetings with their advisors each semester and review their progress and plans for the succeeding semester. The advisors will be available at times posted on their office doors, by appointment, and throughout the University registration periods. Inquiries may be directed to the Office of the Provost and Vice President for Academic and Student Affairs.
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 .................................. Dr. Chris Ritzi

Associate Professor of Biology

Engineering.................................................................................. Dr. David Martin

Assistant Professor of Mathematics

Law.................................................................................. Professor David Watson

Instructor of Political Science

Nursing .................................................................................. Dr. Chris Ritzi

Associate Professor of Biology

Physical Therapy .......................................................................... Dr. Roger Grant

Professor of Physical Education

Veterinary Medicine ...................................................................... Dr. Amy Coburn

Professor of Animal Science-Veterinary Technology

TECHNICAL PROGRAMS ADVISING

Students who intend to pursue one of the following technological programs offered by the University should consult with the appropriate faculty advisor as indicated below.

Veterinary Technology ........................................................... Dr. Amy Coburn

Professor of Animal Science-Veterinary Technology

Farrier Technology....................................................................... Dr. Paul Will

Professor of Animal Science

Meat Technology.......................................................................... Dr. Paul Will

Professor of Animal Science

Vocational Nursing................................................................. Ms. Donna Kuenstler

Director of Vocational Nursing

TEXAS SUCCESS INITIATIVE

Texas law requires institutions of higher education 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 assessment instruments approved by the Texas Higher Education Coordinating Board that are 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 developmental course work as considered necessary to address a student's deficiencies in readiness to perform freshman-level academic course work, except that 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), or the Texas Assessment of Knowledge and Skills (TAKS) 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 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 from the requirements of this section.

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 Career Life Center at Sul Ross State University.
CLASS ATTENDANCE

Regular class attendance is important to the attainment of the educational objectives of the University. Each instructor will keep class attendance records, and the instructor's policy on class attendance will be explained at the beginning of the semester or term.

The instructors will drop a student from a course when the student has a total of nine absences. A student will be dropped for excessive absences in remedial courses after nine absences.

An absence is defined as non-attendance in fifty minutes of class; for example, non-attendance in a one and one-half hour class will constitute one and one-half absences and non-attendance in a three hour class will constitute three absences. An absence because of participation in an official University activity is considered to be an authorized absence.

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 explained 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.

A student who is dropped from a course for excessive absences will be notified in writing by the Registrar after the drop has been approved by the Provost and Vice-President for Academic and Student Affairs. Any student dropped for excessive absences will receive an "F" in the course dropped.

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. The University allows a maximum of 20% absences in a course before an instructor may drop a student for excessive absences with a grade of F. In distance education courses, this policy is interpreted as non-participation; once a student has been documented as non-participating for more than 3 weeks of inactivity during a long semester or 1 week of inactivity during a summer session, the instructor may drop the student from the course with a grade of F. 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 email, and/or not following the instructor's participation guidelines stated in the syllabus.
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 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.

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 reporting 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 Center.

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:

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. The summer session is divided into two terms, each five to six weeks in length.

## THE SEMESTER HOUR

The semester hour is the basis of credit. One semester hour of credit is equivalent to one contact hour per week for a semester or approximately 15 hours of instruction. Two to three contact hours of laboratory work are considered to be the equivalent of one hour of lecture.

## CLASSIFICATION OF STUDENTS

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

<table>
<thead>
<tr>
<th>Hours</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-29</td>
<td>Freshman</td>
</tr>
<tr>
<td>30-59</td>
<td>Sophomore</td>
</tr>
<tr>
<td>60-89</td>
<td>Junior</td>
</tr>
<tr>
<td>90 or more</td>
<td>Senior</td>
</tr>
</tbody>
</table>

## RELIGIOUS HOLY DAYS ABSENCES

(HE 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 descriptions 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.

SCHEDULE CHANGES

Students who desire to add or drop a course after the initial registration in any semester must secure the approval of the major advisor. Courses may be added during the registration periods as specified in the University calendar. Courses which are dropped during the registration period will not be listed on the student's permanent record. Courses which are dropped after the registration period through the last day to drop a course as published in the University's calendar will be assigned a grade of "W." Forms for adding and dropping courses are obtained at the advisor's office.

AUDITING A COURSE

Students who desire to audit a course must obtain a "Permission to Audit" slip from the Center for Enrollment Services. Students must obtain permission of the instructor, the chairman 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 must notify 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 elsewhere and correspondence or extension courses. 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.

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 is considered a full-time student.

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 Center.

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Meanings</th>
<th>Grade Points</th>
</tr>
</thead>
<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>1</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>
<tr>
<td>P</td>
<td>Pass</td>
<td>Not Computed</td>
</tr>
<tr>
<td>PR</td>
<td>In Progress</td>
<td>Not Computed</td>
</tr>
<tr>
<td>W</td>
<td>Withdrew</td>
<td>Not Computed</td>
</tr>
</tbody>
</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 specified on the grade report to the Registrar. 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” is a permanent incomplete grade, which will not be calculated in the student’s grade point average.

**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 hours attempted into the total number of grade points received. The grade for a course is not calculated in the grade point average if the course is repeated and a passing grade is received. When a course is repeated, the original grade will remain on the record but will not be counted in all courses which are repeated (except those specifically described "may be repeated for credit"); the final course grade will be counted.

**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.

**Withdrawn Grades**

The grade of "W" 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.
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 a 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 attempted (excluding I, CR, Pass-Fail courses) and cumulative grade points earned on all courses taken for which a grade of A, B, C, D, and F is recorded. For transfer students, hours attempted and/or completed at other Schools are added to Sul Ross hours undertaken for purpose calculation of 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 including Math 0300/1300, and 0301/1301, English 0300/1300, and Education 0300/1300 are courses intended for students who may lack the necessary skills for entering collegiate level courses. These courses are included in calculating the grade point averages for the purposes of determining satisfactory progress, eligibility for financial assistance, and eligibility for participation in intercollegiate athletics. Since these courses are pre-collegiate level, they shall not be used to satisfy any requirement for graduation. Therefore, 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 Dismissal</th>
<th>Cumulative GPA for Scholastic Probation</th>
<th>(Applied only to those on Scholastic Probation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>less than 2.00</td>
<td>less than 2.00</td>
<td>less than 1.25</td>
</tr>
<tr>
<td>Freshman (0-29 hrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore (30-59 hrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior (60-89 hrs)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior (90+ hrs)</td>
<td></td>
<td></td>
<td></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 in the semester grade report when they are placed on probation or suspension.

**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 Provost and Vice President for Academic and Student 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 the Sul Ross State University Bulletin.

**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.
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 PHI SIGMA** - This national honor society for Criminal Justice majors promotes high Scholastic standards. It also provides Scholarships for outstanding Criminal Justice students.

**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. Minimum GPA of 3.0 in all completed agriculture courses and of 2.5 in all other courses 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, 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 subjects 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 in University Center 211C, the Career Life Center, or by calling (432) 837-8178

COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)

Credit is awarded for the examinations listed below:

<table>
<thead>
<tr>
<th>Subject Examinations:</th>
<th>University Course and Minimum Award</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Award</td>
</tr>
<tr>
<td>American Government</td>
<td>PS 2305</td>
<td>3</td>
</tr>
<tr>
<td>American History</td>
<td>HIST 1301</td>
<td>3</td>
</tr>
<tr>
<td>American History II</td>
<td>HIST 1302</td>
<td>3</td>
</tr>
<tr>
<td>American Literature</td>
<td>NEN</td>
<td>3</td>
</tr>
<tr>
<td>Analysis &amp; Interpretation of</td>
<td>ENG 2301</td>
<td>3</td>
</tr>
<tr>
<td>Literature (includes essays)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>College Algebra</td>
<td>MATH 1315</td>
<td>3</td>
</tr>
<tr>
<td>College Algebra – Trigonometry</td>
<td>MATH 1315</td>
<td>4</td>
</tr>
<tr>
<td>Calculus with Elementary</td>
<td>MATH 2413</td>
<td>4</td>
</tr>
<tr>
<td>Functions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Computer Applications</td>
<td>OFS 1384</td>
<td>3</td>
</tr>
<tr>
<td>Educational Psychology</td>
<td>ED 3302</td>
<td>3</td>
</tr>
<tr>
<td>English Literature</td>
<td>ENG 3309</td>
<td>3</td>
</tr>
<tr>
<td>General Biology</td>
<td>BIOL 1401, 1402</td>
<td>8</td>
</tr>
<tr>
<td>General Psychology</td>
<td>PSY 1302</td>
<td>3</td>
</tr>
<tr>
<td>Human Growth and Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Introduction to Management</td>
<td>ED 3304</td>
<td>3</td>
</tr>
<tr>
<td>Introductory to Accounting</td>
<td>MGT 3360</td>
<td>3</td>
</tr>
<tr>
<td>Introductory Business Law</td>
<td>ACC 2330, 2331</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>GBA 3351</td>
<td>3</td>
</tr>
</tbody>
</table>
Introductory Microeconomics  ECO 2300   3   50
Introductory Macroeconomics  ECO 2305   3   50
Introductory Marketing  MKT 3370   3   50
Introductory Sociology  SOC 2303   3   50
First-Year College Spanish  SPAN 1401, 1402  8   50
First-Year College French  FREN 1401, 1402  8   50
First-Year College German  NEN    8   50
Trigonometry  MATH 1316   3   50
Western Civilization  HIST 2301   3   50
Western Civilization II  HIST 2302   3   50

*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:

<table>
<thead>
<tr>
<th>DANTES Examination</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>Introductory College Algebra</td>
<td>MATH 1315</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Principles of Statistics</td>
<td>GBA 3352</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>The Civil War and Reconstruction</td>
<td>HIST 1301</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>Lifespan Developmental Psychology</td>
<td>PSY 2310</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>General Anthropology</td>
<td>ANTH 1301</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>Intro to Enforcement</td>
<td>CJ 1301</td>
<td>3</td>
<td>45</td>
</tr>
<tr>
<td>Principles of Finance</td>
<td>FIN 3340</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Principles of Financial Accounting</td>
<td>ACC 3332</td>
<td>3</td>
<td>49</td>
</tr>
<tr>
<td>Personnel/Human Resource Management</td>
<td>MGT 3363</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Organizational Behavior</td>
<td>MGT 4361</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Introduction to Computers with</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Programming in BASIC</td>
<td>CS 2305</td>
<td>3</td>
<td>47</td>
</tr>
<tr>
<td>Introduction to Business</td>
<td>GBA 1353</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Money and Banking</td>
<td>ECO 3300</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Personal Finance</td>
<td>FIN 3341</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Astronomy</td>
<td>AST 1401</td>
<td>3</td>
<td>48</td>
</tr>
<tr>
<td>Physical Geology</td>
<td>GEOL 1401</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Technical Writing</td>
<td>ENG 2304</td>
<td>3</td>
<td>46</td>
</tr>
<tr>
<td>Ethics in America</td>
<td>PHIL 1302</td>
<td>3</td>
<td>46</td>
</tr>
</tbody>
</table>
### ADVANCED PLACEMENT (AP)
Credit is awarded for the examinations listed below

<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 3304</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ART 3304, 3305</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Biology</td>
<td>BIOL 1401</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>BIOL 1401, 1402</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 1401</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>CHEM 1401, 1402</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Computer Science A</td>
<td>CS1320</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science AB</td>
<td>CS1320</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Economics - Microeconomics</td>
<td>ECO 2300</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Economics - Macroeconomics</td>
<td>ECO 2305</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>English - Language and</td>
<td>ENG1301</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Composition</td>
<td>ENG 1301,1302</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Government and Politics - US</td>
<td>PS 2305</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>History - European</td>
<td>HIST 2301</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIST 2301,2302</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>History - United States</td>
<td>HIST 1301</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>HIST 1301, 1302</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Mathematics - Calculus AB</td>
<td>MATH 2413</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Mathematics - Calculus BC</td>
<td>MATH 2413, 2414</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Music Theory</td>
<td>MUS1411</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>MUS1411, 1412</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Physics B</td>
<td>PHY 1401, 1402</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Physics C (Mechanics)</td>
<td>PHY 1401</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Physics C (Electricity and</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Magnetism)</td>
<td>PHY 1402</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>Psychology</td>
<td>PSY1302</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Spanish - Language</td>
<td>SPAN 1401</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SPAN 1401, 1402</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Spanish - Literature</td>
<td>SPAN 2305</td>
<td>3</td>
<td>3</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 1401, 1402</td>
<td>BIOL 1413, 1411</td>
</tr>
<tr>
<td>Business &amp; Organization</td>
<td>6</td>
<td>FINC 3340, MGMT 3360</td>
<td>N/A</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8</td>
<td>CHEM 1401, 1402, 2401, 2402</td>
<td>CHEM 1111, 1311, 1112,1312</td>
</tr>
<tr>
<td>Economics</td>
<td>6</td>
<td>ECO 2300, 2305</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 1401, 1402</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>6</td>
<td>MUS 1312</td>
<td>MUS 1306</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 1402, 1402</td>
<td>PHYS 1401, 1402</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>PSYC 1302</td>
<td>PSYC 2301</td>
</tr>
<tr>
<td>Spanish</td>
<td>8</td>
<td>SPAN 1401, 1402</td>
<td>SPAN1411, 1412</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Standard Exams</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 2300, 2305</td>
<td>Econ 2301, 2302</td>
</tr>
<tr>
<td>Music</td>
<td>6</td>
<td>MUS 1312</td>
<td>MUS 1306</td>
</tr>
<tr>
<td>Theatre</td>
<td>3</td>
<td>THEA 1302</td>
<td>THEA 1310</td>
</tr>
</tbody>
</table>

Grades accepted: 7 or 6 only for the following:

<table>
<thead>
<tr>
<th>Standard Exams</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 1401, 1402</td>
<td>BIOL 1413, 1411</td>
</tr>
<tr>
<td>Chemistry</td>
<td>8</td>
<td>CHEM 1401, 1402</td>
<td>CHEM 1111,1311, 1112,1312</td>
</tr>
<tr>
<td>Computer Science</td>
<td>3</td>
<td>CS1301</td>
<td>COSC 1300</td>
</tr>
<tr>
<td>Mathematical Studies</td>
<td>6</td>
<td>MATH 1315, 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>
</tbody>
</table>
### Physics

<table>
<thead>
<tr>
<th>Grades accepted:</th>
<th>7 &amp; 6 = A, 5 = B for the following:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Credit</td>
<td>Equivalent</td>
</tr>
<tr>
<td>Texas Common</td>
<td>Course Number</td>
</tr>
<tr>
<td>Standard Exams</td>
<td>Hours</td>
</tr>
<tr>
<td>Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

### Philosophy

3 hours can be used to satisfy the General Education philosophy requirement.

### Psychology

3 hours can be used to satisfy the General Education psychology requirement.

### French

8 hours can be used to satisfy the Language Requirement.

### German

8 hours can be used to satisfy the Language Requirement.

### Spanish

8 hours can be used to satisfy the Language Requirement.

### Grades accepted:

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

<table>
<thead>
<tr>
<th>Credit</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Common Course Number</td>
<td></td>
</tr>
<tr>
<td>SRSU Course</td>
<td></td>
</tr>
<tr>
<td>Philosophy</td>
<td>3</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
</tr>
</tbody>
</table>

- 5 or 4 = credit for the following:

<table>
<thead>
<tr>
<th>Credit</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Common Course Number</td>
<td></td>
</tr>
<tr>
<td>SRSU Course</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>8</td>
</tr>
<tr>
<td>German</td>
<td>8</td>
</tr>
<tr>
<td>Spanish</td>
<td>8</td>
</tr>
</tbody>
</table>

- 7 or 6 = credit for the following:

<table>
<thead>
<tr>
<th>Credit</th>
<th>Equivalent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Texas Common Course Number</td>
<td></td>
</tr>
<tr>
<td>SRSU Course</td>
<td></td>
</tr>
<tr>
<td>French</td>
<td>14</td>
</tr>
<tr>
<td>German</td>
<td>14</td>
</tr>
<tr>
<td>Spanish</td>
<td>14</td>
</tr>
</tbody>
</table>

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

The Transcript should be sent to:

Sul Ross State University
Center for Enrollment Services
SRSU BoxC-108
Alpine, TX 79832
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>Enhanced ACT English Score</th>
<th>SAT Verbal Score</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>588</td>
<td>English 1301</td>
</tr>
</tbody>
</table>

2. **Mathematics**
   
<table>
<thead>
<tr>
<th>Enhanced ACT Mathematics Score</th>
<th>SAT Mathematics Score</th>
<th>Credit</th>
</tr>
</thead>
<tbody>
<tr>
<td>30</td>
<td>603</td>
<td>Math 13 15</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 Center 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 Center 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 Center.

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 Center. 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 Center 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 Center 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.
CORRESPONDENCE COURSES

The following regulations will apply to work completed through correspondence:

1. Sul Ross State University does not offer correspondence courses but will accept for transfer and application toward a baccalaureate degree a limited number of correspondence courses which have been satisfactorily completed in a correspondence division of an accredited college or university.

2. Students who desire to earn credit by correspondence and apply the credit toward a degree at Sul Ross must secure the approval of their major advisor, the Registrar, and the Dean of the School or Division prior to enrolling in the course for which credit is desired. Forms for this purpose may be obtained in the offices of the Deans.

3. All correspondence work in which a student is enrolled during a given semester will count as a part of the student's maximum load permitted for that semester. A student will not be given permission to exceed the maximum load by enrolling in correspondence courses, and any correspondence work which is completed without approval will not be accepted for transfer to SRSU.

4. Correspondence work must be completed and an official transcript showing the grades and credits earned must be filed in the Center for Enrollment Center at SRSU no later than 14 days before the date of graduation. If credit is filed after this period, the student's graduation may be deferred to the succeeding semester or summer. It is the student's responsibility to have an official transcript sent to the Center for Enrollment Center at SRSU from the Registrar's Office where the correspondence work was completed.

5. Correspondence courses will not be approved for students who are ineligible to enroll in SRSU, or for those students who may be on academic or disciplinary probation or suspension, or for beginning freshmen prior to registration in Sul Ross State University. Also, correspondence courses may not be used to repeat courses.

6. A maximum of 18 semester credit hours may be earned through correspondence work and applied toward a degree at SRSU; the work normally should be in general education, minor, or elective areas. Correspondence work cannot be used to satisfy major field requirements.

7. Sul Ross State University neither offers graduate courses by correspondence, nor allows the transfer of graduate credit earned by correspondence to apply toward a master's degree, EXCEPT in the case of military credit. Correspondence courses, in most instances, from the National Security Management School may be transferred toward the Master of Business Administration degree.

VETERAN EDUCATION BENEFITS RECIPIENTS

The Center for Enrollment Center in the Briscoe Administration Building 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 Veterans Administration must inform the Registrar at each registration to ensure prompt certification of enrollment. In addition to receiving the academic advisor's approval of the course schedule, these students should also confer with the Veterans Coordinator prior to registration concerning certification of the courses.

The Veterans Coordinator 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 Center a degree plan by the end of the first semester of enrollment at the University.

When all entitlement under other V.A. programs has been exhausted, 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 are 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, call or write the Veterans Coordinator at (432) 837-8049, or Box C-108, Alpine, Texas 79832.

**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, (3) graduating under the catalog in force for any subsequent year of registration 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 2006-2008 catalog must complete all requirements for the degree under that catalog prior to August graduation in 2012 or 2014, 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.
Completion of all requirements of the degree sought as determined by the appropriate academic department.

APPLICATION FOR GRADUATION
All forms may be obtained from the dean of the appropriate School. A diploma fee is required. A student is expected to submit an application for graduation during the semester proceeding the final semester of enrollment. 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 a specific deadline for applying to graduate.

COMMENCEMENT
Commencement ceremonies for the awarding of degrees to candidates are held at the end of the spring semester, at the end of the summer session, and at the end of the fall semester on the dates listed in the University Calendar.

Graduates are expected to participate in commencement. Persons graduating in absentia will be charged an additional fee for shipping and handling the diploma.

Information and instructions concerning commencement will be mailed to each candidate for a degree.

GRADUATION WITH HONORS
Special recognition at graduation is provided those undergraduate students who compile outstanding academic records. 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.

The cumulative grade point average reflected on the SRSU transcript is for Sul Ross State University course work only. 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 in person, by sending a letter, or submitting an e-mail to the Center for Enrollment Center at Lawrence Hall. All requests should include: name attended under, Social Security number, last term attended, number of copies desired (maximum of 5 copies per request), the complete mail address of where the transcript should be sent, and your signature.

There is no charge for transcripts. 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 in writing 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 at the window 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 Center 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. Have the complete address of where your transcript is to be mailed. 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 Center mails to the Office of Admissions at educational institutions.

3. Provide a complete return address and telephone number in the event the transcript clerk needs to reach you about your transcript request.

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

5. Facsimile (FAX) Transmission - Requests submitted via fax machine are acceptable if the transcript is being sent to another educational institution or agency. Transcripts sent via fax machine are considered to be unofficial and are not followed-up by an official copy unless you make a specific request. Most institutions require transcripts be mailed from School to School.
SCHOOL OF AGRICULTURAL AND NATURAL RESOURCE SCIENCES
Department of Animal Science
Animal Science                     BS, M.Ag., MS
Farrier                            AAS, Certificate
Meat Technology                   AAS
Veterinary Technology             AAS

Department of Natural Resource Management
Agricultural Business             BS
Natural Resource Management       BS
Range and Wildlife Management     M.Ag., M.S

SCHOOL OF ARTS AND SCIENCES
Academic Center for Excellence

Department of Behavioral and Social Sciences
History                           BA, MA
Mexican American Studies          BA
Political Science                 BA, MA
Political Science - Public Administration MA
Psychology                        BA, MA
Social Science                    BA

Department of Biology
Biology                           BS, MS

Department of Computer Science and Mathematics
Mathematics                       BS
Computer Science                  BS

Department of Earth and Physical Sciences
Chemistry                         BS
Geology                           BS, MS

Department of Fine Arts and Communication
Art                               BFA, MA
Communication                    BA
Music                             BA
Theatre                           BFA

Interdisciplinary Programs
Environmental Studies             BS
General Studies                   BA
Liberal Arts                      MA

Department of Languages and Literature
English                           BA, MA
Spanish                          BA
SCHOOL OF PROFESSIONAL STUDIES

Department of Business Administration
Administrative Systems and Business Technology BA, Certificate
Business Administration BBA, MBA

Department of Criminal Justice
Criminal Justice BS, MS

Department of Education
Education-General MEd
Education-Educational Diagnostician MEd
Education-Counseling MEd
Education-School Administration MEd
Education-Reading Specialist MEd
Interdisciplinary Studies BA, BS

Department of Industrial Technology
Industrial Technology BS

Department of Physical Education
Kinesiology and Sports Science Physical Education BS, MEd

VOCATIONAL NURSING
Certificate

RIO GRANDE COLLEGE

Department of Business Administration
Business Administration-General Business BBA, MBA
Business Administration-International Trade BBA
Business Administration-Management Information Systems BBA

Department of Education
Elementary Education MEd
Secondary Education MEd
Counseling MEd
School Administration MEd
Reading Specialist MEd
Interdisciplinary Studies BA, BS

Department of Liberal Arts
Biology BS
Criminal Justice BS
English BA
History BA
Mathematics BS
Psychology BA
Social Science BA
Spanish BA
DEGREE AND GRADUATION REQUIREMENTS

Requirements for the Core Curriculum
Sul Ross State University requires all students completing a baccalaureate degree to complete a common core curriculum, as follows.

Basic Skills Component
ENGLISH COMPOSITION. Six semester hours.
   English 1301 Composition and Rhetoric I
   English 1302 Composition and Rhetoric II
MATHEMATICS. Three semester hours. Select one of the following:
   Mathematics 1310 University Math
   Mathematics 1315 University Algebra
   Mathematics 1316 Trigonometry
   Mathematics 1342 Calculus I
   Mathematics 2413 Statistics
ORAL COMMUNICATION. Three semester hours. Select one of the following:
   Communication 1303 Introduction to Speech Communication
   Theatre 2304 Oral Performance for Non-majors

Basic General Knowledge
FINE ARTS. Three semester hours. Select one of the following:
   Fine Arts 1301 Fine Arts Appreciation
   Art 1301 Introduction to the Visual Arts
   Music 1312 Music Literature
   Music 1313 Fundamentals of Music
   Theatre 1302 Introduction to the Theatre
KINESIOLOGY. Two semester hours.
   Physical Education 1150 Concepts of Wellness
   P.E. 2101 (Intercollegiate Activities) cannot fulfill this requirement
LITERATURE. Three semester hours.
   English 2301 Literary Types or other Literature course in English
LABORATORY SCIENCE. Eight semester hours. Select two of the following:
   Astr 1401 Descriptive Astronomy
   Astr 1402 Descriptive Astronomy II
   Biology 1401 General Botany
   Biology 1402 General Zoology
   Chem 1401 General Chemistry I
   Chem 1402 General Chemistry II
   Geol 1401 Introductory Geology I
   Geol 1402 Introductory Geology II
   Geol 2402 Introduction to Environmental Geology
   Physics 1401 General Physics I
   Physics 1402 General Physics II
   Physics 2401 Calculus-Based Physics I
   Physics 2402 Calculus-Based Physics II
SOCIAL SCIENCES. Three semester hours. Select one of the following:
- Anthropology 1301: Cultural Anthropology
- Economics 2300: Principles of Microeconomics
- Economics 2305: Principles of Macroeconomics
- Geography 1302: World Regional Geography
- Geography 2302: Geography of the United States
- Philosophy 1301: Introduction to Philosophy
- Psychology 1302: Introduction to Psychology
- Sociology 2303: Introduction to Sociology

**Integrity, Tolerance, Ethical Values, and Citizenship.**

AMERICAN HISTORY. Six semester hours. Select any two of the following:
- History 1301: History of the United States
- History 1302: History of the United States
- History 3309: History of Texas

STATE GOVERNMENT. Three semester hours.
- Political Science 2306: State Government

FEDERAL GOVERNMENT. Three semester hours.
- Political Science 2305: Federal Government

MULTICULTURAL. Three semester hours. Select one of the following:
- History 2301: Development of Western Civilization to 1453
- History 2302: Western Civilization since 1453
- Mexican-American Studies 2301: Introduction to Mexican-American Studies
- Political Science 2307: Women and the Law
- Women's Studies 2301: Introduction to Women's Studies

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

**Deadlines for Completion of Core Requirements.**

The basic skills component 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 basic skills component has been completed. This applies to transfer students as well as continuing students.
Requirements for the Bachelor of Arts Degree

Basic Skills
1. ENGLISH: Six semester hours. English 1301 and 1302.
2. MATHEMATICS: Three semester hours selected from Mathematics 1310, 1315, 1316, or 1342.
3. ORAL COMMUNICATION: Three semester hours selected from Communication 1303, or Theatre 2304.

Basic General Knowledge
1. FINE ARTS: Three semester hours selected from Fine Arts 1301, Art 1301, or Music 1312, 1313, or Theatre 1302, plus an additional 3 s.c.h. from art, journalism, music, theatre, or IT 2304.
2. KINESIOLOGY: Two semester hours. All students must complete a minimum of two semester hours of physical education activity courses, including P.E. 1150. P.E. 2101 (Intercollegiate Activities) cannot be used to fulfill P.E. activity requirements. No more than six additional semester hours of physical education activity courses may be presented as elective credit toward a degree.
3. LITERATURE: Three semester hours selected from English 2301 or other Literature course in English.
4. LABORATORY SCIENCE: Eight semester hours selected from Astronomy 1401 or 1402, Biology 1401 or 1402, Chemistry 1401 or 1402, Geology 1401, 1402 or 2404, Physics 1401, 1402, 2401 or 2402.
5. SOCIAL SCIENCES: Three semester hours selected from Anthropology 1301, Economics 2300 or 2305, Geography 1302 or 2302, Philosophy 1301, Psychology 1302, Sociology 2303.

Integrity, Tolerance, Ethical Values and Citizenship.
1. HISTORY: Six semester hours selected from History 1301,1302 or 3309
2. STATE GOVERNMENT: Three semester hours. Political Science 2306.
3. FEDERAL GOVERNMENT: Three semester hours. Political Science 2305.
4. MULTICULTURAL: Three semester hours selected from History 2301, 2302; Mexican American Studies 2301; Political Science 2307 ; Women's Studies 2301.

General Education
1. ENGLISH: Three semester hours of sophomore or advanced English.
2. FOREIGN LANGUAGE: Six to eight semester hours in one language. Students whose conversational competence in Spanish is satisfactory, as evaluated by the faculty of the Department of Languages and Literature, must complete a minimum of six semester hours. All others must complete a minimum of eight semester hours.

Major
1. 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.
2. All credit courses completed in a discipline required or not, count toward the maximum semester hours allowed in the major.
3. Majors may be selected from the following disciplines:
Minor
1. Students must complete a minor of at least eighteen semester hours except for General Studies, including a minimum of six hours at the advanced level and three advanced hours in residence at Sul Ross State University.

2. Minors may be selected from any of the disciplines which qualify for a major, except General Studies, Interdisciplinary Studies and Social Science, or from any of the following:
   - Administrative Systems & Geography
   - Business Technology Geology
   - Agricultural-Business Industrial Technology
   - Animal Science Journalism
   - Anthropology Kinesiology & Sports Science
   - Art Mathematics
   - Biology Mexican American Studies
   - Business Administration Music
   - Computer Information Systems Natural Resource Management
   - Chemistry Photography
   - Computer Science Sociology
   - Criminal Justice Theatre
   - Economics Women’s Studies
   - Environmental Studies

Additional Requirements
1. At least six hours of electives must be completed to present a minimum total of 120 semester 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. Each student will complete a computer knowledge requirement as determined by the department or major discipline.

8. Students should request a degree plan from their major advisor as soon as the major has been chosen. This should be done no later than the end of the third semester of enrollment.
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

Basic Skills
1. ENGLISH: Six semester hours. English 1301 and 1302.
2. MATHEMATICS: Six semester hours; 1315,1325
3. COMMUNICATION: GBA 4354

Basic General Knowledge
1. FINE ARTS: Three semester hours. Fine Arts 1301, Art 1301, or Music 1312, 1313 or Theatre 1302.
2. KINESIOLOGY: Two semester hours. All students must complete a minimum of two semester hours of physical education activity courses, including P.E. 1150. P.E. 2101 (Intercollegiate Activities) cannot be used to fulfill P.E. activity requirements. No more than six additional semester hours of physical education activity courses may be presented as elective credit toward a degree.
3. LITERATURE: Three semester hours selected from English 2301 or other Literature course in English.
4. LABORATORY SCIENCE: Seven to eight semester hours: Astronomy 1401, 1402; Biology 1401 or 1402; Chemistry 1401 or 1402; Geology 1401, 1402 or 2402 or Physics 1401, 1402, 2401 or 2402.
5. SOCIAL SCIENCES: ECO 2305

Integrity, Tolerance, Ethical Values and Citizenship.
1. HISTORY: Six semester hours selected from History 1301,1302, or 3309.
2. STATE GOVERNMENT: Three semester hours. Political Science 2306
3. FEDERAL GOVERNMENT: Three semester hours. Political Science 2305
4. MULTICULTURAL: GBA 4355

General Education
1. ENGLISH: Three semester hours of sophomore or advanced English
2. MATHEMATICS: Six semester hours, MATH 1315, 1325

Major
1. 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 52 semester hours of core curriculum courses.**
2. Students must complete at least thirty-three semester hours of core courses in Business Administration and at least fifteen (15) semester hours concentrated in one of the following areas: (1) Accounting; (2) Business Management; (3) Office Systems. **Students must complete 39 semester hours of required business courses.**
3. All courses completed in Business Administration, required or not, count toward the maximum semester hours allowed in the major. **Students must complete 14 semester hour of elective courses.**

**Minor**

A minor is not required, but with the approval of the Chairman 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. In addition to the General Educational and Major requirements, students must complete at least six hours of electives to present a minimum total of 130 semester 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-nine advanced semester hours must be completed, including at least fifteen in residence at Sul Ross State University.

4. A minimum of thirty-three 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. Each student will complete a computer knowledge requirement as determined by the department or major discipline.

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

8. Students should request a degree plan from their major advisor as soon as the major has been chosen. **This may be done at the beginning of the freshman year; but in any case, should be done no later than the end of the third semester of enrollment.**

**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**

**Basic Skills**

1. **ENGLISH:** Six semester hours. English 1301 and 1302.

2. **MATHEMATICS:** Three semester hours selected from Mathematics 1310, 1315, 1316, or 1342.

3. **ORAL COMMUNICATION:** Three semester hours selected from Communication 1303, or Theatre 2304.
Basic General Knowledge

1. FINE ARTS: Three semester hours selected from Fine Arts 1301, Art 1301 or Music 1312, 1313, or Theatre 1302.

2. KINESIOLOGY: Two semester hours. All students must complete a minimum of two semester hours of physical education activity courses, including P.E. 1150. P.E. 2101 (Intercollegiate Activities) cannot be used to fulfill P.E. activity requirements. No more than six additional semester hours of physical education activity courses may be presented as elective credit toward a degree.

3. LITERATURE: Three semester hours selected from English 2301 or other Literature course in English.

4. LABORATORY SCIENCE: Eight semester hours selected from Astronomy 1401 or 1402, Biology 1401 or 1402, Chemistry 1401 or 1402, Geology 1401, 1402 or 2404, Physics 1401, 1402, 2401 or 2402.

5. SOCIAL SCIENCES: Three semester hours selected from Anthropology 1301, Economics 2300 or 2305, Geography 1302 or 2302, Philosophy 1301, Psychology 1302, Sociology 2303.

Integrity, Tolerance, Ethical Values and Citizenship.

1. HISTORY: Six semester hours selected from History 1301, 1302 or 3309.

2. STATE GOVERNMENT: Three semester hours. Political Science 2306.

3. FEDERAL GOVERNMENT: Three semester hours. Political Science 2305.

4. MULTICULTURAL: Three semester hours selected from History 2301, 2302; Mexican American Studies 2301; Political Science 2307, Women's Studies 2301.

General Education

1. ENGLISH: Three semester hours of sophomore or advanced English.

2. FINE ARTS: Three to four semester hours selected from foreign language, journalism, music, theatre, or IT 2304.

Major

1. Students must complete a major of sixty semester hours in Art or Theatre including a minimum of twenty-four at the advanced level with twelve of the advanced hours in residence at Sul Ross State University.

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

Additional Requirements

1. At least six hours of electives must be completed to present a minimum total of 120 semester 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. Each student will complete a computer knowledge requirement as determined by the department or major discipline.
8. Students should request a degree plan from their major advisors as soon as the major has been chosen. This may be done at the beginning of the freshman year; but in any case, should be done no later than the end of the third semester of enrollment.

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 Science Degree

Basic Skills
1. ENGLISH: Six semester hours. English 1301 and 1302.
2. MATHEMATICS: Three semester hours selected from Mathematics 1310, 1315, 1316, or 1342.
3. ORAL COMMUNICATION: Three semester hours selected from Communication 1303, or Theatre 2304.

Basic General Knowledge
1. FINE ARTS: Three semester hours selected from Fine Arts 1301, Art 1301, or Music 1312, 1313, or Theatre 1302.
2. KINESIOLOGY: Two semester hours. All students must complete a minimum of two semester hours of physical education activity courses, including P.E. 1150. P.E. 2101 (Intercollegiate Activities) cannot be used to fulfill P.E. activity requirements. No more than six additional semester hours of physical education activity courses may be presented as elective credit toward a degree.
3. LITERATURE: Three semester hours selected from English 2301 or other Literature course in English.
4. LABORATORY SCIENCE: Eight semester hours selected from Astronomy 1401 or 1402, Biology 1401 or 1402, Chemistry 1401 or 1402, Geology 1401, 1402 or 2404, Physics 1401, 1402, 2401 or 2402.
5. SOCIAL SCIENCES: Three semester hours selected from Anthropology 1301, Economics 2300 or 2305, Geography 1302 or 2302, Philosophy 1301, Psychology 1302, Sociology 2303.

Integrity, Tolerance, Ethical Values and Citizenship.
1. HISTORY: Six semester hours selected from History 1301,1302 or 3309
2. STATE GOVERNMENT: Three semester hours. Political Science 2306
3. FEDERAL GOVERNMENT: Three semester hours. Political Science 2305
4. MULTICULTURAL: Three semester hours selected from Criminal Justice 3311,4301; History 2301,2302; Mexican American Studies 2301; Political Science 2307 Women's Studies 2301.

General Education
1. ENGLISH: Three semester hours of sophomore or advanced English.
2. LIFE/PHYSICAL SCIENCES: Six to eight semester hours selected from
Major
1. 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 which require fifty-four to sixty-one semester hours, Environmental Science which requires 53-57 s.c.h. and the major in Animal Science which requires 42-54 semester hours.)

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

3. Majors may be selected from the following disciplines:
   - Agricultural-Business
   - Animal Science
   - Biology
   - Chemistry
   - Computer Science
   - Criminal Justice
   - Economics
   - Environmental Studies
   - Geology
   - Interdisciplinary Studies
   - Industrial Technology
   - Kinesiology and Sports Science
   - Mathematics
   - Natural Resource Management

Minor
1. 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.

2. Minors may be selected from any of the disciplines which qualifies for a major, except for General Studies, Interdisciplinary Studies, Social Sciences and from the following:
   - Administrative Systems & Business Technology
   - Anthropology
   - Art
   - Business Administration
   - Computer Information Systems
   - Communication
   - Economics
   - English
   - Environmental Studies
   - Geography
   - History
   - Mexican American Studies
   - Music
   - Political Science
   - Psychology
   - Photography
   - Sociology
   - Spanish
   - Theatre
   - Women's Studies

3. In lieu of a minor, student pursuing a broad field in Environmental Studies will be required to complete a supporting field of at least 12 SCH including six hours at the advanced level and three advanced hours in residence at Sul Ross State University. The supporting field may be selected from the following:
   - Animal Science
   - Anthropology
   - Biology
   - Business Administration
   - Chemistry
   - Computer Information Systems
   - Economics
   - Environmental Studies
   - Geology
   - Humanities
   - Industrial Technology
   - Kinesiology and Sports Science
   - Management
   - Natural Resource Management
   - Natural Resource
   - Political Science
   - Psychology
   - Sociology
   - Spanish
   - Theatre
   - Women's Studies
   - Social Sciences
### Additional Requirements

1. At least six hours of electives must be completed to present a minimum total of 120 semester 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. Each student will complete a computer knowledge requirement as determined by the department or major discipline.

8. Students should request a degree plan from their major advisor as soon as the major has been chosen. **This may be done at the beginning of the freshman year; but in any case, should be done no later than the end of the third semester of enrollment.**

### 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 School 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 requires all graduate students who expect to be candidates for degrees to take the aptitude portion of the examination before admission to graduate study. The student should take this test before enrollment, or, at the latest, during the first term of graduate study. It 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 Center, 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 School.

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 Center, 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 Center 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, analytical and quantitative portions of the 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 Center 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 Center. 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.

A. FULL ADMISSION

Applicants must have official transcripts and test scores sent to the Center for Enrollment Center, Sul Ross State University. The Center for Enrollment Center 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 Center will
communicate to the applicant the admission status to be granted. One of the following criteria must be met for full admission status.

1. A 2.5 grade point average on a 4.0 scale calculated on the last 60 hours prior to the issuance of the bachelor's degree and a GRE score of 850 (verbal and quantitative) or a GMAT score of 400.
2. A minimum cumulative grade point average of 3.0 on a 4.0 scale on all previous undergraduate work. Full admission may also be granted to applicants who hold a master's degree from accredited colleges or universities and who have the approval of the department in which they propose 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.

B. PROBATIONARY ADMISSION
1. Probationary admission may be granted with the approval of the major academic department if a student has submitted transcripts of baccalaureate work and having satisfied at least one of the requirements specified in criteria number one for full admission. The probationary student must satisfy all conditions which are required by the major department and must maintain a 3.0 grade point average on all courses attempted for graduate credit. Upon the completion of 12 semester credit hours with a 3.0 grade point average or higher, the student may be upgraded to full admission status upon the recommendation of the chair of the major department and with the approval of the Dean of the School. Failure to maintain a 3.0 grade point average during the probationary period will result in dismissal from the graduate program.

2. Probationary status also may be granted to any student who has not submitted GRE or GMAT scores to the Office of Recruiting and Admissions. If required, the GRE or GMAT must be taken prior to the end of the second long semester (fall or spring) after initial enrollment.

The responsibility for monitoring the probationary student's compliance with all conditions of admission rests with the Center for Enrollment Center. The Center for Enrollment Center will track all probationally admitted students each semester, secure information as necessary from the department chairs and communicate to the major department chairs changes of status which are made. During the entire probational period, the student is responsible for maintaining close communications with the major department and, as called upon, with the dean/director of the School 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 School 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 Center:

A. Evidence of Financial Responsibility. This may be satisfied by an Affidavit of 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 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 Registrar 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...
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 OFFICE OF RECRUITING AND ADMISSIONS 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 at the time a degree plan is prepared. No requests for transfer of hours will be accepted after the degree plan is prepared without written approval of the major advisor and the Dean of the School 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 School. 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 Center
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.
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 is appointed by the President of the University and reports to the Provost and Vice President for Academic and Student Affairs. The Council is appointed from members of the Graduate Faculty representing the various graduate programs. The principal functions of the Council are twofold:

1. To serve as an academic appeals process for graduate students, and
2. To serve in an advisory capacity for recommending new degree and certification programs, admissions and graduation policies, criteria for membership on the graduate faculty, and policies to ensure high quality graduate programs throughout the University.

THE GRADUATE FACULTY

All graduate courses taught at Sul Ross State University are taught by members of the graduate faculty. The graduate faculty will inculcate the skills and habits of Scholarship, and the art of critical inquiry in the student. This is accomplished by apprenticeship and contact with the SCHolars of the graduate faculty through graduate teaching, directing or administering graduate research, or by making other contributions to the student's development.

A member 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 School 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 when a graduate degree plan is prepared.
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. Such courses must be accompanied by a memorandum written on department letterhead and submitted with the student's class Schedule.

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 description of the additional work must be on file in the departmental office by the 12th/4th class day via reporting forms which are available in the departmental offices.

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 (if any) fields considered separately. 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. Unless specifically stated elsewhere in this catalog in reference to particular programs or degrees, all course work taken for graduate credit, with the exception of out-of-date courses, will be counted in computing the grade point average.

**Probation and Reinstatement**

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

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

Suspension for grade point deficiency is for two consecutive long semesters (one full summer is equivalent to a long semester) at which time the student may petition for reinstatement to probationary status. Reinstatement, if granted, carries the condition that 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, and (2) the Dean of the appropriate School.

**THE GRADUATE DEGREE PLAN**

Degree plan request forms are available in the departmental offices. A student admitted to a graduate program must complete a degree plan prior to the second registration. For any degree, the student must receive approval for a degree plan from the head of the major and minor departments and the Dean of the School. If professional certification is desired, the student must also have the approval of the Director of Teacher Education. Any change in the approved plan will be permitted only on the basis of reasonable cause.

**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.

**ADMISSION TO CANDIDACY**

Application forms for Admission to Candidacy are available in the office of the School dean or division director. The admission process is not automatic. The request for Admission to Candidacy must be initiated by the student no later than the semester preceding the expected graduation.

The student should submit:

1. Application for Admission to Candidacy, and
2. Current copy of his/her transcript to the major advisor for review after completing the prerequisites for Admission to Candidacy indicated below.
To meet the requirements for Admission to Candidacy, the student must have:

1. Completed twelve semester credit hours at Sul Ross State University,
2. Maintained a grade point average of 3.0 in the major and minor independently,
3. Filed an approved degree plan in the Dean's Office, and
4. Removed any conditions imposed at the time of admission to the Graduate Program, including satisfactory test scores and leveling work.

The application for Admission to Candidacy will be reviewed by the advisor and the Dean. 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.
4. 

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 for thesis 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. A graduate teaching assistant or research assistant enrolled for at least twelve hours during the long semester (six during a summer term) is exempt from this provision; however, all graduate students must be enrolled for thesis when the thesis is accepted for graduation by the appropriate Dean.
3. A public oral defense of the thesis (which may accompany the comprehensive examination) is required of all candidates. Announcement of the defense must be posted in the major department, the appropriate School office and the office of the Provost and Vice President for Academic and Student Affairs at least one week prior to the defense.
4. The final copies of the thesis and abstract must be in the hands of the committee at least five weeks prior to the date of graduation. At least three weeks prior to the date of graduation, the final thesis, signed by the committee, must be in the Dean's Office for final approval.
5. The student must submit to the Dean's Office a receipt for the thesis fee paid in the Cashier's Office. This fee pays for the binding of four copies of the thesis, two for the University library, one for the major department, and one for the candidate. A portion of the fee is for publishing the abstract in Master's Abstracts.

COMPREHENSIVE EXAMINATION

All candidates for the master's degree must pass a comprehensive examination, either oral or written or both as the major department may prefer. This examination may be scheduled through the major advisor any time 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. Permission for a third and final examination requires consent of the major advisor, department chairman, and Dean. Should a third examination be allowed, a representative of the Dean's Office (must be a member of the Graduate Faculty) will attend the examination as a non-voting member of the committee. The results of each attempted examination must be filed in the Dean's Office.

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

REQUIREMENTS FOR A SECOND MASTER'S DEGREE

1. Subject to the approval of the dean or director of a division, 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 of less than B in each, including all extension and transfer work.
   c. All remaining courses necessary to complete the second master's degree must be resident 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.

2. The second master's degree will be subject to the general rules governing master's degrees except as stated above.
The School 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, 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 Associate of Applied Science, 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:

Certificate in Farrier Technology.

Associate of Applied Science with majors in Farrier Technology, Meat Technology and Veterinary Technology.

Bachelor of Science with majors in Agricultural Business, Animal Science (with concentrations in Agricultural Education, Animal Health Management, Animal Production, Equine Science, Meat Science, Pre-Veterinary Medicine, and Reproductive Physiology), and Natural Resource Management (with concentrations in Conservation Biology, Range 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 is the 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: Chance Campbell, Rodeo Coach, Sul Ross State University, P.O. Box C-110, Alpine, Texas 79832, Phone: (432) 837-8240, Fax (432) 837-8802, or www.sulross.edu/pages/3244.asp

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

Department of Animal Science
School of Agricultural and Natural Resource Sciences
Office: Turner Range Animal Science Center, 103
Phone: (432) 837-8200
Fax: (432) 837-8409
www.sulross.edu/pages/3222.asp
e-mail: pwill@sulross.edu

Professor and Chair: Paul Will, Ph.D.
Professors: Scott A. Ericsson, Ph.D.
Associate Professor: Jeffery S. Pendergraft, Ph.D., P.A.S., Dipl ACAN
Assistant Professor: Amy M. Coburn, D.V.M.

PROGRAM DESCRIPTION
The Department of Animal Science offers Associate of Applied Science (Farrier Technology, Meat Technology and Veterinary Health Technology), Bachelor of Science, Master of Agriculture (non-thesis) and Master of Science (thesis) degrees. Students pursuing a Bachelor of Science in Animal Science can choose a concentration in Agricultural Education with secondary teaching certification, Animal Health Management, Animal Production, Equine Science, Meat Science, Reproductive Physiology, and Pre-Veterinary Medicine academic advising. Graduate degrees include a Master of Agriculture (non-thesis) and a Master of Science (thesis) in Animal Science with concentrations in Agricultural Education, Animal Production, Equine Science, Meat Science, Reproductive Physiology, and Veterinary 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 training available for professional careers in the animal agricultural industry. We meet this goal with a curriculum solidly grounded in scientific principles that stress “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
• 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 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 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, swine, dogs, cats, rodents and several wildlife species. 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 (livestock showing and judging), Delta Tau Alpha (agricultural honorary society), Rodeo Club, Equine Science Association, Range and Wildlife Club, Sul Ross Veterinary and Technicians Association (SRVATA), and Graduate Student Association.

SCHOLARSHIPS
A variety of Scholarships are available to qualified applicants through the School 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.

CERTIFICATE IN FARRIER TECHNOLOGY
The Farrier Technology Certificate Program is designed to prepare students to meet the minimum industry standards for entry into the farrier profession. The prerequisite for admission is high School graduation or equivalent (GED). Following are the required courses and their suggested sequence.

<table>
<thead>
<tr>
<th>Fall</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science 1411, Basic Farrier Training</td>
<td>4</td>
</tr>
<tr>
<td>Animal Science 2307, Blacksmithing</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 2403, Equine Lameness Physiology and Veterinary Footcare</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Spring</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Systems and Business Technology 2380</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 2401, Advanced Farrier Training</td>
<td>4</td>
</tr>
<tr>
<td>Animal Science 2408, Ornamental Metal Working</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Summer</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Animal Science 4601, Techniques in Agricultural Enterprises</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>

**Grand Total 28**

ASSOCIATE OF APPLIED SCIENCE
The Department of Animal Science offers two-year Associate of Applied Science Degree programs in Farrier Technology, Meat Technology and Veterinary Technology. Although complete programs, each carries full university credit and may be used toward a four-year degree program by students who choose to complete the Bachelor of Science degree.

Farrier Technology - is designed to prepare the student for a career in professional horseshoeing.

<table>
<thead>
<tr>
<th>Major</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrative Systems and Business Technology 2380</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science 1302, 1401, 1411, 2302, 2307, 2401, 2403, 2408, 3312, 3401, 4601</td>
<td>42</td>
</tr>
<tr>
<td>Animal Science Elective</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>45</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>General Education</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Communication 1303</td>
<td>3</td>
</tr>
<tr>
<td>English 1301, 2304</td>
<td>6</td>
</tr>
<tr>
<td>Industrial Technology 2307, 4307, 4317</td>
<td>9</td>
</tr>
<tr>
<td>Math 1310 or 1315</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2306</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>72</strong></td>
</tr>
</tbody>
</table>
The following is a suggested sequence of courses for students seeking the Associate of Applied Science degree with a major in Farrier Technology.

First Year

Fall...............................................................Hours
Animal Science 1401, General Animal Science .............................................4
Animal Science 1411, Basic Farrier Training .................................................4
Communication 1303, Speech Communication ...........................................3
English 1301, Composition and Rhetoric ....................................................3
Math 1310 or 1315, University Math or Algebra........................................3
Total 17

Spring...........................................................Hours
Animal Science Elective .................................................................................3
Animal Science 1302, Radiology.................................................................3
Animal Science 2302, Equine Anatomy and Physiology ..............................3
Animal Science 2307, Blacksmithing..........................................................3
Industrial Technology 2307, Welding Technologies.......................................3
Political Science 2306, State Government.....................................................3
Total 18

Summer.........................................................Hours
Animal Science 4601,  
Techniques in Agric. Enterprises Farrier Technology.....................................6
Total 6

Second Year

Fall...............................................................Hours
Animal Science 2401, Advanced Farrier Training ..........................................4
Animal Science 2403, Equine Lameness Physiology and  
Veterinary Footcare......................................................................................4
Animal Science 2408, Ornamental Metal Working.........................................4
English 2304 Technical Writing....................................................................3
Total 15

Spring...........................................................Hours
Animal Science 3312, Equine Nutrition and Health.......................................3
Administrative Systems and Business Technology 2380,  
Administrative Procedures ...........................................................................3
Animal Science 3401, Corrective Horse Shoeing..........................................4
Industrial Technology 4307, Welding Technology.........................................3
Industrial Technology 4317, Special Process Welding...................................3
Total 16

Grand Total 72
Meat Technology - prepares students for employment in the meat industry.

Major........................................................................................................... Hours
Animal Science 1401, 2305, 3406, 3302 or 3309, 3402, 3407, 3411, 4300, 4302, 4306, 4602 .............................................................. 41
Animal Science Elective.................................................................................. 3
General Education .......................................................................................... Hours
Biology 1402, 2406 ....................................................................................... 8
Chemistry 1401 ............................................................................................. 4
Communication 1303 .................................................................................... 3
English 1301, 2304 ...................................................................................... 6
Math 1310 or 1315 ........................................................................................ 3
Political Science 2306 ................................................................................... 3
Total 71

The following is a suggested sequence of courses for students seeking the Associate of Applied Science degree with a major in Meat Technology.

First Year
Fall................................................................................................................. Hours
Animal Science 1401, General Animal Science ............................................. 4
Biology 1402, Zoology ................................................................................... 4
English 1301, Composition and Rhetoric ...................................................... 3
Math 1310 or 1315, University Math or Algebra ............................................ 3
Total 14

Spring.............................................................................................................. Hours
Animal Science 3406, Meat Science .............................................................. 4
Biology 2406, Introduction to Microbiology .................................................... 4
English 1401, General Chemistry ................................................................. 4
English 2401, Technical Writing .................................................................... 3
Political Science 2306, State Government .................................................... 3
Total 18

Summer........................................................................................................ Hours
Animal Science 4602, Practicum in Meat Industry Management ................. 6
Total 6

Second Year
Fall............................................................................................................... Hours
Animal Science 2305, Meat Animal Carcass Evaluation ............................... 3
Animal Science 3402, Beef Cattle Prod, and Management ......................... 4
Animal Science 3407, Sausage Manufacturing .............................................. 4
Animal Science 3411, Livestock Slaughter Inspection .................................... 4
Total 15

Spring............................................................................................................. Hours
Animal Science 4300, Meat Technology ........................................................ 3
Animal Science 3302 or 3309, Swine Prod., or Sheep and Goat Prod ......... 3
Animal Science 4302, Mgt. Procedures in the Meat Industry ...................... 3
Animal Science 4306, Control of Domestic & Wild Diseases .........................3
Animal Science Elective .................................................................................3
Communication 1303, Speech Communication .............................................3

Total 18
Grand Total 71

Veterinary Technology - prepares students to work for practicing veterinarians or for employment in related fields.

New students admitted to the program must complete all developmental Math, English, and Writing courses required to be admitted as a full-time student to Sul Ross State University. In addition, students must complete the following courses with a C or better prior to being admitted to the Veterinary Technology Program: English 1301, Math 1310, and Chemistry 1401. Students may be provisionally accepted into the program with the understanding that successful completion of these courses is required before full admission into the program. No second-year Veterinary Technology classes can be taken until these requirements are met. First year students not attaining a grade of C or better in all first year Veterinary Technology will not be allowed to continue into the second year of the program until grade deficiencies are remedied.

Major…………………………………………………………………………..Hours
Animal Science 1202, 2202, 1302, 1303, 1304, 1401, 1403, 2300, 2306, 2403, 2413, 2501, 3301, 3405, 3408, 3601 .......................... 58

General Education ................................................................................. Hours
Biology 2406 ..................................................................................................4
Chemistry 1401 ..............................................................................................4
Communication 1303 .....................................................................................3
English 1301 ..................................................................................................3
Math 1310 or 1315 ..........................................................................................3

Total 76

The following is a suggested sequence of courses for students seeking the Associate of Applied Science degree with a major in Veterinary Technology.

First Year

Fall……………………………………………………………………………..Hours
Animal Science 1305, Lab Animal Management............................................3
Animal Science 1403, Clinical Assistance.......................................................4
Chemistry 1401, General Chemistry .............................................................4
English 1301, Composition and Rhetoric ......................................................3
Math 1310 or 1315, University Math or Algebra .............................................3

Total 17

Spring………………………………………………………………………….Hours
Animal Science 1302, Radiology.................................................................3
Animal Science 1303, Surgical Assistance ...................................................3
Animal Science 1304, Pharmacology...........................................................3
Animal Science 1401, General Animal Science .............................................4
Animal Science 3405, Parasitology...............................................................4

Total 17

Second year

Fall……………………………………………………………………………..Hours
Animal Science 2202, Small Animal Clinical Nutrition ....................................2
Animal Science 2403, Equine Lameness Physiology and
Veterinary Footcare......................................................................................4
Animal Science 2501, Animal Anatomy/Physiology ....................................5
Animal Science 3301, Clinical Pathology .......................................................3
Communication 1303, Speech Communications............................................3

Total 17

Spring………………………………………………………………………….Hours
Animal Science 2300, Veterinary Ethics & Clinical Procedures .................... 3
Animal Science 2306, Small Animal Management.......................................... 3
Animal Science 2413, Animal Nutrition, Feeds and Feeding ........................ 4
Animal Science 3202, Summary Rev. in Vet. Technology ........................... 2
Animal Science 3408, Advanced Clinical Assistance ..................................... 4
Biology 2406, Introduction to Microbiology.................................................. 4

Total 20

Summer…………………………………………………………………….Hours
Animal Science 3601, Practicum in Veterinary Technology .......................... 6

Total 6

Grand Total 76

BACHELOR OF SCIENCE
(Animal Science-120-127 Hours)

Agricultural Education Concentration - is designed to consolidate the unique services of three departments to establish the agricultural production teaching certification program to teach Agriculture in Texas public Schools. To develop agricultural education professionals, 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. To secure these qualities each student will be involved with course work and extensive hands-on experience. This concentration offers career opportunities that include, but are 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.

Core Curriculum.................................................................60
Basic Skills Component
### Animal Health Management Concentration

- Designed to provide the courses necessary to train students properly in the area of management pertaining to disease prevention. This concentration is desirable for those students seeking admission to Veterinary School, employment in feedlots, in cattle and horse breeding operation, and in general farm and ranch work where knowledge of clinical pathology and related courses would be advantageous to the profession. The curriculum meets the requirements for the state and federal employment opportunities in the field of animal health.

<table>
<thead>
<tr>
<th>Core Curriculum</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Skills Component</td>
<td></td>
</tr>
<tr>
<td>English, 1301, 1302, 2304 and one additional soph or Adv lit</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics, select two from 1310, 1315, 1316, or 1342</td>
<td>6</td>
</tr>
<tr>
<td>Communication, select from Comm 1303 or Thea 2304</td>
<td>3</td>
</tr>
<tr>
<td>Basic General Knowledge</td>
<td></td>
</tr>
<tr>
<td>Fine Arts, select from any Fine Art, Art, or Music</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology, PE 1150 and PE 1153</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science, Chem 1401, Biol 1401, 1402, NRM 3405</td>
<td>16</td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303</td>
<td>3</td>
</tr>
<tr>
<td>Integrity, Tolerance, Ethical Values, and Citizenship</td>
<td></td>
</tr>
<tr>
<td>American History, select 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Federal Government, PS 2305</td>
<td>3</td>
</tr>
<tr>
<td>State Government, PS 2306</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural, ANSC 3303</td>
<td>3</td>
</tr>
<tr>
<td>Major</td>
<td>42-43</td>
</tr>
<tr>
<td>Animal Science 1101, 1401, 3201, 3310, 3310</td>
<td>13</td>
</tr>
<tr>
<td>Select from ANSC 3302, 3305, 3309, 3402, 3406</td>
<td>10-11</td>
</tr>
<tr>
<td>Natural Resource Sciences 2301, 2404</td>
<td>7</td>
</tr>
<tr>
<td>Industrial Technology, select 1306, 2305, 2307, 2309</td>
<td>12</td>
</tr>
<tr>
<td>Education</td>
<td>24</td>
</tr>
<tr>
<td>Block I</td>
<td>Block II</td>
</tr>
<tr>
<td>3302, 4314</td>
<td>3301, 3303</td>
</tr>
<tr>
<td>Total</td>
<td>126-127</td>
</tr>
</tbody>
</table>
Major ................................................................. 50-51
  Animal Science, 1101, 1401, 2413, 3308, 3315, 3406 ......................... 28
  Natural Resource Management, select from 1402, 2301, 2302, or 3405 ... 3-4
Concentration
  Animal Science, select from 1202, 1302, 1303, 1304, 1305, 1403, 2300, 2501, 3306, 3301, 3408, 4310 ......................... 19
Electives ................................................................. 10
  Total 120-121

Animal 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.

Core Curriculum................................................................. 60
Basic Skills Component
  English, 1301, 1302, 2304 and one additional soph or
  Adv lit................................................................. 12
  Mathematics, select two from 1310, 1315, 1316, or 1342........ 6
  Communication, select from Comm 1303 or Thea 2304 ........ 3
Basic General Knowledge
  Fine Arts, select from any Fine Art, Art, or Music...................... 3
  Kinesiology, PE 1150 and PE 1153 .................................. 2
  Laboratory Science, Chem 1401 and 1402,
  Biol 1402 and 2406 .................................................... 16
  Social Science, select from Anth 1301, Eco 2300 or 2305, Geog
  1302 or 2302, Phil 1301, Psy 1302, or Soc 2303 .............. 3
Integrity, Tolerance, Ethical Values, and Citizenship
  American History, 1301 and 1302.................................. 6
  Federal Government, PS 2305 ...................................... 3
  State Government, PS 2306 .......................................... 3
  Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302,
  MAS 2301, PS 2307 or WS 2301 ................................ 3
Major ................................................................. 49
  Animal Science, 1101, 1401, 2413, 3308, 3315, 3406
  4304, 4305, and 4306.................................................. 28
  Natural Resource Sciences, select from 1402, 2301, 2302, or 3405 ................................................................. 3-4
Concentration
  Animal Science, 2305, 3201, 3302, 3305, 3309, 3402 .............. 18
Electives ................................................................. 11
  Total 120
Equine Science Concentration - allows students to focus on a complete look at the horse and its industry. The objective of the program is to educate students about the diverse uses of the horse as well as provide students with a broad-based curriculum with a solid science background. The Equine Science program is committed to providing the educational needs for the horse enthusiasts, and educating the future horse industry professionals.

Core Curriculum .................................................................................................................. 60
Basic Skills Component

  English, 1301, 1302, 2304 and one additional soph or Adv lit .................................................................12
  Mathematics, select two from 1310, 1315, 1316, or 1342 ....................6
  Communication, select from Comm 1303 or Thea 2304 .....................3

Basic General Knowledge

  Fine Arts, select from any Fine Art, Art, or Music .................................3
  Kinesiology, PE 1150 and PE 1153 ......................................................2
  Laboratory Science, Chem 1401 and 1402, Biol 1402 and 2406 .............16
  Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303 .........................3

Integrity, Tolerance, Ethical Values, and Citizenship

  American History, 1301 and 1302 .........................................................6
  Federal Government, PS 2305 .............................................................3
  State Government, PS 2306 .................................................................3
  Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS 2301, PS 2307 or WS 2301 ......................................................3

Major ................................................................................................................................. 48

  Animal Science, 1101, 1401, 2413, 3308, 3315, 3406, 4304, 4305, and 4306 .................................................................28
  Natural Resource Sciences, select from 1402, 2301, 2302, or 3405 .................................3-4

Concentration

  Animal Science, 2204, 2304, 3305, 3307, 3312 ..................................14
  Select from ANSC 1302, 1304, 1305, 1411, 2302, 2303, 2307, 2308, 2325, 2401, 2403, 3301, 3306, 3313, 3314, 4303, 4307, 4310, 4312 ..............................................3-4

Electives .............................................................................................................................12

Total 120

Meat Science Concentration - focuses in the area of live animal evaluation, animal anatomy and physiology, beef, sheep, and swine production, carcass evaluation, slaughtering, processing, meat inspection, marketing, sausage manufacturing, meat processing, economics, and livestock management. A variety of career opportunities exist in meat processing, packaging, quality control, sales, marketing, research, consumer safety, international trade, education, and government agencies.

Core Curriculum .................................................................................................................. 60
Basic Skills Component

  English, 1301, 1302, 2304 and one additional soph or Adv lit .......................12
  Mathematics, select two from 1310, 1315, 1316, or 1342 .....................6
  Communication, select from Comm 1303 or Thea 2304 .......................3
Basic General Knowledge

Fine Arts, select from any Fine Art, Art, or Music.........................3
Kinesiology, PE 1150 and PE 1153..............................................2
Laboratory Science, Chem 1401, 1402,
  Biol 1402 and 2406.......................................................................16
Social Science, select from Anth 1301, Eco 2300 or 2305, Geog
  1302 or 2302, Phil 1301, Psy 1302, or Soc 2303.........................3

Integrity, Tolerance, Ethical Values, and Citizenship

American History, 1301 and 1302.................................................6
Federal Government, PS 2305......................................................3
State Government, PS 2306..........................................................3
Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS
  2301 or WS 2301.........................................................................3

Major ........................................................................................................... 48

Animal Science, 1101, 1401, 2413, 3308, 3315, 3406,
  4304, 4305, and 4306.................................................................... 28
Natural Resource Sciences, select from 1402, 2301, 2302,
  or 3405......................................................................................... 3-4

Concentration

Animal Science, 2305, 3407, 3411, 4300, 4302 .........................17

Electives ..................................................................................................... 12

Total 120

Reproductive Physiology Concentration - prepares students for careers
in the field of animal reproduction-breeding, research, teaching, business,
and for advanced study in animal science.

Core Curriculum..........................................................................................60

Basic Skills Component

English, 1301, 1302, 2304 and one additional soph or
  Adv lit.................................................................12
Mathematics, select two from 1310, 1315, 1316, or 1342..............6
Communication, select from Comm 1303 or Thea 2304...............3

Basic General Knowledge

Fine Arts, select from any Fine Art, Art, or Music.........................3
Kinesiology, PE 1150 and PE 1153..............................................2
Laboratory Science, Chem 1401, 1402,
  Biol 1402 and 2406.......................................................................16
Social Science, select from Anth 1301, Eco 2300 or 2305, Geog
  1302 or 2302, Phil 1301, Psy 1302, or Soc 2303.........................3

Integrity, Tolerance, Ethical Values, and Citizenship

American History, 1301 and 1302.................................................6
Federal Government, PS 2305......................................................3
State Government, PS 2306..........................................................3
Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS
  2301, PS 2307 or WS 2301.........................................................3

Major ........................................................................................................... 49

Animal Science, 1101, 1401, 2413, 3308, 3315, 3406,
  4304, 4305, and 4306.................................................................... 28
Natural Resource Sciences, select from 1402, 2301, 2302,
  or 3405......................................................................................... 3-4
Concentration
Animal Science, select 3 sections of 3310, and 4307, 4310........15
Select from ANSC 3302, 3309, 3402................................. 3-4
Electives ..................................................................................11
Total 120

Suggested Four Year Plan
The following is a generalized sequence of courses for students seeking the Bachelor of Science degree in Animal Science for all concentrations. For further assistance see your advisor. The Agricultural Education degree plan requires specific course sequencing not shown here.

Freshman Year.................................................................Hours
Science Core Requirement ...................................................4
Math Core Requirement .......................................................6
English 1301, 1302 ..............................................................6
History 1301, 1302 ..............................................................6
Animal Science 1101, 1401 ..................................................5
Natural Resource Management 1402, 2302, or 2301 ............3-4
Total 30

Sophomore Year............................................................Hours
Animal Science concentration ................................................8
English 2304 and Core Requirement .....................................6
Fine Arts Core Requirement ................................................ 3
Science Core Requirement ...................................................8
Social Science Core Requirement (includes 3 hrs Multicultural) 3
Total 28

Junior Year.................................................................Hours
Animal Science core 2413, 3308, 4306, and 6 hrs from concentration...16
Communication Core Requirement .........................................3
Electives .................................................................................4
Political Science Core Requirement .......................................6
Science Core Requirement .....................................................4
Total 33

Senior Year.................................................................Hours
Animal Science 4304, 4305, and 10 additional hrs from concentration ....16
Electives ..................................................................................8
Physical Education Core Requirement .....................................2
Social Science Core Requirement (includes 3 hrs Multicultural) ....3
Total 29
Grand Total 120
The Pre-Veterinary Medicine curriculum at Sul Ross State University is designed to meet or exceed the requirements for entrance into the Texas A&M University College of Veterinary Medicine. Students should write other Schools to request admission requirements and application forms. For current entrance requirements and suggested courses for the School of Veterinary Medicine at Texas A&M University see the Director of Veterinary Technology – Pre-Veterinary Medicine curriculum advisor (available in the Department of Animal Science, Turner Range Animal Science Center, room 103).

UNDERGRADUATE COURSES IN ANIMAL SCIENCE (ANSC)

(Subject titles and course numbers in parenthesis at the end of the course description represent the course equivalent in the Texas Common Course Numbering System.)

1101 Introduction to Agricultural and Natural Resource Sciences (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.

1202 Laboratory Animal Management (2-0). An introduction into types care, management and legislative regulations pertaining to laboratory animals. Offered fall.

1302 Radiology (2-2). Introduction into radiological techniques in veterinary hospitals and biomedical institutions. Introduction into X-ray with patient positioning, instrumentation and processing of films stressed. Introduction to contrast media. Offered spring.
Prerequisite ANSC 1403

1303 Surgical Assistance (2-2). Introduction of the veterinary technology student to the instruments, equipment, and techniques in all phases of surgical preparation, assisting, monitoring, anesthesia and post-operative nursing and clean-up. Offered spring.
Prerequisite ANSC 1403

1303 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.
Prerequisite: Chemistry 1401.

1401 General Animal Science (3-2). An introductory survey course. Farm animals as a source of food, clothing, labor; the place of livestock in farming; the place of the United States and Texas in the livestock industry, heredity, the basis for improvement; selecting and judging and its importance; the place and advantage of each type of livestock, showing classification; classification of the breeds and market types of horses, beef cattle, hogs, sheep, and goats. Offered fall and spring. (AGRI 1419)

1403 Clinical Assistance (3-2). An introduction into the principles of restraining domestic animals. This will involve the function, principles and use of certain mechanized restraint equipment as well as the use of common knots, halters and other restraint items. Introduction into injection and
1411 Basic Farrier Training (1-6). A basic course in the principles of horseshoeing including: common unsoundnesses, horse handling skill, hoof trimming, balancing, and cold shoeing technique. Necessary hand tools must be purchased by students. Offered fall and spring. Prerequisite: ANSC 2403 or concurrent enrollment.

2201 Live Animal Evaluation (1-2). This course is designed to give special training in the selection and judging of beef cattle, sheep, and swine. (AGRI 2221)

2202 Small Animal Clinical Nutrition (2-0). An emphasis on diet formulation and use of specialized diets in treatment of various disease conditions of companion animals. Prerequisite: ANSC 1403.

2204 Equine Stable Management I (0-4). This course focuses on applied aspects of stable management. Included are horse care and handling, management and upkeep of facilities, equipment operation and maintenance, personnel issues, public relations, and record keeping. Students will work closely with instructors to learn and practice skills necessary to effectively maintain and manage an equine facility. Each student will be responsible for the care of a horse throughout their stable management experience. Offered fall.

2205 Equine Stable Management II (0-4). This course continues the advanced hands-on learning skills from ANSC 2204. Included are horse care and handling in research settings, management and upkeep of the research facilities and equipment, operation and maintenance of research laboratories, and data record keeping. Students will work closely with instructors to learn and practice specialized skills necessary to effectively maintain and manage an equine facility. May be used as elective only. Offered spring.

2300 Veterinary Ethics and Clinic Procedures (3-0). An in-depth study of laws and regulations governing veterinary medicine and the role of the veterinary technical assistants in clinic operations. Offered spring only. Prerequisite: ANSC 1303, 1403, 2501, 3301.

2302 Equine Anatomy and Physiology (2-2). Students will study the anatomy of the horse's body systems including skeletal, respiratory, cardiovascular, nervous, muscular, digestive, reproductive, and endocrine systems. Students will study the way the body functions for growth, nutrition, metabolism and neurological response at the cellular, systemic and total body levels. Fall odd years, alternates with ANSC 3305.

2303 Horsemanship (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.
2304 Equine Behavior Modification (1-4). Emphasis will be placed on application of actual training techniques for 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. Fall even years.

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.

2306 Small Animal Management (3-0). A study of breeds, management, nutrition and diseases of the dog and cat. Offered spring.

2307 Blacksmithing (1-4). Forge operation and basic blacksmithing techniques including drawing, upsetting, punching, twisting and forge welding. Projects will consist of brands, gate hardware, spurs, bits, knives, spoons, and ornamental ironwork. Tool sharpening, steel tempering, and forged machinery part repair will also be included. Offered fall and spring.

2325 Equine Business Management (3-0). A study of the management practices of different types of horse businesses. Discussion will focus on many aspects of running a horse facility, including contracts and records, budgeting, insurance, employees, taxes, advertising, client relationships and the development of a professional attitude. The introduction of equine management software will be done in this course. Offered spring even years.

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.

2403 Equine Lameness Physiology and Veterinary Footcare (3-2). Animal healthcare course designed to develop the knowledge and skills of an equine professional. Students will study anatomy, disease of the foot, and lameness of the limbs. Students will then learn to diagnose and treat the lameness through corrective shoeing theory and practice.

2408 Ornamental Metal Working (3-2). Ornamental metal working, similar to blacksmithing, involving forge operation and blacksmithing techniques. Projects will include jewelry, flowers, animals and other ornamental metals works.

2413 Animal Nutrition, Feeds and Feeding (3-2). A study of nutritive requirements for all classes of livestock and/or wildlife and feed suitability for each type. Special emphasis is on computing balanced rations from available feed stuffs. (Offered spring & Summer).

Prerequisite: Math 1305 or above or ANSC 2501 and Math 1305, 1310 or above (for Veterinary Technicians). Organic chemistry recommended.

2501 Animal Anatomy/Physiology (4-3). A basic course to teach the students the fundamentals of the structure and function of the various organ systems in the common domestic animals. Offered fall.

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.

Prerequisite: ANSC 2201 or permission of instructor.
**3202 Summary Review in Veterinary Technology (2-0).** Review of all subjects covered in the Veterinary Technology program in preparation for taking the VTNE for certification as a Veterinary Technician. To be taken the last semester of the Veterinary Technology course of study.
Prerequisites: Successful completion with the grade of “C” or better in the following courses; ANSC 1202, 1302, 1303, 1304, 1401, 1403, 2202, 2300, 2306, 2501, 3301, 3408, Biology 2406.

**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.
Prerequisite: Chemistry 1401.

**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.

**3303 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.

**3304 Agricultural Education in Secondary Schools (3-0).** This class provides an overview of agricultural education, TEKS, TEA regulations, secondary School policy and the leadership opportunities available for students who participate in agricultural education in high School.

**3305 Horse Production and Management (3-0).** Introduction to the various careers and economics associated with the equine industry. The course will focus on basic equine care and use, breeds, identification methods, horse selection, and diseases and disease control. Offered fall even years, alternate with ANSC 2302.

**3307 Equine Reproduction Management (3-0).** Theory and practice in reproductive management and breeding techniques of the horse. Includes basic reproductive physiology of the stallion and mare, demonstration and practice in semen collection and processing, teasing systems, natural and artificial breeding techniques, management, and record keeping. Offered spring, alternates with ANSC 4312.

**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 1305, 1310, 1342 or permission of instructor.
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.

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.

3312 Equine Nutrition and Health (3-0). A detailed study of the nutrient requirements of horses for various stages of growth, work, reproduction, and lactation. Ration formulation using various feed ingredients. Relationships among nutrition, feed-related diseases, environment, and management. Review of current horse nutrition research. Offered fall, alternate with ANSC 3313.

3313 Equine Exercise Physiology (3-0). In-depth study focusing on the physiological changes that occur in the respiratory, cardiovascular and muscle-skeletal system in the exercising horse. Special emphasis will be placed on conditioning the performance horse. Offered fall, alternate with 3312.

3314 Farrier Business Applications and Ethics (3-0). To make Farrier Technology students proficient in automated systems for preparing and maintaining business records and files, maintaining banking information and tax information, updating customer account files and bank accounts printing reports, and balancing checkbooks. Also familiarize the student with updated veterinary ethics and laws as they pertain to a professional farrier practice.

3315 Behavior and Management of Domestic Animals (3-0). An in-depth study into the basic components of animal behavior and how these principles apply to the management of domestic livestock. Special emphasis will be placed on facility design, handling techniques, stress, training and current animal welfare and ethics issues.

3401 Corrective Horse Shoeing (3-2) An advanced course in Farrier Technology that will focus on correcting foot lameness in the horse through specialized shoeing.

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.

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. Prerequisite: General Zoology or equivalent.

3406 Meat Science (2-4). Course content to include slaughtering and cutting carcasses of cattle, sheep, and hogs. Cutting, wrapping, and storage of carcasses. Factors affecting meat quality and palatability. Offered fall.
3407 Sausage Manufacturing (3-2). The manufacturing of processed meats. Product formulation, curing, smoking, sanitation, and quality control. Offered spring.

3408 Advanced Clinical Assistance (3-2). Review and further use of X-ray techniques including the use of contrast media. Further evaluation of the role of the assistant in anesthesia and the surgery room. Post-mortem principles and techniques of opening carcasses of all species, proper presentation of anatomical systems for examination and diagnosis by the veterinarian. Proper selecting, packing and sending of tissues to laboratories for examination. Offered spring only. Prerequisite: ANSC 1202, 2501, 1302, 1303 and 3404.

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.

3601 Practicum in Veterinary Assistance (0-6). This course requires working with a practicing veterinarian in an internship program. Credit will be granted upon receipt of the cooperating veterinarian’s report of the student’s performance as a participant in the internship activities. Prerequisite: Satisfactory completion of two years of the Veterinary Technology program and permission of the instructor.

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.

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.

4303 Advanced Animal Nutrition (3-0). The purpose of this course is to present advanced principles of nutrition and their application to feeding practice. Special attention will be given to the nutritive requirements of farm animals as demonstrated in most recent experiments in the field. Offered alternate years. Prerequisite: ANSC 2413.

4304 Reproductive Physiology (2-2). Study of anatomical and physiological process of reproduction in domestic animals and wildlife. Offered fall.

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.
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 affected animals. Offered alternate years, fall only.
Prerequisite: Biology 2406 or permission of instructor.

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.

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.

4311 Problems in Range 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.

4312 Inquiry into Equine Science (0-6). The purpose of this course is to provide the senior level undergraduate student with the scientific application of biological and biotechnological principles in the discipline of horse production and research. Emphasis will be placed on advanced principles of nutrition, reproduction and exercise physiology and their relationships to the efficient production of horses. Offered spring, even years, alternate with ANSC 3307.
Prerequisite: ANSC 3307, ANSC 3312 or ANSC 3313.

4601 Techniques in Agricultural Enterprises (0-6). In-depth training in the management of various agriculture enterprises and actual on-the-job supervised training. Students will be required to make an in-depth report of facility after completion of training period. Offered all semesters.
Prerequisite: Approval of ANSC chair.

4602 Practicum in Meat Industry Management/Meat Technology (0-6). This course requires training in meat related activities. On-the-job supervised training will be conducted. Students will be required to make an in-depth report of the facility after completion of the training program. Offered summer only, alternate (odd) years.
Prerequisite: Permission of instructor.

GRADUATE PROGRAMS IN ANIMAL SCIENCE

The Department of Animal Science offers programs of study leading to the Master of Science (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. Offerings in collateral fields enable the student to develop a program tailored to their particular needs and interests.

Master of Science (Thesis) Animal Science-30 hours

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.

Students 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.

Master of Agriculture (Non-thesis) Animal Science-36 hours

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

- ANSC 5301 Seminar in Animal Science
- ANSC 5307 Physiology and Biochemistry of Muscle as a Food
- ANSC 5309 Advanced Animal Nutrition
- ANSC 5310 Advanced Reproduction Physiology
- ANSC 5311 Scientific Writing
- ANSC 5312 Biostatistical Analysis I
- ANSC 5313 Biostatistical Analysis II
- ANSC 5317 Agricultural Biochemistry
- ANSC 5318 Advanced Agricultural Genetics

plus 9 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.

Students 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.

GRADUATE COURSES IN ANIMAL SCIENCE (ANSC)

5301 Seminar in Animal Science (3-0). This course is designed to be flexible enough to meet the needs of graduate students studying in the various disciplines in Animal Science. Subject matter to be selected by the students under the guidance of the instructor. May be repeated under different subject matter titles.
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.

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.

5307 Physiology and Biochemistry of Muscle as a Food (3-0). Emphasizes biochemical, histological, anatomical, and physical factors associated with the transformation of the muscle cell into meat.

5309 Advanced Animal Nutrition (3-0). Physiological aspects of digestion and absorption; nutrient content of livestock feeds and methods of analyzing nutritional energetics, nutrient requirements of different farm animals and the application of current concepts in nutrition to ration formulation and nutritional programs.

5310 Advanced Reproductive Physiology (3-0). Advanced study of the physiological basis of reproduction, including hormonal and nervous system pathways affecting estrous cycles, ovulation, parturition, and spermatogenesis.

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 students chosen field. Scientific publications are emphasized.

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.

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, multsample 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. Prerequisite: ANSC 5312 or permission of instructor.

5314 Endocrinology (3-0). Structure and function of endocrine glands and how their secretions regulate biochemical reactions, integrate tissue and organ systems, and control behavior.

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.

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.

5317 Agricultural Biochemistry (3-0). The biochemical properties of macromolecules found in living matter, including proteins, enzymes, and nucleic acids. The study of metabolic regulation, including lipids, proteins, and carbohydrates.

5318 Advanced Agricultural Genetics (3-0). Principles of genetics and their application to livestock, including cell reproduction, Mendelian genetics, biochemistry of genetics, gene structure and functions and genetics of populations.

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.

6301 Thesis Proposal (0-6). Satisfactory completion of this course will result in an acceptable prospectus presented to the Graduate Committee.

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 Provost and Vice President for Academic and Student Affairs.
DEPARTMENT OF
NATURAL RESOURCE MANAGEMENT
(Including Agricultural Business, Range and Wildlife Management, and Conservation Biology)

Department of Natural Resource Management
School of Agricultural and Natural Resource Sciences
Office: Range Animal Science 111
Phone: (432)837-8488
Fax: (432)837-8822
www.sulross.edu/pages/3233.asp
e-mail: nrm@sulross.edu

 Associate Professor and Chair: Bonnie J. Warnock, Ph.D
 Professors: Louis A. Harveson, Ph.D., Robert J. Kinucan, Ph.D., and Jimmy T. LaBaume, Ph.D.
 Assistant Professors: Patricia Moody Harveson, Ph.D.

The Department of Natural Resource Management offers Bachelor of Science degrees in Agricultural Business and 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 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 range management, wildlife management, or ecosystem management.

The Department of Natural Resource Management is designed to educate students in the art and science of applied 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."

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, nutrition wet lab, game bird specimen collection, plant collections, greenhouse, Natural Resource Management Technologies Computer Lab, Range and Wildlife Field Unit at Elephant Mountain Wildlife Management Area, the 14,700-acre Faskin Ranch, 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, and Forest Service. We interact with many private, state and federal organizations which 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 Mountain 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. We help you take advantage of this natural laboratory through field trips and class projects. 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 School 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.

AGRICULTURAL BUSINESS PROGRAM DESCRIPTION
The Agricultural Business program 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 fundamental principles in agricultural business are the same as those applied in any other business field, regardless of the product or service being produced or marketed. Identical skills apply equally to the family farm as to the multinational corporation. However, a few things make agribusiness unique. For example, the agribusiness manager is often dealing with a perishable product that is produced seasonally. It is often easier for the manager with a background in agriculture to transition to other fields of business than it is for someone without that background to transition into agribusiness.

In addition to the fundamentals of agricultural sciences, agricultural business students at Sul Ross receive a basic grounding in macro- and micro-economic theory with a world-view. The program also provides tools necessary to apply this theory to the management of modern agribusiness.

CAREER OPPORTUNITIES IN AGRICULTURAL BUSINESS
• Agricultural Stabilization and Conservation Service
• U.S. Department of Agriculture
• Ranches
• Banks
• Agricultural Credit Associations
• Insurance Companies
• Consulting Firms
• Agricultural Product Distribution and Sales
• Production and Processing Management
• Personnel Management
• Accounting and Financial Marketing
• Stock and Commodities Brokerage
# BACHELOR OF SCIENCE
## Agricultural Business
### 120 hours

**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.

### Core Curriculum

<table>
<thead>
<tr>
<th>Component</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Skills Component</td>
<td>12</td>
</tr>
<tr>
<td>English, select 1301, 1302, 2304 and one additional soph or Adv lit.</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics, select two from 1310, 1315, 1316, or 1342</td>
<td>6</td>
</tr>
<tr>
<td>Communication, select from Comm 1303 or Thea 2304</td>
<td>3</td>
</tr>
<tr>
<td>Basic General Knowledge</td>
<td>16</td>
</tr>
<tr>
<td>Fine Arts, select from any Fine Art, Art, or Music</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology, PE 1150 and PE 1153</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science, select from Astr 1401, 1402, Biol 1401, 1402 Chem 1401, 1402, Geol 1401, 1402, 2404, Physics 1401, 1402, 2401, 2402</td>
<td>16</td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303</td>
<td>3</td>
</tr>
<tr>
<td>Integrity, Tolerance, Ethical Values, and Citizenship</td>
<td>6</td>
</tr>
<tr>
<td>American History, select 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Federal Government, select PS 2305</td>
<td>3</td>
</tr>
<tr>
<td>State Government, select PS 2306</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS 2301, PS 2307 or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td>Major50</td>
<td>24</td>
</tr>
<tr>
<td>NRM 1101</td>
<td>1</td>
</tr>
<tr>
<td>Select from ANSC 1401, 2406, 2413, 3315, 4304, 4305, 4306, 4307, Natural Resource Sciences, select from 2301, 2302, 2404, 3304, 3308, 3401, 4406, 4407</td>
<td>24</td>
</tr>
<tr>
<td>Concentration</td>
<td>25</td>
</tr>
<tr>
<td>Agricultural Business, select 2302, 3402, 4302, 4303, 4304, 4308, 4315, 4316</td>
<td>25</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td>Total120</td>
<td></td>
</tr>
</tbody>
</table>

- **Total**: 120 hours
Bachelor of Science Agricultural Business

The following is a suggested sequence of courses for students seeking the Bachelor of Science degree with a major in Agricultural Business.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resource Management 1101</td>
<td>1</td>
</tr>
<tr>
<td>Agricultural Business 2302</td>
<td>3</td>
</tr>
<tr>
<td>Animal Science and/or Natural Resource Management</td>
<td>4</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Science Core Requirement</td>
<td>4</td>
</tr>
<tr>
<td>Math Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Business 3402, 4308, 4315</td>
<td>10</td>
</tr>
<tr>
<td>Animal Science and/or Natural Resource Management</td>
<td>4</td>
</tr>
<tr>
<td>English 2304 and Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Science Core Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Social Science Core Requirement (includes 3 hrs Multicultural)</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Business, 4302, 4316</td>
<td>6</td>
</tr>
<tr>
<td>Animal Science and/or Natural Resource Management</td>
<td>8</td>
</tr>
<tr>
<td>Science Core Requirement</td>
<td>4</td>
</tr>
<tr>
<td>Communication Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Political Science Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agricultural Business 4303, 4305</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education Core Requirement</td>
<td>2</td>
</tr>
<tr>
<td>Animal Science and/or Natural Resource Management</td>
<td>8</td>
</tr>
<tr>
<td>Social Science Core Requirement (includes 3 hrs Multicultural)</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

**Grand Total 120**
Undergraduate Courses In Agricultural Business (AGB)

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering System.)

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. Offered spring.

3402 Agricultural Marketing (3-2). 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. Offered fall (AGRI 1325)

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.

4302 Agricultural Salesmanship (3-0). Fundamentals of salesmanship as they apply specifically to selling for agri-business. Includes topics such as the psychology of selling, understanding customers, communication in sales, the process of selling, career opportunities in sales, and selling in the future. Offered spring, alternate even years.

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.

4305 Economic Taxation of Agriculture (3-0). This course introduces the student to the topic through an historical overview of taxation in the United States. It then explores the socio-economic impacts of some of the major types of taxation. The emphasis under each of these topic headings is on the economic impacts and influences on farm, ranch, and agribusiness decision making processes.

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.

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.

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. Offered spring alternate (odd) years. Prerequisite: ACC 2330.
4316 International Development 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. Offered spring, alternate (odd) years.

NATURAL RESOURCE MANAGEMENT PROGRAM DESCRIPTION

The Natural Resource Management program is designed to meet civil service requirements for resource management specialists with federal agencies, or meet The Wildlife Society's criteria for certification as an Associate and Certified Wildlife Biologist.

Our degrees offer great flexibility to customize your education to meet your interests and needs by providing a wide selection of minors to choose from. Some of the more popular minors for our students majoring in Natural Resource Management include Biology (wildlife biologist, range scientist), Chemistry (environmental consulting), Criminal Justice (game warden), and Agricultural Business or Industrial Technology (ranch manager). 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

- U. S. Fish and Wildlife Service
- Wildlife Services
- Natural Resource Conservation Service
- U. S. Forest Service
- Bureau of Land Management
- National Park Service
- State Parks & Wildlife Department
- Agricultural Extension Service
- Environmental Consulting Firms
- Ranches and Ranch Consulting
- Conservation Organizations
BACHELOR OF SCIENCE
NATURAL RESOURCE MANAGEMENT-120 HOURS
(With concentrations in Wildlife Management, Range Management, or Conservation Biology)

The Natural Resource Management (NRM) curriculum is designed to educate students in the art and science of applied ecological knowledge to manage natural resources. Students may select a concentration in wildlife management, range management, or conservation biology, which allows them to meet professional requirements as a wildlife biologist or resource conservationist. Students receive a broad education in natural resources, plant and animal ecology and management, and obtain specific expertise in their chosen concentration. Natural Resource Management majors may minor in any other four-year degree option at the institution. Practicum courses may not be used as a minor subject.

Wildlife Management Concentration - is designed to educate students in the art and science of applied ecological knowledge to manage natural resources. Students receive a broad education in natural resources, plant and animal ecology and management.

Core Curriculum 60
Basic Skills Component
- English, select 1301, 1302, 2304 and one additional soph or adv lit. 12
- Mathematics, select two from 1310, 1315, 1316, or 1342..............6
- Communication, select from Comm 1303 or Thea 2304...............3

Basic General Knowledge
- Fine Arts, select from any Fine Art, Art, or Music..........................3
- Kinesiology, PE 1150 and PE 1153............................................2
- Laboratory Science, select Biol 1401, 1402, Chem 1401 and GIS 3401.....................................................................................16
- Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303.....................3

Integrity, Tolerance, Ethical Values, and Citizenship
- American History, select 1301 and 1302.................................6
- Federal Government, select PS 2305........................................3
- State Government, select PS 2306............................................3
- Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS 2301, PS 2307 or WS 2301 .....................................................3

Major ..........................................................................................51
- Animal Science, select 1401, 4305..............................................7
- Natural Resource Sciences, select 1101, 2301, 2302, 2404, 3304, 3306, 3401, 4406, 4407.........................................................29
### Concentration
Wildlife Management, select 3409, 4309, 4405, 4408 ..........14
Additional courses in NRM suggested as use for electives 3301, 3302, 3303, 4301, 4314

### Electives .................................................................9

### Additional courses needed for Wildlife Biologist Certification
Biol 4404, 4406, 4409; CJ 3304 or PS 2304 if not NRM 3304 and 4301; Also Biol 4406 or NRM 3303

**Total 120**

### Range Management Concentration
- is designed to educate students in the art and science of applied ecological knowledge to manage natural resources. Students receive a broad education in natural resources, plant and animal ecology and management.

### Core Curriculum

<table>
<thead>
<tr>
<th>Component</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Skills Component</strong></td>
<td></td>
</tr>
<tr>
<td>English, select 1301, 1302, 2304 and one additional soph or Adv lit.</td>
<td>12</td>
</tr>
<tr>
<td>Mathematics, select two from 1310, 1315, 1316, or 1342</td>
<td>6</td>
</tr>
<tr>
<td>Communication, select from Comm 1303 or Thea 2304</td>
<td>3</td>
</tr>
<tr>
<td><strong>Basic General Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>Fine Arts, select from any Fine Art, Art, or Music</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology, PE 1150 and PE 1153</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science, select Biol 1401, 1402, Chem 1401 and GIS 3401</td>
<td>16</td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303</td>
<td>3</td>
</tr>
<tr>
<td><strong>Integrity, Tolerance, Ethical Values, and Citizenship</strong></td>
<td></td>
</tr>
<tr>
<td>American History, select 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Federal Government, select PS 2305</td>
<td>3</td>
</tr>
<tr>
<td>State Government, select PS 2306 or Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS 2301, PS 2307 or WS 2301</td>
<td>3</td>
</tr>
<tr>
<td><strong>Animal Science, select 1401, 4305</strong></td>
<td>7</td>
</tr>
<tr>
<td>Natural Resource Sciences, select 1101, 2301, 2302, 2404, 3304, 3308, 3401, 4406, 4407</td>
<td>29</td>
</tr>
<tr>
<td><strong>Concentration</strong></td>
<td></td>
</tr>
<tr>
<td>Range Management, select from 3301, 3302, 3303, 4301, 4314, 4405</td>
<td>14</td>
</tr>
<tr>
<td>Additional NRM courses can be used as electives 3409, 4309, 4408</td>
<td></td>
</tr>
<tr>
<td><strong>Electives</strong></td>
<td>10</td>
</tr>
</tbody>
</table>

**Total 120**
Conservative Biology Concentration - is designed to educate students in the art and science of applied ecological knowledge to manage natural resources. Students receive a broad education in natural resources, plant and animal ecology and management.

Core Curriculum ........................................................................................................60
Basic Skills Component

- English, select 1301, 1302, 2304 and one additional soph or adv lit. .................................12
- Mathematics, select two from 1310, 1315, 1316, or 1342 ............................................6
- Communication, select from Comm 1303 or Thea 2304 ..................................................3

Basic General Knowledge

- Fine Arts, select from any Fine Art, Art, or Music .............................................................3
- Kinesiology, PE 1150 and PE 1153 .................................................................................2
- Laboratory Science, select Biol 1401, 1402, Chem 1401 and GIS 3401 ......................16
- Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303 .........................................................3

Integrity, Tolerance, Ethical Values, and Citizenship

- American History, select 1301 and 1302 .................................................................6
- Federal Government, select PS 2305 .................................................................3
- State Government, select PS 2306 ............................................................................3
- Multicultural, select from CJ 3311 or 4301, Hist 2301 or 2302, MAS 2301, PS 2307 or WS 2301 .................................................................3

Major ..................................................................................................................................47

- Animal Science 4305 .................................................................................................3
- Natural Resource Sciences, select 1101, 2301, 2302, 3304, 3308, 3310, 3401, 4309, 4405, 4407 .................................................................31

Concentration

- Conservative Biology, select from 3303, 3409, 4301, 4314, 44081 ..........................3
- Additional courses suggested for use as electives
  - Biol 4403, 4404, 4406, 4409, NRM 2404, 3301, 3302, 4406, PS 2304

Electives ..........................................................................................................................13

Total 120
## Natural Resource Management Bachelor of Science

The following is a suggested sequence of courses for students seeking the Bachelor of Science degree with a major in Natural Resource Management.

<table>
<thead>
<tr>
<th>Freshman Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resource Management 1101, 2301, 2302</td>
<td>7</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>History 1301</td>
<td>3</td>
</tr>
<tr>
<td>Science Core Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Math Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophomore Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resource Management 2404, 3304</td>
<td>7</td>
</tr>
<tr>
<td>English 2304 and Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Science Core Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Social Science Core Requirement (including 3 hrs Multicultural)</td>
<td>6</td>
</tr>
<tr>
<td>Animal Science 1402</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Junior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resource Management 3308, 3401, 4406 and 3 additional hrs</td>
<td>14</td>
</tr>
<tr>
<td>History 1302</td>
<td>3</td>
</tr>
<tr>
<td>Communication Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Political Science Core Requirement</td>
<td>6</td>
</tr>
<tr>
<td>Animal Science 4305</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Senior Year</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natural Resource Management 4407, and 11 additional hrs</td>
<td>15</td>
</tr>
<tr>
<td>Fine Arts Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education Core Requirement</td>
<td>2</td>
</tr>
<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

**Grand Total 120**
1101 Introduction to Agricultural and Natural Resource Sciences (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.

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. Offered spring.

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.

2302 Wildlife Resources (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. Offered fall.

2404 Soils (3-2). 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. Offered fall, even years and summers.

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. Offered fall, odd years.

3302 Forest Ecology (3-0). Introduction to forest ecosystems. Includes forest types and distribution, inventory and monitoring techniques and management of forest ecosystems. Offered summer, even years.

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. Offered fall.

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. Offered fall, odd years.

Prerequisite: NRM 2302.
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 1310, 1315, 1342 or permission of instructor.

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.

3401 Rangeland Ecology (3-2). 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. Offered fall.

3405 Horticulture (3-2). 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. Offered spring, odd years.

3409 Upland and Wetland Wildlife Management (3-2). Application of wildlife management principles to wildlife species in upland and wetland habitats; a survey of migratory and nonmigratory upland and wetland wildlife species; discussion regarding common management practices and survey techniques for monitoring upland and wetland species. Offered spring, odd years. Prerequisite: NRM 2302.

4301 Environmental Assessment (3-0). An overview of environmental assessments, including, but not limited to environmental impact statements, gap analysis, natural resource and biological survey techniques. This course will review legal requirements, as well as assessment procedures currently used by private entities and federal and state agencies. Offered fall, even years. Prerequisite: NRM 2301 and NRM 2302 (NRM 4406 and NRM 4407 recommended) or permission from instructor.

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.

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. Offered alternate years, fall. Prerequisite: Biology 2406 or permission of instructor.

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. Offered spring, even years. Prerequisite: NRM 2302 and junior or senior status or approval of instructor.

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.

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. Offered spring, even years.

4405 Range and Wildlife Habitat Management (3-2). 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. Also incorporates the effects of these practices on livestock and wildlife interactions. Offered fall, odd years.  
Prerequisite: NRM 2301 or NRM 2302 and junior or senior status or approval of instructor.

4406 Range Inventory and Analysis (3-2). An overview of methods for measuring and analyzing rangeland plant communities and populations; statistical analysis of sampling; techniques to inventory rangeland resources; determining range condition and trend; determining forage production and utilization; determining proper stocking rates; development of management plans. Offered spring. Prerequisite: NRM 2301 or NRM 2302 or permission of instructor.

4407 Wildlife Management Techniques (3-2). An overview of habitat inventory and evaluation techniques, census methods; age and sex criteria; banding data analysis; research methods in wildlife management. Offered spring. Prerequisite: NRM 2302 and junior or senior status or approval of instructor.

4408 Big Game Management (3-2). Application of the principles of wildlife management to big game species; habitat management, production, population characteristics and management strategy for each big game species will be stressed. Offered fall, odd years. Prerequisite: NRM 2302.

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

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

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 agricultural 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 900 (verbal and quantitative) are required for full admission to the program. Contact the department for additional application materials and requirements.

The Department of Natural Resource Management recently formalized a 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 Rangeland Ecology 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
- NRM 5305 - Range and Wildlife Research Methods
- NRM 5306 - GIS, GPS and Remote Sensing for Resource Managers
- NRM 5311 - Scientific Writing
- NRM 5312 – Bio-statistical Analysis I
- NRM 5313 – Bio-statistical Analysis II
- NRM 6301 - Thesis Proposal
- NRM 6302 - Thesis Defense
  Plus 6 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.

**Master of Sciences (Non-thesis)**  
*Range and Wildlife Management-36 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
- NRM 5304 - Research (optional)
- NRM 5305 - Range and Wildlife Research Methods
- NRM 5306 - GIS, GPS and Remote Sensing for Resource Managers
- NRM 5311 - Scientific Writing
- NRM 5312 – Bio-statistical Analysis I
- NRM 5313 – Bio-statistical Analysis II
  Plus 15-18 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: a) a
university directed internship and report of your internship experiences, or b) a major, detailed literature review document in a field of study or problem appropriate to your graduate studies.

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.

Master of Agriculture (Non-thesis)
Range and Wildlife Management-36 hours

The Master of Agriculture program of study for Range and Wildlife concentration must include the following courses:

- NRM 5302 - Seminar in Range and Wildlife Management
- NRM 5304 - Research (optional)
- NRM 5305 - Range and Wildlife Research Methods
- NRM 5306 - GIS, GPS, and Remote Sensing for Resource Managers
- NRM 5311 - Scientific Writing
- NRM 5312 - Biostatistical Analysis I
- NRM 5313 - Biostatistical Analysis II

Plus 15-18 semester hours of additional graduate work. These may be upper-level undergraduate courses for graduate credit (G) in NRM or graduate-level courses from other departments, with approval from advisor and course instructor.

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.
GRADUATE COURSES IN NATURAL RESOURCE MANAGEMENT (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).

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.

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.

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.

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.

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

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.

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.
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.

5316 Project Research (1 to 9-0). Research for thesis project. May be repeated. Prerequisite: Master of Science students that have been admitted to candidacy. May be repeated.

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.

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.

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.

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 Provost and Vice President for Academic and Student Affairs.
The School of Arts and Sciences, in its present configuration, was formed in 1986 following the merger of three distinct divisions. This School 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 School 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 School of Arts and Sciences consists of the following seven departments:

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

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

The School 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, Mexican American Studies, Music, 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, Environmental Studies, Geology, and Mathematics;
4. Master of Arts with majors in Art, English, History, Liberal Arts, Political Science, Political Science (Public Administration Option), and Psychology;
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) 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. The Center also provides facilities, organization, and coordination for the SRSU Honors Program. The SRSU Honors Program challenges students into conceptualizing, analyzing, and learning 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 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. The available software includes applications used in mathematics and statistics courses as well as tutorial software. Reference materials available through the ALC include study guides for the Texas Higher Education Assessment (THEA), and 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 are 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 Standards

- **ACT** - 23 composite score; minimum of 19 on both English and Mathematics tests
- **SAT** - 1070 combined score; minimum of 500 on both verbal and mathematics sections
- **TAKS** - 2200 minimum on both the English/Language Arts and Mathematics and a minimum of 3 on writing sub-score.

DEVELOPMENTAL EDUCATION COURSES

EDUCATION

**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; identify 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. (ED 0300)

ENGLISH

**0300 Writing Skills (3-1 0)**. This course is designed for students whose 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)

MATHEMATICS

**0300 Introductory Algebra (3-1)**. 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 operations with rational numbers: elementary geometry and applications; algebraic expressions and their operations: solving linear equations and inequalities including applications; rectangular coordinate system and graphs of linear equations. 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 score a grade of C or better to progress to the next level math course. (MATH 0300)

0301 Intermediate Algebra (3-1). 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, and complex numbers, and critical thinking skills. Credit in this course cannot be used to satisfy requirements for any degree. Students must score a grade of C or better to progress to the next level math course. (MATH 0301)

Prerequisite: C or better in MATH 0300 or satisfactory score on placement exam.

HONORS PROGRAM

The Sul Ross State University Honors Program is a challenging and an excitingly 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. It offers our 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.

To graduate “In Honors Studies,” a student must complete a minimum of 24 credit hours in honors classes, and retain a 3.50 GPA in honors classes and a cumulative GPA of 3.30. Students may earn honors credit by taking a course with the HONS prefix or entering a contract for honors credit.

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.
HONORS COURSES

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. This course would fulfill the Oral Communications core requirement. (HONS 1301)
Prerequisite: Admission into the Honors Program or consent of the instructor.

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. The course meets the second half of the freshman composition core requirement. (HONS 1302)
Prerequisite: Consent of instructor and either admission to the Honors Program or ENG 1301.

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. This course would fulfill the Fine Arts core requirement. (HONS 1303)
Prerequisite: Consent of the instructor and either admission to the Honors Program or ENG 1301.

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. This course would fulfill the Social Science core requirement. (HONS 1304)
Prerequisite: Admission into the Honors Program or consent of the instructor.

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. (HONS 2301)
Prerequisite: Completion of the freshman English requirement and one of the following: admission into the Honors Program or consent of the instructor.

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. This course would fulfill 4 semester hours from the Lab Science core requirement. (HONS 2401)
Prerequisite: Biology 1401 or Biology 1402.

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. (HONS 3301)
Prerequisite: Admission into the Honors Program or consent of the instructor.
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. This course would fulfill the Fine Arts core requirement or could be used as an upper level elective. (HONS 3301)
Prerequisite: Admission in the Honors Program or consent of the instructor.

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. This course would be used to fulfill an upper level elective. (HONS 4300)
Prerequisite: Admission into the Honors Program and consent of the Director of the 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)

Department of Behavioral and Social Sciences
School of Arts and Sciences
Office: Lawrence Hall 208
Phone: (432)837-8157
FAX: (432)837-8146
e-mail: jdowning@sulross.edu

Professor and Chair: James Downing, Ph.D.

Professors: Jim D. Case, Ph.D., Dale B. Christophersen, Ph.D., David L. Cockrum, Ph.D., Clifford L. Hirsch, Ph.D., Mark S. Saka, Ph.D. and Paul A. Wright, Ph.D.

Associate Professors: Judith A. Parsons, M.A., Andrea Powers, Ph.D.

Assistant Professors: Mark C. Emerson, Ph.D., Amy Moreland, Ph.D.

Instructor: David Watson, M.A.

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). The Pre-Law program is also housed in Behavioral and Social Sciences. At the graduate level, the department offers the Master of Arts degrees in History, Political Science (General or Public Administration), and Psychology. The department has a limited number of graduate Teaching Assistantships for graduate students in Political Science and Psychology. 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 foci. 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 national psychology honor society. The Pre-Law Association, a group which furthers the interests of those students preparing for law School., Psi Chi, the national psychology honor society. 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

Mexican American Studies
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 psychology 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 Arts and Sciences School 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 member of the Pre-Law Association, should 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 majors.

### 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.

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

### UNDERGRADUATE COURSES IN ANTHROPOLOGY

**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. (ANTH2351)

**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 2302)

**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.

**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.

**2303 Readings and Research.** Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

**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.

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.

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.

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.

GEORGAPHY

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 2302, and Geography 3401/Geology 3401. An academic concentration in the Geography minor may be developed by taking, in addition to the required core, Geography 2305, Geography 3412/Geology 3412, and an additional three semester credit hours in Geography. 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.

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

UNDERGRADUATE COURSES IN GEOGRAPHY
1302 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 1303)

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.

2307 Economic Geography (3-0). Introduces the principles that explain the locations of economic activities. Actual patterns of economic activity are compared to what would be predicted from the principles and reasons advanced for the discrepancies. Visits are made to local economic enterprises to learn about locational decisions and economic organizations.

2308 Readings and Research. Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

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.

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.

3303 Special Topics in Geography (3-0). Selected topics in Geography. May be repeated for credit when the topic varies.

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.

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, coastal, groundwater and weathering processes will be studies along with lithologic and structural influences. Labs will include map and photo interpretation and field studies. This course is cross-referenced with Geology 3412. Prerequisite: Geology 1401.

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.
Bachelor of Arts

(History Major-120 hours)

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Major ................................................................. 30</td>
</tr>
<tr>
<td>History 2301, 2302, and 3311 .................................................. 9</td>
</tr>
<tr>
<td>21 SCH (15 SCH advanced) .................................................. 21</td>
</tr>
<tr>
<td>Electives ........................................................................ 12</td>
</tr>
<tr>
<td>English 1301, 1302, 2301 or other literature, and 3 SCH sophomore or Advanced</td>
</tr>
<tr>
<td>Communication 1303 or Theatre 2304 .................................. 3</td>
</tr>
<tr>
<td>Fine Arts: select 3 SCH from Fine Arts 1301; Art 1301; Music 1312, 1313; or Theatre 1302 plus an additional 3 SCH from art, journalism, music/theatre, or IT 2304 ...................... 6</td>
</tr>
<tr>
<td>Foreign Language .................................................................. 6-8</td>
</tr>
<tr>
<td>Multicultural ...................................................................... 3</td>
</tr>
<tr>
<td>History 1301 &amp; 1302 .......................................................... 6</td>
</tr>
<tr>
<td>Mathematics: select from 1310, 1315, 1316, or 1342 ..................... 3</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course .......................... 2</td>
</tr>
<tr>
<td>Political Science 2305 and 2306 ............................................ 6</td>
</tr>
<tr>
<td>Laboratory Science: select from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; Physics 1401, 1402, 2401, 2402 .................. 8</td>
</tr>
<tr>
<td>Social Science: select from Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303, Anthropology 1301 ........................................ 3</td>
</tr>
<tr>
<td>Minor ............................................................................... 18</td>
</tr>
<tr>
<td>TOTAL 120</td>
</tr>
</tbody>
</table>

Bachelor of Arts (History Major)

The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in History.

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman Year</td>
</tr>
<tr>
<td>United States History ....................................................... 6</td>
</tr>
<tr>
<td>English 1301, 1302 .......................................................... 6</td>
</tr>
<tr>
<td>Math Requirement ............................................................. 3</td>
</tr>
<tr>
<td>Oral Communication Requirement ...................................... 3</td>
</tr>
<tr>
<td>Fine Arts Requirement ...................................................... 3</td>
</tr>
<tr>
<td>Science Requirement .......................................................... 8</td>
</tr>
<tr>
<td>Physical Education Requirement ......................................... 2</td>
</tr>
<tr>
<td>TOTAL 31</td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences requirement ............................................... 3</td>
</tr>
<tr>
<td>History 2301, 2302 .......................................................... 6</td>
</tr>
<tr>
<td>Political Science 2305, 2306 ............................................. 6</td>
</tr>
<tr>
<td>English Literature course and one English 2000 or higher .............. 6</td>
</tr>
<tr>
<td>Fine Arts Requirement .......................................................... 3</td>
</tr>
</tbody>
</table>
Foreign Language Requirement .................................................................8

TOTAL 32

Junior Year
History 3311 + 3 other History courses .................................................15
Minor .........................................................................................................9
Multicultural ............................................................................................3
Electives .....................................................................................................3

TOTAL 30

Senior Year
History ........................................................................................................9
Minor .........................................................................................................9
Electives .................................................................................................. 9

TOTAL 27

GRAND TOTAL 120

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
UNDERGRADUATE COURSES IN HISTORY

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

*1301 History of the United States (3-0). A general survey of the history of the United States from the discovery of the New World to 1877. (HIST 1301)

*1302 History of the United States (3-0). A general survey of the history of the United States from 1877 to the present time. (HIST 1302)

2301 Development of Western Civilization to 1453 (3-0). A survey of western civilization from the first civilization in the ancient Near East to mid 15th century.

2301 World History to 1500 (3-0). A survey of world history from the ancient world until the end of the fifteenth century.

2302 World History Since 1500 (3-0). A survey of European history since the 15th century to the present.

2302 World History since 1500 (3-0). A survey of world history since the fifteenth century to the present.

2303 Readings and Research. Selected readings and research projects to be offered as individual study to meet student’s needs. May be repeated for credit.

3300 Ancient Civilization (3-0). A history of the ancient civilizations of the Near East, Greece, and Rome to the 4th Century.

3301 The Middle Ages to 1350 (3-0). A history of the political, social, and intellectual development of medieval society to the 14th century.

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.

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 absolutism, the enlightenment, and the French Revolution and Napoleon.

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.

3305 Europe since 1919 (3-0). A history of Europe from the Treaty of Versailles to the present.

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

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.
3308 History of Modern Mexico 1821-Present (3-0). This course begins with Mexican Independence in 1821 and continues through the present.

3309 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.

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.

3311 The Study of History (3-0). An introduction to the techniques and the materials important to the study of history.

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.

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 diasporic considerations of their growth and development, the emergence of the Chicano Movement, and their trajectory in American life.

3314 Blacks in the United States (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.

3315 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.

4301 The History of World Religions (3-0). This course is designed to introduce the student to the origins, beliefs and development of the world's major Abrahamic religions, Judaism, Christianity, and Islam.

4302 The Modern Middle East (3-0). This course covers the emergence of the Modern Middle East since the late nineteenth century through the collapse of the Ottoman Empire during World War I and the challenges faced by the nation states of the Middle East since 1919.

4303 The History of Russia 19th Century to the Present (3-0). This course examines social, economic, and political history in Russia from 1801 to the present. Emphasis is placed on understanding the changes as well as continuities in Russia under the tsars, commissars and beyond.

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.

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.

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.
171

*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.

*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.

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.

*4322 The Ranching Frontier in American History (3-0). A study of the development of cattle ranching in the American West from its Hispanic roots to the 20th century, with emphasis on the 19th century.

*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.

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.

GRADUATE COURSES IN HISTORY
5302 Seminar in Texas History (3-0). Topics to be announced. May be repeated for credit as topic varies.
5303 Seminar in Pre-Columbian and Colonial Mexican History (3-0). Topics to be announced. May be repeated for credit as topic varies.
5304 Seminar in Modern Mexican History, 1821-Present. (3-0). Topics to be announced. May be repeated for credit as topic varies.
5305 Seminar in the Modern Middle East, 1914-Present. (3-0). Topics to be announced. May be repeated for credit as topic varies.
5308 Seminar in European History (3-0). Topics to be announced. May be repeated for credit as topic varies.
5309 Seminar in Western History (3-0). Topics to be announced. May be repeated for credit as topic varies.
5310 Seminar in American History (3-0). Topics to be announced. May be repeated for credit as topic varies.
5312 Readings and Research (3-0). An individualized course with varying
topics to be chosen by the instructor in consultation with the student.

5313 Special Topics (3-0). Selected topics in areas of history. May be repeated for credit when topic varies.

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.

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 School, and filed in the Office of the Provost and Vice President for Academic and Student Affairs.

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.

COURSES IN MEXICAN AMERICAN STUDIES (MAS)

2301 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.

2302 Readings and Research. Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

3309 Language on the Border. 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
3310 Special Topics (3-0). Selected topics in the area of Mexican American Studies. May be repeated for credit when the topic varies.

3311 Folklóre and Culture on the Texas-Mexican Border 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.

4309 Readings and Research (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.

PHILOSOPHY
UNDERGRADUATE COURSES IN PHILOSOPHY

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

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 1301)

1302 Ethics (3-0). An introduction of systematic approaches to moral reasoning, including both normative ethics and metaethics as moral philosophy. Survey of approaches to judging the Tightness or wrongness of actions and judgments about the goodness or badness of things. (PHIL 2306)

1303 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 2303)

2301 Special Topics in Philosophy (3-0). Selected topics in Philosophy. May be repeated for credit when the topic varies.

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.

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:

1. Successfully completing Political Science 2305 and 2306
2. 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 Major- 120 hours)

Political Science 2305, 2306 ................................................................. 6
24 SCH at least 18 SCH advanced .................................................. 24
Psychology 2307 and Sociology 3301 .............................................. 6
Elective ......................................................................................... 10-12

English 1301, 1302, 2301 or other literature, and
3 SCH sophomore or advanced ....................................................... 12
Communication 1303 or Theatre 2304 .............................................. 3
Fine Arts: select 3 SCH from Fine Arts 1301; Art 1301; Music 1312, 1313; or Theatre 1302 plus an additional 3 SCH from art, journalism, music, theatre, or IT 2304 .................................................. 6

Foreign Language .............................................................................. 6-8
United States History ........................................................................... 6
Mathematics: select from 1310, 1315, 1316, or 1342 .......................... 3
Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301 ..................................................... 3
Physical Education 1150 and one activity course ............................... 2
Laboratory Science: select from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; Physics 1401, 1402, 2401, 2402 .................................................. 8
Social Science: select from Anthropology 1301; Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303 ..................................................... 3
Minor .................................................................................................... 18
TOTAL 120

The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with major in Political Science.

Hours

**Freshman Year**

<table>
<thead>
<tr>
<th>Course</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>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
</tr>
</tbody>
</table>

**Sophomore Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>English Literature course and one English 2000 or higher</td>
<td>6</td>
</tr>
<tr>
<td>Fine Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Minor</td>
<td>3</td>
</tr>
<tr>
<td>Science</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
</tr>
</tbody>
</table>

**Junior Year**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology 2307</td>
<td>3</td>
</tr>
<tr>
<td>Sociology 3301</td>
<td>3</td>
</tr>
<tr>
<td>Political Science</td>
<td>12</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>30</td>
</tr>
</tbody>
</table>
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.

UNDERGRADUATE COURSES IN POLITICAL SCIENCE
(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

1302 The World of Law (3-0). This course is designed for students who are interested in preparing for law study or determining whether they are interested in legal careers in professional studies or in legal phases of political systems. No prerequisites. Credit given toward major and minor programs in Political Science.

2303 The Nature and Functions of Law (3-0). This is a casebook study to introduce the undergraduate to some of the major fields of law and basic concepts underlying them. It provides early exposure to the thought processes demanded by the case method of study, and it deals with what law does toward the operation of our society.

2305 Federal Government (3-0). A required course in United States Government. (GOVT 2305)

2306 State Government (3-0). A required course in Texas Government. (GOVT 2306)

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.

2308 Readings and Research. Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

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.

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.


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.

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.

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.

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.

3308 The Presidency (3-0). This course involves studies in the nature and growth of executive power, the analysis of the many-faceted 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.

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.

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.

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.

4302 American Political Thought (3-0). The development of American democracy, including "liberal" and "conservative" contributions to contemporary American political thought.

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.

4308 Readings and Research. Selected readings or research projects to be offered as individual study to meet student needs. May be repeated once for credit with departmental approval.

4309 Classical Political Thought (3-0). The purpose, functions, and structure of political theory, with intensive study of Plato and Aristotle.
4310 Modern Political Thought (3-0). Intensive study of post Reformation political thought: Hobbes, Locke, Rousseau, Marx or selected contemporary political ideologies—democracy, communism, fascism, socialism, liberalism, conservatism.

4311 Special Topics (3-0). Special courses on topics not included in the regular curriculum. May be repeated for credit with departmental approval.

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.

GRADUATE PROGRAM IN POLITICAL SCIENCE

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 with a major in Political Science may be tailored to meet the needs of the individual student by selecting the courses to be taken to provide a specialization, such as international and comparative politics. For example, course work for this specialization could be distributed among three disciplines: political science as the major field and the supporting disciplines of history and business. Other arrangements with political science as the major field might use appropriate graduate courses from supporting areas such as economics or education. As a concentrated degree program which combines subject matter from a specific number of related disciplines, it may be used to establish professional teaching certification in Political Science as well as to complete a master's degree preparatory to the Ph.D.

Students desiring the applied program in public administration should follow the degree plan outlined in the Master of Arts with a major in Political Science (Public Administration Option), a program designed to meet the needs of individuals currently employed in, or desiring careers in, public service.

The Criminal Justice and Political Science faculties also offer the student a dual graduate degree in Public Administration and Criminal Justice. Upon completion of a fifty-four hour curriculum, the student will be awarded both a M.A. degree in Political Science-Public Administration and a M.S. degree in Criminal Justice.

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
While presentation of an undergraduate major in political science is not a requirement, background familiarity with the discipline and/or the general field of United States Government must be evidenced in one of two ways:

1. Credit on the undergraduate level for at least 12 semester credit hours of political science, OR
2. A score of at least 60 percent on an American Government examination administered by the department. Text materials and sample questions are available upon request from the department chairman. Students pursuing a second master's degree must present the same background for study in political science. Any graduate hours already earned in political science (perhaps a minor or electives in the first master's degree) are counted toward the twelve hours background. This test must be successfully completed during the first semester following the student's enrollment.

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. Jay Downing
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 coursework 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 Political Science (Public Administration Option)

A. Required Political Science: 15 semester credit hours as follows:
   - PS 5303 Public Administration Survey
   - PS 5307 Scope and Methods in Social Science
   - PS 5310 Public Budgeting and Finance
   - PS 5311 Intergovernmental Relations
   - PS 5313 Public Policy Analysis

   Minimum 6 semester credit hours from the following Political Science:
   - PS 5308 Case Studies in Public Administration
   - PS 5312 Agency Politics
   - PS 5314 Public Management
   - PS 5315 Local Government Administration
   - PS 5316 Special Topics in Public Administration

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 Political Science (Public Administration Option) and

Master of Science in Criminal Justice

A. Required Political Science and Criminal Justice:
   - PS 5303 Public Administration Survey
   - PS 5310 Public Budgeting and Finance
   - PS 5311 Intergovernmental Relations
   - PS 5313 Public Policy Analysis
   - CJ 5301 Overview and Administration of Criminal Justice
   - CJ 5303 Program and Policy in Criminal Justice
   - CJ 5304 Seminar on Liability and Immunity in Criminal Justice
   - CJ/PS 5307 Scope and Methods
   - CJ 5315 Seminar in Courts and Judiciary
   - CJ 5318 Seminar in Criminal Justice Theory
B. Three semester credit hours from:
   PS 5308 Case Studies in Public Administration
   PS 5312 Agency Politics
   PS 5314 Public Management
   PS 5315 Local Government Administration
   PS 5316 Special Topics in Public Administration

C. Eighteen additional semester credit hours from Political Science (Public Administration), Criminal Justice, or related discipline as advised by major advisor. No more than nine semester credit hours may be from a related discipline.

GRADUATE COURSES IN POLITICAL SCIENCE

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.

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.

5303 Public Administration Survey (3-0). The conduct of public business by organized agencies at national, state and local levels. (Public Administration)

5304 Seminar in Political Theory (3-0). An introduction, on the graduate level, to the problems and techniques of analytic political philosophy or other topics in theory.

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.

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 5307.

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)

5309 Internship in Public Administration. 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)

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)

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)

5312 Agency Politics (3-0). A seminar which deals with the several types of non-electoral politics in which public agencies are regularly involved: intraorganizational conflicts, accommodations, negotiations and competitions; and inter-organizational with other agencies, clientele-constituency groups, and legislative and executive entities. (Public Administration)

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)

5314 Public Management (3-0). Public agency administration, including leadership, planning, delegation, supervision, motivation, and performance. (Public Administration)

5315 Local Government Administration (3-0). Administration of local government with particular reference to small cities in Texas. May also include counties, metrosystems, School districts, and other special purpose units. (Public Administration)

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)

5317 Seminar in U.S. Government (3-0). Course focuses on selected topics in U.S. Government. May be repeated when topic varies.

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.

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 School, and filed in the Office of the Provost and Vice President for Academic and Student Affairs.

PRELAW PROGRAM

The Pre-Law Advisor is located in the Department of Behavioral and Social Sciences. Law Schools do not prescribe a specific pre-law curriculum; instead they recommend broad-based, liberal arts preparation. A Pre-Law curriculum within the Political Science major has been designed to meet that recommendation. Catalogs from most American Bar Association accredited law Schools are available in the Behavioral Sciences office. An active Pre-Law Association exists to further the interests of those preparing for law School. More than fifty Sul Ross graduates are actively practicing law at the present time. Political Science 1302, The World of Law, is specifically for
Pre-Law students and is offered in even-numbered years.

**Bachelor of Arts**

*(Political Science Major with Pre-Law Recommendations)*

<table>
<thead>
<tr>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>15</td>
<td>Select 15 SCH from Political Science 1302, 2303, 2304, 3302, 4302 or 4309.</td>
</tr>
<tr>
<td>15</td>
<td>Political Science 2305 and 2306 plus additional Political Science courses to total 30 SCH, including 18 SCH advanced.</td>
</tr>
<tr>
<td>6</td>
<td>Philosophy 1302 and 1303.</td>
</tr>
<tr>
<td>6</td>
<td>Psychology 2307 and Sociology 3301.</td>
</tr>
<tr>
<td>6</td>
<td>English 1301, 1302, 2301, or other literature and 3 SCH Sophomore or advanced.</td>
</tr>
<tr>
<td>3</td>
<td>Communications 1303 or Theatre 2304.</td>
</tr>
<tr>
<td>6</td>
<td>Philosophy 1302 and 1303.</td>
</tr>
<tr>
<td>6</td>
<td>Psychology 2307 and Sociology 3301.</td>
</tr>
<tr>
<td>12</td>
<td>English 1301, 1302, 2301, or other literature and 3 SCH Sophomore or advanced.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-8</td>
<td>Philosophy 1302 and 1303.</td>
</tr>
<tr>
<td>6</td>
<td>Psychology 2307 and Sociology 3301.</td>
</tr>
<tr>
<td>6</td>
<td>English 1301, 1302, 2301, or other literature and 3 SCH Sophomore or advanced.</td>
</tr>
<tr>
<td>2</td>
<td>Physical Education 1150 and one activity course.</td>
</tr>
<tr>
<td>8</td>
<td>Laboratory Science: select from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; Physics 1401, 1402, 2401, 2402.</td>
</tr>
<tr>
<td>3</td>
<td>Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301.</td>
</tr>
<tr>
<td>12</td>
<td>Elective Recommended Courses: Accounting 2330, 2331; General Business 3351; Management 3360; Criminal Justice 1306, 2305; Computer Science 1301, 1302; Communications 2304, 4301; English 2301, 2302, 2304, 3302, 3312; Sociology 3308; Geography 1302, 2302; Psychology 2304; History 2301, 2302, 3312.</td>
</tr>
</tbody>
</table>

**TOTAL 120**

**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 Major- 120 hours)*

182
### Bachelor of Arts

(Psychology Major) The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in Psychology. One of the history or elective courses may be taken to meet the multicultural social science requirement.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Freshman Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychology 1302 and any one from 2304, 2309, or 2310</td>
</tr>
<tr>
<td></td>
<td>United States History</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302</td>
</tr>
<tr>
<td></td>
<td>Math Requirement</td>
</tr>
<tr>
<td></td>
<td>Oral Communication Requirement</td>
</tr>
<tr>
<td></td>
<td>Fine Arts Requirement</td>
</tr>
<tr>
<td></td>
<td>Physical Education Requirement</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychology 2307 (only after completing math requirement), and any two additional Psychology courses, one at the 3000 level or higher</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305, 2306</td>
</tr>
<tr>
<td></td>
<td>English Literature course and one English 2000 or higher</td>
</tr>
<tr>
<td></td>
<td>Science Requirement</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 120</strong></td>
</tr>
</tbody>
</table>
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.

**UNDERGRADUATE COURSES IN PSYCHOLOGY**

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

**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.

**1302 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. (PSYC 2301)

**2304 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. (PSYC 2319)
Prerequisite: Psychology 1302 or consent of instructor.

**2307 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. (PSYC 2317)
2309 Human Sexuality (3-0). Fundamentals of human sexuality including biological, behavioral, and cultural aspects of sexuality. (PSYC 2306)

2310 Developmental Psychology (3-0). The study of the developing human from birth to death, including physical, cognitive, emotional, and moral development. (PSYC 2314) Prerequisite: Psychology 1302 or consent of instructor.

2311 Readings and Research. Selected readings and research projects to be offered as individual study to meet student's needs. May be repeated for credit.

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: Psychology 1302 or consent of instructor.

3303 Psychology of Adjustment in Modern Life (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.

3304 Abnormal Behavior (3-0). An investigation of behavioral disorders and the biological and social factors which may affect them. Prerequisite: Psychology 1302 or consent of instructor.

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: Psychology 1302 and Psychology 2307 or consent of instructor.

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: Psychology 1302 or consent of instructor.

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: Psychology 1302 and Psychology 2307 or consent of instructor.

3314 Multicultural Psychology (3-0). The concept of culture is investigated as a subject in and of itself and also as a variable that may explain differences in various psychological contexts: conceptions of personhood, therapeutic intervention, family dynamics, expectations for the future. Prerequisite: Psychology 1302 or consent of instructor.
4009 Reading and Research (0-0). 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. Variable for 1 or 2 semester credit hours.

4306 Biopsychology (3-0). A systematic review of the theories and research dealing with physiological correlates of learning, motivation, emotion and perception. Prerequisite: Psychology 1302 or consent of the instructor.

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: Psychology 1302 and Psychology 2307 or consent of the instructor.

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.

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: Psychology 1302 and Psychology 2307 or consent of the instructor.

4311 Community Experience in Psychology (0-0). 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.

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.

**GRADUATE PROGRAM IN PSYCHOLOGY**

**Master’s Degree in Psychology**

The Department of Behavioral and Social Sciences at Sul Ross State University offers a Masters Degree Program in Psychology.

**Graduates Will Earn a Master’s Degree**

This is a Master of Arts in Psychology with a Supportive/Clinical Psychology emphasis. The supportive/clinical emphasis is referred to as the Supportive Psychology Training Program or - "the program."

The program is based on a scientist-practitioner model incorporating cognitive behavioral change technologies and social self-perception with self
management and life enhancement skills. Much of the training and experience will be based on extant clinical psychological theories and practices buttressed by community/social and person change methods.

**Program Intent**

This program is designed for those:

- Seeking training and experience to teach psychology and deliver a broad range of student psychological support services in community colleges
- Preparing for careers in professional applied psychology that require training in clinical psychology
- May be used in partial fulfillment of the requirement for Texas credentialing as a Licensed Psychological Associate (LPA)
- May be used in partial fulfillment of the requirements for the Licensed Professional Counselor (LPC) credential
- Preparing for advanced graduate study in psychology and other human services programs (thesis alternative available)
- Persons who aspire to certain administrative or managerial positions in human service agencies

**Course Work Format:**

- Most courses are offered during the work week late afternoons and early evenings
- Some weekend coursework is offered/required.

**Program Course Requirements:**

- 36 semester credit hours per entry catalog
- 6 semester credit hours optional (in keeping with licensing requirements)

**Program Experience Requirements:**

- 6 semester credit hours of supportive/clinical human services (450 supervised clock-hours)
- 3 semester credit hours of college undergraduate teaching (225 supervised clock-hours)

**Program Examination requirements:**

- Clinical Written and Oral Comprehensive Examination

**Psychology Board Requirements for the LPA Credential Eligibility:**

- 36 semester credit hours from a regionally approved university psychology program
- 450 supervised hours of clinical experience
- 6 post MA semester credit hours for LPA license eligibility

**Current Course Offerings:**

- 5301 Thesis
- 5302 Thesis
5313 Empirical Procedures for Human Services
5326 Assessment of Psychopathology and Human Problems
5322 Psychological Interventions
5325 Biopsychology for Human Services
5321 Community Psychology: Trauma and Disaster
5330 Humanistic Psychology
5314 Multicultural Psychology, Ethics and Professional Problems for Human Services
5333 Teaching of Psychology Pro-seminar
5339 Topics in Graduate Psychology—may be repeated
5040 Readings and Research in Graduate Psychology
5341 Psychology Intervention Practicum—may be repeated
5342 Teaching of Psychology Practicum—may be repeated

Admission Requirements:

- 2.8 GPA on last 60 undergraduate semester credit hours
- Personality and mental health appropriate to human service provision, professional appearance and demeanor, positive supportive people skills, etc.
- Ability and commitment to participate in practicum and course work, individual and group oriented, requiring personal exploration and insight as required for human service training
- Acceptance of the Program’s right to require mental health treatment as a condition of program continuation when determined to be necessary by the Program
- Practicum participation will require laboratory screening for substance use/abuse and a criminal background check
- Three letters of recommendation:
  - two academic references and one character reference
- Personal interview may be required
- Completed Psychology Program application
- Admission to the SRSU Graduate School
  http://www.sulross.edu/pages/3620.asp
- Successful completion of the following or the equivalent prior to admission or as leveling work upon conditional admission
  - Introduction to Statistics for the Behavioral Sciences
  - Theories of Personality
  - Abnormal Behavior
  - Experimental Psychology
  - Biopsychology or Drugs and Behavior

- Limited graduate work may be undertaken prior to full completion of undergraduate requirements in some circumstances.
Admission Procedure:

- Apply to the Graduate School on-line.
- An application for the Psychology Graduate Program will be sent to you

Financial Support:

- Nine-month university supported teaching assistantship positions are available
- Occasionally, full-time positions are available through the program affiliated mental health center

Further Information:

Jay Downing, Ph.D.
Chair, Department of Behavioral and Social Sciences
Professor of Psychology
Graduate Advisor
Graduate Program in Psychology
Behavioral and Social Sciences
Sul Ross State University
Alpine, Texas 79832
(432)837-8157
jdowning@sulross.edu

GRADUATE COURSES IN PSYCHOLOGY

5040 Readings and Research in Graduate Psychology (0-0). 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. Variable for 1 to 3 semester credit hours.

5045 Clinical Practicum (0-0). This course provides supervised clinical experience in various patient service delivery settings and further develops the student's assessment and intervention skills. Professional and ethical development is also emphasized. May be taken only with the approval of the Director of Clinical Training. May be repeated for credit with additional approval. Variable credit for 1 to 3 semester credit hour.

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.

Required only of students taking the thesis option.

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.
Required only of students taking the thesis option.

5313 Empirical Procedures for Human Services (3-0). Statistics and research designs for understanding psychological literature and conducting basic research in human support settings. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

5314 Multicultural Psychology, Ethics and Professional Problems for Human Services (3-0). The ethics of professional psychological practice with special consideration of multicultural issues. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

5321 Community Psychology: Trauma and Disaster (3-0) Principles of community psychology, trauma and disaster applied to rural community intervention planning and implementation. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

5322 Psychological Interventions (3-0). Principles of psychotherapy for human services focusing on cognitive, existential/humanistic, psychodynamic and group techniques. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

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. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

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. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

5330 Humanistic Psychology (3-0). Didactic and experiential introduction to the theory and practice of person-centered approaches. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

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. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

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 or 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.
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.

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. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

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. Prerequisite: Psychology program graduate standing and/or permission of the Director of Clinical Training.

**SOCIODY**

Sociology as a Minor

A minor in Sociology requires eighteen (18) semester credit hours in Sociology, including six semester credit hours advanced.

**UNDERGRADUATE COURSES IN SOCIOLOGY**

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

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.

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. (SOCI 1301)

2305 The Family (3-0). Sociological analyses of the family as a social institution, its social-psychological processes, development, and cross-cultural variations. (SOCI 2301)

2306 Readings and Research. Selected readings and research projects to be offered as individual study to meet students needs. May be repeated for credit.

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.

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.
3308 Minority Groups (3-0). The study of the processes and effects of social discrimination in the creation and maintenance of minority groups.

3308 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.

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.

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.

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.

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.

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.

4305 Social Deviance (3-0). The study of nonconformity to social norms. The causes of deviance and the role the deviant plays in society.

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.

4309 Readings and Research. Selected readings or research projects to be offered as individual study to meet student needs. May be repeated once for credit with departmental approval.

4310 Special Topics in Sociology (3-0). Selected topics in Sociology. May be repeated for credit when the topic varies

GRADUATE COURSES IN SOCIOLOGY
Sociology is available to support such majors as Political Science, Education, Business Administration, or History.
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.

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.

Special Topics in Sociology (3-0). Selected topics in the area of Sociology. May be repeated when topic varies.

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 Sciences Major- 120 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Sciences Major:</td>
<td>48</td>
</tr>
<tr>
<td>Geography</td>
<td>9</td>
</tr>
<tr>
<td>History 2301, 2302</td>
<td>6</td>
</tr>
<tr>
<td>History advanced</td>
<td>12</td>
</tr>
<tr>
<td>Economics 2300, 2305</td>
<td>6</td>
</tr>
<tr>
<td>Political Science advanced</td>
<td>15</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td>English 1301, 1302, 2301 or other literature, and 6 SCH sophomore or advanced</td>
<td>12</td>
</tr>
<tr>
<td>Communication 1303 or Theatre 2304</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science: select from OFS 1384, CS 1301, or equivalent</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts: select from Fine Arts 1301; Art 1301; Music 1312, 1313; or Theatre 1302 plus an additional 3 SCH from art, journalism, Music, theatre, or IT 2304</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>6</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics: select from 1310, 1315, 1316, or 1342</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science: select from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; or Physics 1401, 1402, 2401, 2402</td>
<td>8</td>
</tr>
</tbody>
</table>

TOTAL 120

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.

**Bachelor of Arts – Social Sciences Major**
The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in Social Science. One of the political science, history, or elective courses may be taken to meet the multicultural social science requirement.

**Hours**

**Freshman Year**
- Computer Science Requirement ..............................................................3
- United States History Requirement .........................................................6
- English 1301, 1302 ..................................................................................6
- Oral Communication Requirement ............................................................3
- Fine Arts Requirement ............................................................................3
- Science Requirement ..............................................................................8
- Physical Education Requirement ..............................................................2

**TOTAL 31**

**Sophomore Year**
- Political Science 2305, 2306 .................................................................6
- Geography ................................................................................................3
- Multicultural Requirement .................................................................3
- History 2301, 2302 ..................................................................................6
- English Literature 2000 or higher .........................................................3
- Foreign Language Requirement ..............................................................6-8
- Mathematics Requirement .................................................................3

**TOTAL 30-32**

**Junior Year**
- English Advanced ..................................................................................3
- Political Science ......................................................................................6
- Economics 2300, 2305 .................................................................6
- Geography ................................................................................................6
- Fine Arts .................................................................................................3
- Electives .................................................................................................3

**TOTAL 27**

**Senior Year**
- History ................................................................................................12
- Political Science ......................................................................................9
- Electives .................................................................................................9-11

**TOTAL 30-32**

Grand Total 120
DEPARTMENT OF BIOLOGY
School of Arts and Sciences
Office: Warnock Science Building, 216
Phone: (432) 837-8112
e-mail: biology@sulross.edu
Associate Professor and Chair: Christopher M. Ritzi, Ph.D.
Professor: James C. Zech, Ph.D.
Associate Professor: Steven G. Platt, Ph.D.
Assistant Professor: Martin K. Terry, Ph.D., D.V.M.

PROGRAM DESCRIPTION
The major orientation of the Department of Biology 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. The department 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.

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 and habitat makes the entire area a huge natural outdoor laboratory unmatched elsewhere for the study of 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 following list shows 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.
<table>
<thead>
<tr>
<th>Health/Medical</th>
<th>Business/Industry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anesthesiologist</td>
<td>Aquarist</td>
</tr>
<tr>
<td>Athletic Trainers</td>
<td>Biochemist</td>
</tr>
<tr>
<td>Audiology</td>
<td>Bioengineer</td>
</tr>
<tr>
<td>Bacteriologist</td>
<td>Bioethicist</td>
</tr>
<tr>
<td>Biomediation Technician</td>
<td>Botanical or Zoological Gardens Curator</td>
</tr>
<tr>
<td>Biomedical Engineering</td>
<td></td>
</tr>
<tr>
<td>Chiropractic</td>
<td>Botanist</td>
</tr>
<tr>
<td>City Recycling Manager</td>
<td>Ecologist</td>
</tr>
<tr>
<td>Dentistry</td>
<td>Editor</td>
</tr>
<tr>
<td>Dermatology</td>
<td>Entomologist conservationist</td>
</tr>
<tr>
<td>Epidemiology</td>
<td>Environmental Protection Specialist</td>
</tr>
<tr>
<td>Food and Drug Inspector</td>
<td></td>
</tr>
<tr>
<td>Gerontology, Geriatrics</td>
<td></td>
</tr>
<tr>
<td>Hunger Policy Analyst</td>
<td></td>
</tr>
<tr>
<td>Industrial Hygiene</td>
<td></td>
</tr>
<tr>
<td>Kinesiology</td>
<td></td>
</tr>
<tr>
<td>Medical Illustration</td>
<td></td>
</tr>
<tr>
<td>Medical Technologist</td>
<td></td>
</tr>
<tr>
<td>Nursing</td>
<td></td>
</tr>
<tr>
<td>Occupational Safety and Health</td>
<td></td>
</tr>
<tr>
<td>Occupational Therapy</td>
<td></td>
</tr>
<tr>
<td>Osteopathic Medicine Resources</td>
<td></td>
</tr>
<tr>
<td>Parasitologist</td>
<td></td>
</tr>
<tr>
<td>Pathology</td>
<td></td>
</tr>
<tr>
<td>Pharmaceutical Sales</td>
<td></td>
</tr>
<tr>
<td>Pharmacology</td>
<td></td>
</tr>
<tr>
<td>Physician</td>
<td></td>
</tr>
<tr>
<td>Physician’s Assistant</td>
<td></td>
</tr>
<tr>
<td>Podiatry</td>
<td></td>
</tr>
<tr>
<td>Public Health</td>
<td></td>
</tr>
<tr>
<td>Public Health Officer</td>
<td></td>
</tr>
<tr>
<td>Water Quality Inspector</td>
<td></td>
</tr>
<tr>
<td>Sales: Health Care</td>
<td></td>
</tr>
<tr>
<td>Speech Pathology</td>
<td></td>
</tr>
<tr>
<td>Sports Medicine</td>
<td></td>
</tr>
<tr>
<td>Toxicologist</td>
<td></td>
</tr>
<tr>
<td>Veterinary Medicine</td>
<td></td>
</tr>
<tr>
<td>Vision Science</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Bachelor of Science

**Bachelor of Science**  
*(Biology Major: Professional Degree 120 hours)*

<table>
<thead>
<tr>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>Biology 1401, 1402</td>
</tr>
<tr>
<td>8</td>
<td>Biology 2403</td>
</tr>
<tr>
<td>8</td>
<td>Biology 3306, 4101, 4301 plus 19 SCH advanced</td>
</tr>
<tr>
<td>8</td>
<td>Electives</td>
</tr>
<tr>
<td>26</td>
<td>Biology 3306, 4101, 4301 plus 19 SCH advanced</td>
</tr>
<tr>
<td>3</td>
<td>Communication 1303 or Theatre 2304</td>
</tr>
<tr>
<td>3</td>
<td>Fine Arts: select from Fine Arts 1301, Art 1301; Music 1312, 1313; or Theatre 1302</td>
</tr>
<tr>
<td>6</td>
<td>United States History</td>
</tr>
<tr>
<td>6</td>
<td>Mathematics: 1342, and 3 SCH from 1315, 1316, or higher</td>
</tr>
<tr>
<td>6</td>
<td>Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; or Women's Studies 2301, or other approved course</td>
</tr>
<tr>
<td>6</td>
<td>Social Science: select from Anthropology 1301; Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303</td>
</tr>
<tr>
<td>18</td>
<td>Minor</td>
</tr>
<tr>
<td><strong>TOTAL 120</strong></td>
<td></td>
</tr>
</tbody>
</table>

---

### Bachelor of Science

**Bachelor of Science**  
*(Biology Major: Professional Degree)*

The following shows a suggested sequence of classes for the Biology major professional degree.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Description</th>
</tr>
</thead>
</table>

#### Freshman Year

| 8     | Biology 1401, 1402 |
| 9     | English 1301, 1302, 2304 |
| 3     | Math 1315, 1316 or higher |
| 8     | Chemistry 1401, 1402 |
| 6     | United States History 1301, 1302 |
| 2     | Physical Education 1150 and one activity course |

**TOTAL 36**

#### Sophomore Year

Choose 8 hours from any 2000 level Biology course except 2403. Choose 8 hours from any 3000 or 4000 level Biology course

| 8     | English 2301 or other literature |
| 3     | Multicultural Social Science |
| 3     | Social Science |
| 6     | Political Science 2305, 2306 |
| 3     | Fine Arts |
| 3     | Communication 1303 or equivalent |

**TOTAL 29**

#### Junior Year

| 3     | Biology 3306 |
| 8     | Choose 8 hours from any 3000 or 4000 level Biology course |
| 3     | Math 1342 |
Electives ............................................................................................................... 5
Minor ................................................................................................................... 9

TOTAL 28

Senior Year
Biology 4101, 4301 .............................................................................................. 4
Choose 11 hours from any 3000 or 4000 level Biology course ....................... 11
Minor ................................................................................................................... 9
Electives ............................................................................................................... 3

TOTAL 27

GRAND TOTAL 120

No course with a grade less the "C" can be used to fulfill biology course requirements.

Bachelor of Science
(Biology Major with emphasis in Wildlife Biology)
The Biology Professional Degree Plan can be tailored to any particular biology career. For example, students wanting to meet the educational requirements for certification as a wildlife biologist by the Wildlife Society can do so by selecting specific courses for the Biology major, choosing a minor in Natural Resource Management, and taking the following recommended classes. Students should consult with an advisor to ensure that certification requirements do not change and to discuss the multitude of options that can be used for certification requirements.

Hours

Freshman Year
Biology 1401, 1402 .............................................................................................. 8
English 1301, 1302 .............................................................................................. 6
Math 1315 or 1320 ............................................................................................... 3
Social Science ....................................................................................................... 3
Chemistry 1401 and Geology 1401 ................................................................. 8
United States History .......................................................................................... 6
Physical Education 1150 and one activity course ............................................ 2

TOTAL 36

Sophomore Year
Biology 2405 and 2408 ...................................................................................... 8
English 2301 or other literature and English 2304 ............................................. 6
Multicultural Social Science ............................................................................. 3
Political Science 2305, 2306 ............................................................................. 6
Fine Arts ........................................................................................................... 3
Communication 1303 or equivalent ................................................................. 3
Natural Resource Management 2302 ............................................................. 3

TOTAL 32

Junior and Senior Years
Biology 3306, 4101, 4301 .................................................................................... 7
Choose 8 hours from Biology 4403, 4404, or 4409 ........................................ 8
Choose 8 hours from Biology 3405, 4406, or other botany ............................. 8
Choose 3 hours from any 3000 or 4000 level Biology ................................... 3
Criminal Justice 3304 ......................................................................................... 3
Geology 3401 ................................................................................................... 4
No course with a grade less than "C" can be used to fulfill biology course requirements.

Bachelor of Science
(Biology Major with Composite Science 8-12 Teacher Certification)

Required Education Courses: ED3300, 3301, 3302, 3303, 4314, 4322, 4317, 4605

Teaching Field:
Biology 1401, 1402, 2406, 3306, 4101, 4301, 4406; 4 hrs from 2401, 2403, or 2407; 4 hours from 3403, 3408 or 3601; 4 hours from 4402, 4403, and 4404, or 4409; 3601, 4403, 4404, or 4409; 4 hours from 3405, 3602, 4405 or 4408; Biology 4406; Geology 1401, 1402; Physics 1401, 1402; plus 10 semester credit hours advanced Biology courses.

Biology as a Minor
Biology 1401, 1402; 4 SCH from any 2000 level course except Biology 2403; upper level 3306, 4301, plus 4 SCH advanced.......................... 22

No course with a grade less than "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.

Biology as a Minor for Criminal Justice Majors
Biology 1401, 1402; 12 hours from Biology 4402, 4403, 4404 or 4409; other upper level Biology courses may be substituted.

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 before enrolling. Students interested in other pre-health professions should also consult the Pre-Health Professions Advisor in
the Department of Biology. Some of these programs involve other disciplines and students will also be advised by these departments.

UNDERGRADUATE COURSES IN BIOLOGY

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

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.

1401 General Botany (3-2). 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 1411)

1402 General Zoology (3-2). 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 1413)

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.

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.

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.

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.

2401 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.

2403 Survey of Human 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.

2404 Human 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.

2405 Human Anatomy and Physiology II (3-2). Study of the structure and function of the cardiovascular, respiratory, 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.

2406 Introduction to Microbiology (3-2). This course is a study of the principles and techniques of bacteriology. The laboratory work is in part comprised of the application of staining and microscopic techniques, preparation of media, pure culture techniques, and the physical and chemical control of microorganisms. Course designed for biology majors, pre-nursing, pre-dental, and pre-vet students. (BIOL 2421)
Prerequisite: General Botany or Zoology or equivalent, and General Chemistry.

2407 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 Standard Methods used in field and laboratory analysis of environmental samples.
Prerequisite: consent of instructor.

2420 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.


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.
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 are required to write a review paper on each film viewed during the course. 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.

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.

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.

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.

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. Post mortem examinations and treatment of animals will be performed in labs as available. Prerequisite: General Zoology or equivalent.

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.

3408 Invertebrate Zoology (3-2). The study of the life history, morphology, taxonomy, phylogeny, and ecology of invertebrate organisms. Prerequisite: General Zoology or equivalent.

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.

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.

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).

4102 Individual Studies (1-0). Individual study of selected topics in biological literature or field biology.

4202 Individual Studies (2-0). Individual study of selected topics in biological literature or field biology.

4300 Individual Studies (3-0). Independent study of selected topics in Biology.

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.

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.

4305 Special Topics (3-0). A course dealing with selected and timely topics in biology such as Animal Behavior, 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.

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.

4402 Ichthyology (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.

4403 Herpetology (3-2). The systematics, natural history, and phylogeny of the amphibians and reptiles with emphasis on those found in the American Southwest. Prerequisite: General Zoology or equivalent.

4404 Ornithology (3-2). The systematics, 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.

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, transpiration, translocation, nitrogen fixation, and hormones will be included with emphasis on vascular plants. Prerequisite: General Botany
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.

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.

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.

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.

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.

4412 Medical/Veterinary Microbiology (3-2). A comprehensive introduction to the microbiology of pathogenic organisms in the medical and veterinary field. This will include discussion of the principles of 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.

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.

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.

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.
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.

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 the committee, accept toward the master's degree 6 semester credit hours of coursework in a department other than the major.

GRADUATE COURSES IN BIOLOGY
5100 Individual Studies (1-0). Independent study of selected topics in biology.
5101 Graduate Seminar (1-0). Discussion of pertinent topics in biology, with emphasis changing depending upon instructor.
5200 Individual Studies (2-0). Independent study of selected topics in biology.
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 adaptation of the cacti and succulents of the Southwest and in particular those in the Trans-Pecos region.
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.
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.
5307 Special Topics (3-0). A course dealing with selected and timely topics in biology. May be repeated when topic varies.
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.
5311 Evolution (3-0). The study of the theory and current concepts of evolution, including: natural selection, gene flow, founder effect, and speciation.
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.

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.

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.

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.

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, multisample 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.

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.

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.

5406 Phytochemistry (3-2). The study of chemical constituents of plants, including: flavonoids, alkaloids, terpenoids, isozymes, and cpDNA.

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.

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.

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.

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.

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.

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.

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.

6301 Thesis Prospectus (0-6). Satisfactory completion of this course will result in an acceptable prospectus to the Graduate Committee. The student will normally register for this course no earlier than the second semester of graduate study. The prospectus is expected to be completed promptly, and this course may not be taken more than two long semesters.

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, and filed in the Office of the Provost and Vice President for Academic and Student Affairs. Prerequisite: Thesis Prospectus
DEPARTMENT OF COMPUTER SCIENCE
AND MATHEMATICS

Department of Computer Science and Mathematics
School of Arts and Sciences
Office: Academic and Computer Resource Center 107
Phone: (432)837-8106
Fax: (432) 837-8397

Chair and Assistant Professor:  David R. Martin, Ph.D.
Professor:  R. Vic Morgan, Ph.D.
Associate Professors:  Kristofer D. Jorgenson, Ph.D.
and Elizabeth A. Measures, Ph.D.
Assistant Professors: Rafael Azuaje, Ph.D.;  Eric N. Holt, Ph.D.
and Lloyd E. Moyo, Ph.D.

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 engineering 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 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 for further study in graduate School.

CAREER OPPORTUNITIES

Computer Science
  Computer Network Support Specialist
  Computer Operations Manager
  Database Applications Program Analyst or Designer
  Programmer or Administrator
  Programming Team Member, Specializing in Design, Testing, or Documentation
Secondary School Educator
Computer Science Teacher Software
Engineer 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 Academic and Computer Resource Center, and works in cooperation with, but independently from, the campus-wide computer center also housed there.

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.
Bachelor of Science (Computer Science Major-120 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1320*, 1321, 2305, 2320, 2360, 3101, 3310, 3331, 4390</td>
<td>25</td>
</tr>
<tr>
<td>Ten additional advanced hours in Computer Science</td>
<td>10</td>
</tr>
<tr>
<td>Mathematics 1315** or higher and 2340</td>
<td>6</td>
</tr>
<tr>
<td>Minor (Mathematics recommended)</td>
<td>18</td>
</tr>
<tr>
<td>English 1301, 1302, 2301 or other literature, and 3 SCH</td>
<td></td>
</tr>
<tr>
<td>Sophomore or advanced</td>
<td>12</td>
</tr>
<tr>
<td>Communication 1303 or Theatre 2304</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts: select from Fine Arts 1301; Art 1301; Music 1312, 1313; or Theatre 1302</td>
<td>3</td>
</tr>
<tr>
<td>United States History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301</td>
<td></td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Science: select from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; Physics 1401, 1402, 2401, 2402</td>
<td>14-16</td>
</tr>
<tr>
<td>Social Science: select from Anthropology 1301, Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303</td>
<td>3</td>
</tr>
<tr>
<td>Electives</td>
<td>7-9</td>
</tr>
</tbody>
</table>

TOTAL 120

*Students with limited exposure to computers prior to beginning the program may benefit from completing Computer Science 1301 before taking the courses listed above. The course may be counted for elective credit.

**Credit for Math 1315 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."
Freshman Year
Computer Science 1320, 1321 ................................................................. 6
English 1301, 1302 .................................................................................. 6
Mathematics 1315, 1316, 2340 ................................................................. 9
Oral Communication Core Requirement .................................................... 3
Physical Education 1150 and one other activity course ............................... 2
History 1301, 1302 .................................................................................. 6
TOTAL 32

Sophomore Year
Computer Science 2305, 2320, 2360 ......................................................... 9
Minor ......................................................................................................... 6
English 2301 and one other course numbered 2000 or higher ..................... 6
Two courses selected from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2402 ......................... 8
TOTAL 29

Junior Year
Computer Science 3101, 3310, 3331, and one other course numbered 3000 or higher ................................................................. 10
Minor ......................................................................................................... 6
Physics 2401, 2402 .................................................................................... 8
Political Science 2305, 2306 ..................................................................... 6
TOTAL 30

Senior Year
Computer Science 3101 and three other courses numbered 3000 or higher ................................................................. 10
Minor ......................................................................................................... 6
Fine Arts Core Requirement ....................................................................... 3
Social Science Requirement ....................................................................... 3
Multicultural Social Science Core Requirement ....................................... 3
Electives .................................................................................................... 4
TOTAL 29

GRAND TOTAL 120

Computer Science as a Minor

Computer Science 1320*, 1321, 2320 and either 2305 or 2360 .................... 12
6 additional advanced hours in Computer Science ................................... 6
TOTAL 18

*Minors with limited exposure to computers prior to beginning the program may benefit from completing Computer Science 1301 before taking the courses listed above.
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 1320, 1321, 2305, 2320, 2360, 4320; and select 9 SCH 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.

UNDERGRADUATE COURSES IN COMPUTER SCIENCE

The numbers in parentheses following the course titles indicate the number of hours of lecture and laboratory instruction per week, respectively. Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.

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. (COSC 1301)

1320 Introduction to Programming Logic (2-2). This course provides a background in the logic of program design, to prepare the student for later computer language courses. The course will utilize design tools such as flowcharts, structured flowcharts, and pseudo code, in the context of a suitable modern programming language. Offered fall. (COSC 1305) Prerequisite: Concurrent enrollment in Math 1315.

1321 Beginning Object-Oriented Programming (2-2). This course introduces the concepts of object-oriented design using a modern programming language. The student will learn the syntax of the programming language and how to construct object glasses. Programming applications will be drawn from a wide variety of commercial, technical, and scientific problem areas. Offered spring. (COSC 1320) Prerequisite: CS 1320 and Math 1315.

2305 Topics in Computer Languages (2-2). An alternative computer language to the language used in CS 1321 will be explored. This course may be repeated for different languages. Offered fall. Prerequisite: CS 1321.

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.

2320 Data Structures and Algorithms (2-2). A third course in programming. This course introduces data abstraction and the common data structures such as stacks, queues, trees, and graphs. Searching and sorting are discussed. Offered spring. (COSC 2315) Prerequisite: CS 1321 and concurrent enrollment in Math 2340.
2360 UNIX (3-0). This introduction to the UNIX operating system covers UNIX shell commands, shell programming, AWK programming, VI text editor, the SED editor, UNIX platforms, and X-Windows. Offered spring odd years.
Prerequisite: CS1321 and concurrent enrollment in Math 2340.

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.

3302 Computer Aided Instruction (2-2). Development of methods for utilizing computers in education. May be repeated with different topics. Offered spring even years.
Prerequisite: Permission of the instructor.

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.

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 1321 and concurrent enrollment in Math 2340.

3320 Object-Oriented Programming (3-0). Concepts and techniques of object-oriented programming. Objects, classes, methods, inheritance, polymorphism. Memory management of objects. Comparison of object-oriented languages such as C++, Smalltalk and CLOS. Offered fall odd years. Prerequisite: CS 2320.

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 2320.

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.

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 2320 or permission of the instructor.

4340 Computer Hardware (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 2320 and Math 2340.

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.

UNDERGRADUATE COURSES IN COMPUTER INFORMATION SYSTEMS

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 of information gathering and reporting activities during the transition from analysis to design. Prerequisite: GBA 3350.
Bachelor of Science  
(Mathematics Major--120 Semester Credit Hours)

Core Curriculum

<table>
<thead>
<tr>
<th>Component</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Skills Component</td>
<td>46</td>
</tr>
<tr>
<td>English 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1315*</td>
<td>3</td>
</tr>
<tr>
<td>Communications, select from Comm 1303 or Thea 2304</td>
<td>3</td>
</tr>
</tbody>
</table>

Basic General Knowledge

<table>
<thead>
<tr>
<th>Component</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts, select from FA 1301, Art 1301, Music 1312 or 1313, or Thea 1302</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology, PE 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>English 2301 or other literature course in English</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science, Physics 2401, 2402</td>
<td>8</td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300, Eco 2305, Geog 1301 or 2302, Phil 1301, Psy 1302, or Soc 2303</td>
<td>3</td>
</tr>
</tbody>
</table>

Integrity, Tolerance, Ethical Values, and Citizenship

<table>
<thead>
<tr>
<th>Component</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>American History, select two from Hist 1301, 1302, or 3309</td>
<td>6</td>
</tr>
<tr>
<td>State Government</td>
<td>3</td>
</tr>
<tr>
<td>Federal Government</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural, select from Hist 2301 or 2302, MAS 2301, PS 2307, or WS 2301</td>
<td>3</td>
</tr>
</tbody>
</table>

General Education

<table>
<thead>
<tr>
<th>Component</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>English, select one 2000 or higher course</td>
<td>3</td>
</tr>
<tr>
<td>Physical and Life Sciences, select two from astronomy, biology, or chemistry</td>
<td>6-8</td>
</tr>
<tr>
<td>Mathematics 1316*</td>
<td>3</td>
</tr>
</tbody>
</table>

Major

<table>
<thead>
<tr>
<th>Component</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics 2413, 2414, 2415, 2330, 3101, 3320, 3340, 4320, 4330, and 4360</td>
<td>31</td>
</tr>
<tr>
<td>Additional 3 advanced SCH in Mathematics</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science 1320</td>
<td>3</td>
</tr>
</tbody>
</table>

Minor (at least 6 SCH advanced)

<table>
<thead>
<tr>
<th>Component</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives</td>
<td>18</td>
</tr>
</tbody>
</table>

Total 120

*Majors in mathematics may obtain credit for Math 1315 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.
Bachelor of Science  
(Mathematics Major)

Following is a suggested sequence of courses for students seeking the Bachelor of Science degree with a major in Mathematics. The minor in Computer Science shown in this sequence may be replaced with a minor in some other discipline.

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
<th>SCH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman Year</strong></td>
<td>Mathematics 2413, 2414</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Chemistry 1401, 1402</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Oral Communications Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Physical Education and one activity course</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>History 1301, 1302</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
</tr>
<tr>
<td><strong>Sophomore Year</strong></td>
<td>Mathematics 2330, 2415</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Computer Science 1320, 1321</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>English 2301 and one other course numbered 2000 or higher</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Fine Arts Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Social Science Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305 and 2306</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Multicultural Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>31</td>
</tr>
<tr>
<td><strong>Junior Year</strong></td>
<td>Mathematics 3320, 3340, one 4320, 4330, or 4360</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>One other advanced Mathematics course</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Computer Science 2305 and 2320</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Physics 2401 and 2402</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>29</td>
</tr>
<tr>
<td><strong>Senior Year</strong></td>
<td>Two of Mathematics 4320, 4340, 4360</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mathematics 3101 and one other SCH advanced course</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Computer Science, 6 SCH numbered 3000 or higher</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Electives (36 SCH total of advanced coursework are required for graduation, including major and minor)</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>30</td>
</tr>
</tbody>
</table>

**Mathematics as a Minor**

- Mathematics 1315 and 1316 if needed* 0-6
- Mathematics 2413, 2414, 2415, and 2330 15
- 6 additional advanced SCH in Mathematics 6

**Total 21-27**

*Minors in mathematics may obtain credit for Math 1315 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)**

Required Education Courses: ED 3300, 3302, 3305, 4312, 4314, and 4605

Required Mathematics Courses: Math 1315 and 1316 (or credit by examination), Math 2330, 2413, 2414, 2415, 3301, 3350, and three 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 elementary-level certification degree plans are done 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 1315 and 1316 (or credit by examination), Math 1342, 2413, 2310, 2311, 2340, 2413, 3301, 3310, 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**

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. Following is the recommended sequence of courses for pre-engineering students.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Freshman Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mathematics 1315, 1316 (If needed) ................. 6</td>
</tr>
<tr>
<td></td>
<td>Mathematics 2413, 2414 ..................................... 8</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302 ........................................... 6</td>
</tr>
<tr>
<td></td>
<td>Chemistry 1401, 1402 ........................................ 8</td>
</tr>
<tr>
<td></td>
<td>Physical Education 1150 and one other activity course .......... 2</td>
</tr>
<tr>
<td></td>
<td>History 1301 .................................................... 3</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 33</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mathematics 2330, 2415 and 3320 ......................... 10</td>
</tr>
<tr>
<td></td>
<td>Computer Science 1320, 1321 ............................... 6</td>
</tr>
<tr>
<td></td>
<td>Physics 2401, 2402 ........................................... 8</td>
</tr>
<tr>
<td></td>
<td>History 1302 .................................................... 3</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305, 2306 ................................ 6</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 33</strong></td>
</tr>
</tbody>
</table>

**UNDERGRADUATE COURSES IN MATHEMATICS**

Students who are working toward a Bachelor of Arts or Fine Arts degree
must complete at least one course from 1310, 1315, 1316, 1342, or 2413. Students working toward a Bachelor of Science degree must complete an additional course numbered 1310 or higher. Students working toward a Bachelor of Business Administration degree must complete one semester of calculus, usually Math 1325. Students in Interdisciplinary Studies (working toward teacher certification at the elementary or middle School level) must take either Math 1315 or 1342 (Math 1315 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.

The numbers in parentheses following the course titles indicate the number of hours of lecture and laboratory instruction per week, respectively. (Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

1310 Introduction to University 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. This course satisfies the Common Core Curriculum requirement for Mathematics and is recommended for students who do not plan to take Calculus I (Math 2413). Offered fall, spring, and summer. (MATH 1324)
Prerequisites: Completion of Math 0300 or an appropriate placement score.

1315 University Algebra (3-0). A university level algebra course for students who plan to take calculus. Topics include linear and quadratic equations and functions, inequalities, graphs and zeros of polynomial and rational functions, exponential and logarithmic functions, and systems of equations and inequalities. Offered fall, spring, and summer. (MATH 1314)
Prerequisite: Math 0301 or a satisfactory score on the Mathematics Placement Exam. (Math TASP 260 or higher).

1316 Trigonometry (3-0). Directed angular measure, definitions and evaluation of circular and trigonometric functions, graphs of the trigonometric functions, the inverse trigonometric functions and their graphs, solution of triangles by the law of sines and law of cosines, trigonometric identities and conditional equations, and applications of trigonometry to analytic geometry. MATH 1316 offered fall, spring, and summer.
Prerequisite: Concurrent enrollment in Math 1315.

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.
Prerequisite: Math 1315

1342 Statistics (3-0). An introductory statistics course designed to give the student the critical thinking skills necessary to interpret statistical information. This course will prepare the student for further statistical work in
his/her field. Topics include: measures of central tendency, measures of variation, normal distributions, hypothesis testing, and graphical representations. Use of statistical software and real-world data is integrated throughout the course. Offered fall, spring and summer.
Prerequisites: Completion of MATH 0301 or a satisfactory score on the Mathematics Placement Test.

2303 Individual Studies (3-0). Independent study of selected topics in mathematics. This course may be repeated during different semesters.

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.

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.

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.

2330 Linear Algebra (3-0). Systems of linear equations, matrices, determinants, vectors and vector spaces, matrix inversions and linear transformations, determination of eigenvalues and eigenvectors, and numerical approximation methods of linear algebra. Use of a programmable graphing calculator may be required. Students are also introduced to related mathematical resources on the Internet. Offered fall.
Prerequisite: Math 2414 or consent of instructor.

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.

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 with a grade of C or better.

2415 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 with a grade of C or better.

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: Upper division standing.

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 2340 or Math 2330; or consent of instructor.

3306 Special Topics (3-0). Discussion of selected topics in mathematics. The course may be repeated for different topics. Offered when needed. 
Prerequisite: Permission of instructor.

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. 
Corequisite: Math 2330; Prerequisite: Math 2414.

3330 Number Theory (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 2330.

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.

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.

4303 Individual Studies (3-0). Independent study of selected topics in mathematics. This course may be repeated during different semesters.
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.

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.

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.

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.

4340 Mathematical Statistics (3-0). Classical probability theory, discrete and continuous random variables, distribution functions, expectation, law of large numbers, central limit theorem, applications. Offered when needed. Prerequisite: Math 2414.

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 2415.

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.

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 Math 4320 or 4330 with a grade of "C" or better.
GRADUATE COURSES IN MATHEMATICS

The undergraduate courses Math 3301, 3330, 3350, 4320, 4321, 4330, 4331, 4340, 4360, and 4361 may be taken for graduate credit, as described elsewhere in this Catalog under "Undergraduate Courses for Graduate Credit." The Department of Mathematics also offers the following graduate courses.

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.

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.

5303 Individual Studies (3-0). Independent study of selected topics in mathematics. This course may be repeated during different semesters.
DEPARTMENT OF
EARTH AND PHYSICAL SCIENCES
(including Astronomy, Chemistry, Environmental Studies, Geology, Physical Science and Physics)

Department of Earth and Physical Sciences
School of Arts and Sciences
Office: Warnock Science Building, 314
Phone: (432) 837-8259
e-mail: geology@sulross.edu

Professor and Chair: David Rohr, Ph.D.
Professors: Avinash Rangra, Ph.D., Kevin Urbanczyk, Ph.D., and James Whitford-Stark, Ph.D.
Associate Professor: Rayford Ball, Ph.D.
Assistant Professor: Md. Abul Kalam, Ph.D.

The Department of Earth and Physical Sciences provides its students with a background in, and an appreciation for, certain aspects of Astronomy, Chemistry, Geographic Information Systems, Geology, Physical Science, and Physics. Degree programs available include the BS in Chemistry, BS in Geology, BS in Environmental Studies with Chemistry or Geology emphasis, and the MS in Geology. The mission of the Department is to provide the opportunity to master analytical and computational skills and to master and create knowledge in the area of Earth and Physical Sciences.

CAREER OPPORTUNITIES

CHEMISTRY
The Chemistry program has a primary goal of supporting other disciplines whose subject matter depend, in part, on the knowledge of the principles of chemistry. It presents non-science students with an overview of the ideas, methods, and achievements in the science of chemistry.

The Chemistry program is aggressively engaged in supporting non-chemistry disciplines such as Biology, Geology, Range Animal Science, and Criminal Justice.

Successful completion of the Chemistry program, as outlined, enables graduates to pursue careers in industry, government, teaching, or to continue education at the graduate level. The Chemistry discipline offers undergraduate students excellent opportunities to complete a comprehensive program leading to the Bachelor of Science degrees in (1) professional chemistry, (2) environmental sciences with specialization in chemistry and (3) teacher certification. Additionally, students wishing to enter medical, dental, or pharmacy Schools can complete their pre-professional course work under the close supervision of a pre-professional advisor.
GEOLOGY

Employment in industry (petroleum, natural gas, mining, and service companies): Geologists explore, develop, and produce fossil fuel, metallic and nonmetallic resources in North America and world-wide.

Service with state and federal agencies: Volcanologists study volcanoes to understand the hazards and predict eruptions. Hydrogeologists study the occurrence, movement, abundance, distribution and quality of subsurface and surface waters.

Examination and analysis of environmental issues: Environmental geologists study the interaction between the Earth and human activities to solve problems associated with pollution, waste management, and natural hazards.

Employment in Environmental Geosciences: Employers in the environmental field are large, multidisciplinary engineering companies and smaller specialty firms. In the larger organizations, geoscientists are part of long-term projects in which they work with scientists from other disciplines. In the smaller firms, geoscientists work with environmental laws and regulations, make environmental risk assessments, and write technical reports. The fields that should remain strong in the future are water resources investigations and remediation of contamination.

CHEMISTRY PROGRAM DESCRIPTION

Successful completion of the Chemistry program enables graduates to pursue careers in industry, government, teaching, or to continue education at the graduate level. Here is a short list of the occupations:

- Chemist
- Hydrogeologist
- Forensic Chemist
- Occupational Safety Specialist
- Physician
- Science Laboratory Technician
- Teacher
- Water/wastewater Plant Manager
- Biochemist
- Agricultural Scientist
- Food Scientist/Technologies
- Pharmaceutical Sales Representative
- Quality Control Manager
- Soil Scientist
- Anesthesiologist
- Toxicologist
- Environmental Health Specialist
- Crime Lab Analyst
- Medical Technologist
- Pharmacist
- Radiologist
- Technical Writer
- Patent Agent
- Veterinarian

FEATURES

Students in the Chemistry program have available to them some of the most current teaching tools - such as Ultraviolet and Visible Spectrophotometer, Infra Red (IR) Spectrophotometer, Nuclear Magnetic Resonance (NMR) Spectrometer, Gas Chromatograph, Hewlett-Packard Gas Chromatograph with Isothermal, and Programmed Temperatures features, Vacuum Oven, Micromaster microscope model CK, and several optical microscopes, Abbe-3L Refractometer, Accumet pH meter to measure pH values, Sentron pH meters to measure pH of semi-liquids in trace quantities, digital thermometers, Analytical Balances to weigh trace quantities of samples, Parr Bomb Calorimeter, Varian Gas Chromatograph (Model CP-3800).

SCHOLARSHIPS

Robert A. Welch Foundation Undergraduate Scholarship
Available in Fall/Spring/Summer semesters up to $3000.00
Raymond B. Seymour Award for $300.00
Kundan Lall and Rampyari Rangra Chemistry Endowment for $500

GEOLOGY PROGRAM DESCRIPTION
Sul Ross State University, located in mountainous West Texas, is in an ideal locality for geologic studies. The campus, surrounded by the Trans-Pecos volcanic field, is only twenty minutes from the famous sedimentary area of the Marathon Basin and Glass Mountains and only two hours from Big Bend National Park.

The Department offers undergraduate courses leading to the Bachelor of Science degree in (1) Professional Geology, (2) Earth Science for Teachers, and (3) Environmental Science with a Specialization in Geology.

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.

The third program is described under the Environmental Studies section.

The department also offers graduate courses leading to a master of science in Geology.

FEATURES
The department has the following: cathode luminescence, atomic absorption spectrophotometer, clean lab facilities, low temperature plasma asher, Hach portable water analysis lab, rock and mineral preparation laboratory, Frantz isodynamic magnetic mineral separator, desk computers, rock thin sectioning equipment, petrographic and binocular microscopes, sonic sifter, river rafting equipment, field geology surveying equipment, GPS units, and audio-visual equipment.

In 1999 the Department established, with National Science Foundation funding, a Geographical Information System (GIS) laboratory. The primary purpose of the laboratory is to teach introductory GIS techniques at the sophomore level, and to allow these students use of the laboratory in other upper division classes. A secondary purpose of the lab is for upper division and graduate GIS classes, and for faculty research.

The GIS laboratory currently has 13 computers, one large format digitizing tablet, one large format plotter, a printer, a scanner, and a 35mm slide maker. The primary software used in the GIS laboratory is ArcMap, a product of ESRI (Environmental Systems Research Institute). The lab has a 25 seat license for the ArcView version (9.x), and an additional single license for ArcInfo. The university has a site license for the ESRI software, and the GIS lab uses the ARC-Info version. Available extensions include Spatial Analyst and 3D Analyst. The lab also maintains a license for ArcView 3.x with Spatial, 3D, and Image Analyst extensions. For Remote Sensing applications, the lab maintains 5 copies of ERDAS Imagine Professional with one additional license for both Vector and Virtual GIS. A list of other available technical software includes: Visual MODFLOW, Rockworks, Golden Software’s Surfer and Didger, Sigmaplot, and general wordprocessing/spreadsheet/database software. The laboratory benefits
from cooperative agreements with the Texas Parks and Wildlife Department and The Pan American Center for Earth and Environmental Studies. Through these and other sources, the laboratory has compiled and extensive spatial library for the Trans-Pecos and northern Mexico region, including 21 Landsat scenes, complete coverage in standard GIS datasets (DRG, DOQ, NED, Transportation), and additional geologic, hydrologic and biologic datasets.

GEOLOGY SCHOLARSHIPS
(Contact Financial Aid Office for details and applications).

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 or Environmental Science major. 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. Undergraduates, American Citizen, Agriculture or Geology major preferred.
UNDERGRADUATE COURSES IN ASTRONOMY

1401 Descriptive Astronomy I (3-2). 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. This course includes observations of the night sky and solar objects with various university telescope systems.

1402 Descriptive Astronomy II (3-2). 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. The course includes instruction in the university planetarium as well as telescopic observations.

Bachelor of Science

(Chemistry Major-120 hours)

This degree program is designed to prepare the student or professional service as a chemist or for future graduate study. The American Chemical Society standards for a professional degree in chemistry are: Chemistry 1401, 1402, 2405, 3403, 3404, 3407, 3408, 4304, 4401, 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.

Chemistry 2405, 3309, 3403, 3404, 3407, 3408, 4209, 4304, 4401 plus 3 SCH advanced (4300 or 4307) ........................................35
Electives (computer science courses are strongly recommended) ..................6
English 1301, 1302, 2304, and 2301 or other literature ...............................12
Communication 1303 or Theatre 2304 .....................................................3
Fine Arts: select from Fine Arts 1301; Art 1301, Music 1312, 1313; or Theatre 1302 .................................................................3
United States History ..........................................................6
Mathematics: 2413 and 2414 .................................................................8
Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301 .................................................................3
Physical Education 1150 and one activity course ........................................2
Political Science 2305, 2306 ...............................................................6
Life/Physical Sciences: Physics 2401, 2402 ..............................................8
Laboratory Science: Chem 1401 and 1402 ..............................................8
Social Science: select from Anthropology 1301; Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303 .................................................................3
Minor (recommended Geology, Biology, Mathematics, Business, or Computer Science) ..................................................18

TOTAL 121
Bachelor of Science
(Chemistry Major)

The following is a suggested sequence of courses for students seeking the Bachelor of Science degree with a major in Chemistry

**Freshman Year**
- Chemistry 1401, 1402 ................................................................. 8
- English 1301, 1302 .................................................................... 6
- Computer Requirement ............................................................. 3
- Math 2413, 2414 ....................................................................... 8
- Physical Education 1150 and one activity course ...................... 2
- United States History 1301, 1302 ................................................. 6

**TOTAL 33**

**Sophomore Year**
- Chemistry 2405, 4401 ................................................................. 8
- Physics 2401, 2402 .................................................................... 8
- English 2301 or other literature, 2304 ........................................... 6
- Social Science requirement ......................................................... 3
- Political Science ......................................................................... 3
- Ivjinor or Electives Computer Requirement ............................... 3

**TOTAL 31**

**Junior Year**
- Chemistry 3407, 3408 ................................................................. 8
- Chemistry 3403, 3404 (replaced with 8 SCH Minor or Elective alternate years) ................................................................. 8
- Oral Communication Core requirement ..................................... 3
- Political Science ......................................................................... 3
- Minor or Electives ..................................................................... 6

**TOTAL 28**

**Senior Year**
- Chemistry 4304 and 7 advanced hours ..................................... 10
- Multicultural requirement ......................................................... 3
- Fine Arts requirement ............................................................... 3
- Minor (8 SCH replaced with Chemistry 3403, 3404 in alternate years) ................................................................. 112

**TOTAL 28**

**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
We offer Texas teacher certification in Physical Science (secondary certification). See your major advisor for details.

Chemistry as a Minor
18 SCH of Chemistry to include 6 SCH advanced. Recommended courses are 1401, 1402, 2405 plus 6 SCH at 3000-4000 level.

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 Earth and Physical Sciences. Periodic student conferences with the Pre-Professional Advisor are strongly recommended.

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.

UNDERGRADUATE COURSES IN CHEMISTRY
(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

1401 General Chemistry I (3-2). This course covers introduction to matter, atomic theory, atomic structure, concept of mole, chemical units of concentration, concept of pH, concept of balanced chemical reaction equation, chemical bonding, and kinetic molecular theory of gases. (CHEM 1411)
Prequisite: Math 1315 or equivalent. Advanced placement in Chemistry 1401 may be given on successful completion of advanced placement examination.

1402 General Chemistry II (3-2). This course covers colligative properties of solutions, chemical kinetics, chemical equilibrium, acid-base systems, energy relationships in chemistry reactions, and electrochemistry. The laboratory includes an introduction to qualitative and quantitative analysis. (CHEM 1412) Prerequisite: Chemistry 1401.

2405 General Quantitative Analysis (2-4). This course includes chemical equilibria, acid-base equilibria, buffers, solubility equilibria, and volumetric methods of analysis. (CHEM 2401) Prerequisite: Chemistry 1402.
3309 Biochemistry I (3-0). Fundamental principles of Biochemistry will be covered in this course. Chemistry and functions of amino acid proteins, nucleic acids, and their functions in the storage and transfer of biological information, bioenergetics and metabolism. 
Prerequisite: Chemistry 3407

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 fingerprints, perform micro-testing of drugs, and utilize a novel technique developed at SRSU for the preparation of hair fibers for SEM analysis.

3403 Physical Chemistry I (3-2). This course includes an in-depth study of gaseous systems, thermodynamics, phase equilibria, colligative properties of solutions, and surface chemistry. 
Corequisite: Math 2413 or equivalent, and Chemistry 2405.

3404 Physical Chemistry II (3-2). This course includes an in-depth study of statistical thermodynamics, molecular reaction dynamics, reaction kinetics, electrochemistry, and homogenous and heterogeneous equilibrium. 
Prerequisite: Chemistry 3403; Corequisite: Math 3320.

3407 Organic Chemistry I (3-2). A thorough study of the chemistry of aliphatic and aromatic hydrocarbons and their derivatives. Special emphasis on stereochemistry spectroscopy, reaction mechanisms, and fundamental principles of organic chemistry. 
Prerequisite: Chemistry 1402.

3408 Organic Chemistry II (3-2). The study of heterocyclic compounds, carbohydrates, amino acids, proteins, and steroids. 
Prerequisite: Chemistry 3407 or permission of the instructor.

4209 Biochemistry II (2-0). Current articles on selected topics will be chosen, and article written and seminar presented. Emphasis will be given on structures and mechanisms of replication, transcription and translation systems. 
Prerequisite: Chemistry 3309

4300 Undergraduate Research. Individual research or studies on topics of general interest encouraged. May be repeated once for credit. (On demand)

4304 Advanced Inorganic Chemistry (3-0). This course involves an in depth study of wave mechanical principles, chemical bonds, comparison of valence bond and molecular bond theories, coordination compounds, and inorganic nomenclature. Prerequisite: Chemistry 3404.

4307 Qualitative Organic Analysis (3-0). The isolation and identification of organic compounds by modern chromatographic and spectroscopic techniques. Prerequisite: Permission of instructor.

4307 Special Topics (3-0). A course covering various topics in Chemistry. May be repeated for credit when topic varies.
4401 Instrumental Analysis (2-4). The theory and application of instrumental methods such as gas chromatography, infra red spectroscopy, nuclear magnetic resonance spectroscopy, atomic absorption spectroscopy, and ultra-violet and visible spectroscopy. Prerequisite: Chemistry 2405 or permission of instructor.

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.

4509 Biochemistry I (5-0). The chemistry of the living cell. A thorough examination of biomolecules, metabolic cycles and biosynthetic pathways. Prerequisite: Chemistry 3407.

GRADUATE COURSE IN CHEMISTRY
A master's degree is not offered in chemistry, but students working toward master's degrees in other disciplines may select or may be required to complete graduate courses in chemistry to support their major fields of study.

5301 Special Topics (3-0). A course dealing with selected topics in chemistry. May be repeated once for credit when topic varies.

Geology
Bachelor of Science
(Geology Major-120 hours)

Geology
Select from Geology 2404 or 2407 ...............................................................4
Geology 2401, 3402, 3408, 3601, 4401, 4403, plus 6 SCH Advanced ..............................................................32
Electives ...................................................................................................... 4-7
English 1301, 1302, 2301 or other literature, and
3 SCH sophomore or advanced .................................................................12
Communications 1303 or Theatre 2304 ........................................................3
Fine Arts: select from Fine Arts 1301; Art 1301;
Music 1312, 1313; or Theatre 1302 ...................................................3
United States History .....................................................................................6
Mathematics: select from 1310, 1315, 1316, 1342, 2413, or higher........... 6-7
Multicultural Social Science: select from History 2301, 2302; Mexican
American Studies 2301; Political Science 2307;
Women's Studies 2301 ...........................................................................3
Physical Education 1150 and one activity course ......................................2
Political Science 2305, 2306 ......................................................................6
Life/Physical Science: select from Chemistry 1401 and Physics 1401
or higher .....................................................................................................8
Laboratory Science: Geology1401 and 1402 ..............................................28
Social Science: select from Anthropology 1301; Economics 2300,
2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302;
Sociology 2303 ......................................................................................3
Minor .......................................................................................................18

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.

**Geology as a Minor**

Recommended courses: Geology 1401, or 2404, 1402, 10 SCH 3000-4000 level courses.

**Bachelor of Science**

*(Geology Major)*

The following is a suggested sequence of courses for students seeking the Bachelor of Science with a major in Geology.

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman Year</strong></td>
<td>Geology 1401, 1402</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Math 1310, 1315, 1316, 1342, 2413 or higher</td>
<td>6-7</td>
</tr>
<tr>
<td></td>
<td>United States History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 28-29</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Sophomore Year</strong></td>
<td>Geology 3408 or Adv. Geology 3-4 hrs</td>
<td>3 or 4</td>
</tr>
<tr>
<td></td>
<td>Geology 2401 or Geology 3402</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Chemistry 1401, Physics 1401 or higher</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>COMM 1303 or THEA 2304</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>English, sophomore or advanced</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 27 or 28</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Junior Year</strong></td>
<td>Geology 3408 or Adv. Geology 3-4 hrs</td>
<td>3 or 4</td>
</tr>
<tr>
<td></td>
<td>Geology 4401 or Geology 4403</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Geology 3 hours advanced</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Minor</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 29 or 30</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Junior or Senior Summer</strong></td>
<td>Geology 3601</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 6</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Senior Year</strong></td>
<td>Geology 4401 or Geology 4403</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Geology, 3 hours advanced</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Multicultural requirement</td>
<td>3</td>
</tr>
</tbody>
</table>
2010 – 2012 CATALOG

Fine Arts Requirement .................................................................3
Political Science 2306 .................................................................3
Electives ....................................................................................4-7
Minor .....................................................................................9

TOTAL 29-30

GRAND TOTAL 120

We offer Texas teacher certification (secondary certification). See your major advisor for details.

UNDERGRADUATE COURSES IN GEOLOGY

1401 Introductory Geology I (3-2). 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 1403)

1402 Introductory Geology II (3-2). 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. (GEOL 1404)

Prerequisite: Geology 1401.

2401 Crystal and 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 1401, Chemistry 1401.

2404 Introduction to Environmental Geology (3-2). 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. Laboratory will consist of the study of a variety of environmental problems. This course may be used by Environmental Science majors and by persons seeking earth science teacher certification.

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.

3301 Geology of West Texas (3-0). Designed to introduce the non-major to 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. This course does not count toward advanced hours for Geology majors.

3302 Dinosaurs, Volcanoes and Earthquakes (3-0). 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.

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.

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, OFS 1384, equivalent or approval of instructor.

3402 Structural Geology (3-3). A study of the structural features (faults, folds, etc.), their classification, identification, occurrence, causes and geographic distribution. Prerequisite: Geology 1401, Math 1316.

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 Imagine. Prerequisite: GEOL 3401 or approval of instructor.

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 1402.

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 1402.

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.
2010 – 2012 CATALOG

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, coastal, groundwater and weathering processes will be studied along with lithologic and structural influences. Labs will include map and photo interpretation and field studies. 
Prerequisite: Geology 1401.

3601 Field Geology (3-6). A six weeks summer field course on the methods or techniques of geologic surveying, the nature and construction of topographic and geologic maps, measurement of stratigraphic sections and preparation of geological reports. 
Prerequisite: Geology 3402, 3408 or permission of the instructor.

4101 (1-0). Research. Research by the student into a carefully outlined problem in the earth or geologic sciences. May be repeated for credit when topics vary.

4311 Special Topics (3-0). A course covering various topics in geology. Maybe repeated for credit when course topic varies.

4308 Tectonics (3-0). A general survey of large-scale geologic structures and their relationships on continental and global systems. Detailed study of the origin of continents, ocean basins, geoclines, and the major mountain ranges as well as discussions about the concepts of continental drift, plate tectonics and the new global tectonics. Prerequisites: GEOL 1401

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 2401, 3408.

4402 Special Problems (3-3). 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.

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 2401, and Chemistry 1401.

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.

4412 Subsurface Geology (3-3). An examination and application of the techniques employed in subsurface geologic analysis; primarily the theory of open hole logging operations; analysis of log records, use of log records to construct various types of subsurface maps; examination of well cuttings and cores; methods of calculating water saturations, porosity and probable...
2010 – 2012 CATALOG

lithologies. Prerequisite: Geology 3408.

4414 Hydrology (3-3). A detailed, analytical, quantitative overview of the general concepts of the Hydrologic Cycle including both surface and groundwater hydrology. Discussion of the major water parameters in the cycle and their interactions. Field and lab exercises as well as lectures dealing with: precipitation; interception and water losses; evaporation; evapotranspiration; infiltration and soil moisture, groundwater movements, and aquifers; surface runoff processes and flood hazards; all as related to Water in Environmental Planning. Prerequisite: Geology 1401, Math 1310, 1315 and 1316, or equivalents.

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 Department of Earth and Physical Sciences
   2. An acceptable undergraduate academic record which includes the completion of the following or their equivalents:
      a. Math 2413 Introductory Calculus
      b. Any one of the following three courses:
         1. Math 2414 Multi-Variable Calculus
         2. Math 2330 Linear Algebra
         3. Computer Programming Class
      c. Computer Science 1301 Introduction to Computing
      d. Chemistry 1401 or 1402
      e. Physics 1401 or 1402 or higher
      f. Geology 2301 Lithology
      g. Geology 2401 Crystal and Optical Mineralogy
      h. Geology 3402 Structural Geology
      i. Geology 3408 Stratigraphy and Sedimentation
      j. Geology 3601 Field Geology
      k. Geology 4401 Sedimentary Petrology
      l. 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 semester 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.

1. Students must select at least one course from each of the following groups:
   a. 5306, 5332, 5401, 5402, 5403
   b. 5308, 5312, 5316, 5317, PHSC 4401
   c. 5320, 5322, 5326, 5328

Plan 1. Thesis Option: Thirty semester credit hours of coursework in Geology, including 6 SCH of thesis (6301 and 6302), and a minimum of 16-18 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 School 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 School 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.

GRADUATE COURSES IN GEOLOGY

Note: Most of the courses below are offered on alternate years.

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.

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.

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.

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.

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.
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.

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.

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.

5320 Advanced Paleontology (3-0). Understanding the basic principles of evolution and ecology through the study of fossil organisms. The use of fossils in paleo environmental interpretations.

5322 Stratigraphic Analysis (3-0). The determination of the depositional history of segmentary rocks by the study of lithology and paleontology.

5326 Carbonate Petrology (3-0). Origin, classification and diageneisis of ancient and modern carbonate rocks and sediments.

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.

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.

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.

5401 Remote Sensing (3-3). 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.

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, OFS 1384, equivalent, or permission of instructor.

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 Imagine. The graduate requirements will include a term research project related to the individual student's research interest.
Prerequisite: GEOL 3401, GEOL 5402, or approval of instructor

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.

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.

6301 Thesis (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.

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 requires the completed thesis to be presented to the Graduate Committee, accepted by the Dean of the School of Arts and Sciences, and filed in the Office of the Provost and Vice President for Academic and Student Affairs.

PHYSICAL SCIENCE

PHYS 1415 Physical Science (3-2). Survey course to prepare education majors to teach physical science topics (physics, chemistry, astronomy, and geology) in grades K-5.

UNDERGRADUATE COURSES IN PHYSICS

Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.

1401 General Physics I (3-2). 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. (PHYS 1401) 
Prerequisite: Math 1315 or a satisfactory score on the algebra placement test.

1402 General Physics II (3-2). Continuation of Physics 1401. 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. (PHYS 1402) 
Prerequisite: Physics 1401.

1415 Physical Science (3-2). Survey course to prepare elementary education majors to teach physical science topics (physics, chemistry, astronomy, and geology) in grades K-5.

2401 Calculus-Based Physics I (3-2). 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. (PHYS 2425) 
Prerequisites: Math 1316 and Math 2413.

2402 Calculus-Based Physics II (3-2). Continuation of Physics 2401 covering kinetic theory, thermal properties of matter, thermodynamics, electrostatic fields, potential, electric circuits, and magnetic fields. (PHYS 2426) Prerequisites: Physics 2401 and Math 2414.
ENVIRONMENTAL STUDIES

School of Arts and Sciences
School of Agricultural and Natural Resource Sciences
e-mail: arts-sciences@sulross.edu
e-mail: anrs@sulross.edu

Biology Concentration Advisor: Chris Ritzi, Ph.D.
Chemistry Concentration Advisor: Avinash Rangra, Ph.D.
Geology Concentration Advisor: Dave Rohr, Ph.D.
Humanities and Social Science Concentration Advisor: Barbara J. Nelson, Ph.D.
Natural Resource Management Concentration Advisor: Patricia Moody Harveson, Ph.D.

PROGRAM DESCRIPTION
Environmental Studies is an interdisciplinary major that encourages students to delve into the problems and prospects of the environment. The environmental studies common core gives all students 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 concentration may be selected from 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.

Bachelor of Science in Environmental Studies -120 hours

Environmental Studies Core ................................................................. 44-49
Select 3 of the following courses: Biology 2407; Chemistry 2409;
English 2315; Geology 2404; Political Science 2304 ...................... 10-12
Natural Resource Management 4301 and Geology 3401 ............ 7
Environmental Studies Concentration: to include at least
18 advanced SCH ........................................................................... 27-30

English 1301, 1302, 2301 or other literature, and 3 SCH sophomore
or advanced .................................................................................... 12
Communication 1303 or Theatre 2304 ........................................... 3
Computer Science: select from: Computer Science 1301;
ASBT 1384; English 2304 ............................................................... 3
Fine Arts: select from Fine Arts 1301; Art 1301; Music 1312 or 1313;
Theatre 1302 ................................................................................... 3
United States History: 6 SCH selected from History 1301, 1302, or 3309 ... 6
Kinesiology: PE 1150 and one activity course ............................... 2
Laboratory Science: Eight semester hours selected from

Astronomy 1401 or 1402; Biology 1401 or 1402; Chemistry 1401
or 1402; Geology 1401or 1402; Physics 1401, 1402,
2010 – 2012 CATALOG

2421, or 2402 plus 6-8 SCH selected from at least two following:
Astronomy, Biology, Chemistry, Geology, Physics............... 14-16
Mathematics: select from 1310, 1315, 1316, 1342 or higher ..............6
Social Sciences: select from Anthropology 1301; Economics 2300 or
2305; Geography 1302 or 2302; Philosophy 1301;
Psychology 1302; Sociology 2302 ..........................................................3
Multicultural Social Science: select from History 2301, 2302;
Mexican American Studies 2301; Political Science 2307;
Women's Studies 2301, or other approved course .........................3
Political Science 2305, 2306 .................................................................6
Electives................................................................. 8-13

Total 120

CONCENTRATION REQUIREMENTS

Biology Concentration:
Select 2 courses from the following: Biology 2401, 2406, 4405 ................ 8
Select 2 courses from the following: Biology 3601, 3403, 3409
3602, 4412 ................................................................. 8-10
Select 2 courses from the following: Biology 4402, 4403,
4404, 4409 ................................................................. 8
Select 1 course from the following: Biology 4406, 4411, 4601 .......... 4-6

Chemistry Concentration:
Chemistry 2405, 3407, 3408, 4401; Physical Science 4401 ............ 20
Select 2 courses from: Chemistry 3403, 3404, 4304, 4307,
4300-Environmental ......................................................................... 6-8

Geology Concentration:
Select from the following courses: Geology 1402, 2407, 3301,
3302, 3303, 3304, 3408, 3410, 3412, 3601, 4414;
Physical Science 4401 .................................................... 27

Humanities and Social Sciences Concentration:
Select from the following courses: Anthropology 2302; Communication 2304;
Criminal Justice 3304; English 3301, 3323, 4302, 4311; Geography 2305;
History 3306, 4322; Political Science 3305, 3314; Psychology 3313;
Sociology 3308, 3311................................................................. 27

Natural Resource Management Concentration
Natural Resource Management 2302, 2401, 2404, 3401, 4406, 4407 .... 23
Select from the following courses: Natural Resource Management
3409, 4309, 4314, 4405, 4408 ......................................................... 7-8

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 2407; Chemistry 2409;
English 2315; Geology 2404; 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.

242
DEPARTMENT OF
FINE ARTS AND COMMUNICATION
(including Art, Communication, Journalism, Music and Theatre)

Department of Fine Arts and Communication
School of Arts and Sciences
Office: Fine Arts Building 106
Phone: (432) 837-8218
erumsey@sulross.edu

Associate Professor and Chair: Esther L. Rumsey, Ph.D.


Associate Professors: Donald C. Freed, Ph.D., Dona W. Roman, M.F.A., and Jay M. Sawyer, M.F.A.

Assistant Professors: Travis L. Clark, Ph.D.
Michael S. Lippard, D.M.A., Erin Lippard, D.M.A., and Michelle L. Selk, Ph.D.,

Instructor: Joseph G. Velasco, M.A.

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, Music
- Bachelor of Fine Arts: Art, Theatre
- Master of Art: Art
- Teacher Certification: Art, Communication, Music, 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), the Video Club (for students interested in producing independent video/film projects) and the Sul Ross Speech Team.

**CAREER OPPORTUNITIES**

<table>
<thead>
<tr>
<th>Art</th>
<th>Music</th>
</tr>
</thead>
<tbody>
<tr>
<td>Artist Educator</td>
<td>Educator</td>
</tr>
<tr>
<td>Art Critic</td>
<td>Private Instructor</td>
</tr>
<tr>
<td>Gallery Owner/Operator</td>
<td>Performer</td>
</tr>
<tr>
<td>Photographer</td>
<td>Music Publishing</td>
</tr>
<tr>
<td>Printmaker</td>
<td>Music Retailing Management</td>
</tr>
<tr>
<td>Jeweler</td>
<td>Administrator in Music and Arts</td>
</tr>
<tr>
<td>Production Potter</td>
<td>Music Technology</td>
</tr>
<tr>
<td>Craftsman</td>
<td>Music Therapy</td>
</tr>
<tr>
<td>Therapist</td>
<td>Church Music</td>
</tr>
<tr>
<td>Digital Art Librarian</td>
<td>Military Service Music</td>
</tr>
<tr>
<td>Movie Set Designer</td>
<td></td>
</tr>
<tr>
<td>Movie Set Production Artist</td>
<td></td>
</tr>
<tr>
<td>Museum Curator</td>
<td></td>
</tr>
<tr>
<td>Layout Artist</td>
<td></td>
</tr>
<tr>
<td>Corporation Artist</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication</th>
<th>Theatre</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advertising</td>
<td>Educator</td>
</tr>
<tr>
<td>Educator</td>
<td>Actor</td>
</tr>
<tr>
<td>Electronic Media</td>
<td>Entertainer</td>
</tr>
<tr>
<td>Web Page Designer</td>
<td>Director</td>
</tr>
<tr>
<td>Radio Broadcasting</td>
<td>Designer</td>
</tr>
<tr>
<td>Television Broadcasting</td>
<td>Theatre Technician</td>
</tr>
<tr>
<td>Non-Broadcast Video Production</td>
<td>Broadcaster</td>
</tr>
<tr>
<td>Print Journalism</td>
<td>Community Theatre Director</td>
</tr>
<tr>
<td>Electronic Journalism</td>
<td>Stage Manager</td>
</tr>
<tr>
<td>Public Relations</td>
<td>Theatre Administrator</td>
</tr>
<tr>
<td>Public Information Officer</td>
<td>Box Office Personnel</td>
</tr>
<tr>
<td>Training Specialist</td>
<td>Public Relations</td>
</tr>
<tr>
<td>Marketing Communication-Mng.</td>
<td>Sales Representative</td>
</tr>
<tr>
<td>Customer Service</td>
<td></td>
</tr>
<tr>
<td>Human Relations Director</td>
<td></td>
</tr>
</tbody>
</table>
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 (FAB 104), the Studio Theatre (FAB 105), the choir room (FAB 200), the television production studio (FAB 205), the radio station and production room (FAB 206), 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).

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 Scholarship(s); 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 $100-200 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 $50-400 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 to 15 $50-600 Scholarships for students who are in good academic and disciplinary standing, are active in SRSU theatre productions and are taking some theatre courses. Contact the Theatre Program for further details.
Grace M. Davis Drama Excellence Fund Scholarship
Two $200 Scholarships for students who are in good academic and disciplinary standing, are active in SRSU theatre productions and are taking some theatre courses. Contact the Theatre Program for further details.

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.

Bachelor of Fine Arts

(Art Major 121 hours)

Core Curriculum

Basic Skills Component ................................................................. 46
English 1301 and 1302 ................................................................. 6
Mathematics, select from 1310, 1315, 1316, 1342, or 2413 .............. 3
Communication, select from Comm 1303 or Thea 2304 .................. 3

Basic General Knowledge
Fine Arts, select from FA 1301, FA2301, Art 1301, Music 1312 or 1313
or Thea1302 ................................................................. 3
Kinesiology, PE 1150 and one activity course ................................. 2
Literature 2301 ........................................................................ 3
Laboratory Science, select two from Astr 1401 or 1402, Biol 1401
or 1402, Chem 1401 or 1402, Geol 1401, 1402 or 2402, Phys 1401, 1402,
2401 or 2402 ......................................................................... 8
Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301
or 1302, Phil 1301, Psy 1302, or Soc 2303 .................................. 3

Integrity, Tolerance, Ethical Values, and Citizenship
American History, select two from Hist 1301, 1302, or 3309 ............ 3
State Government, PS 2306 ....................................................... 3
Federal Government, PS 2305 ..................................................... 3
Multicultural, select from Hist 2301, or 2302, MAS 2301, PS 2307 or
WS 2301 ........................................................................ 3

General Education ..................................................................... 9
English, select one 2000 or higher course .................................... 3
Fine Arts, select one course from foreign language, journalism, music
or IT ................................................................................ 3
Computer Science, Comm 2308, FA 2301, or journalism .................. 3

Major ..................................................................................... 60
Art, 1302, 1303, 1304, 1306, 2301,2302, 2303, 2305, 2306, 2309, 3302,
3306, 3310, and 3328 ................................................................. 42
Select 6 SCH from 3304, 3305, 3308, plus 12 SCH advanced in area of
specialization (4301) ............................................................... 18

Electives .................................................................................... 6

Total 121

*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. All graduating Art majors are
required to submit a slide digital portfolio to be reviewed during their final
year. Students may be asked to leave an example of their work for inclusion in the permanent collection of the Art Program.

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 including Art 1302 (Drawing I), Art 1303 (Design I), Art 3304 or 3305 (Art History), a two-dimensional class; either Art 2301 (Painting), or Art 2302 (Watercolor), a three-dimensional class; either Art 2305 (Ceramics) or Art 2309 (Sculpture), plus three (3) hours of an advanced studio.

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.

Bachelor of Fine Arts
Option I - All-Level Teaching Field
Required Education Courses: ED3300, 3301, 3302, 4312, 4314, 4317, 4603.
Art: Art 1302, 1303, 1304, 1306, 2301, 2302, 2305, 2309, 3302, 3303, 6 SCH from 3304, 3305 or 3308, 3309, 3315, 3326, 4301

Bachelor of Fine Arts (Art Major)
Areas of specialization: Ceramics, Painting, Drawing, Mixed media, Sculpture, and Art History.
The following is a suggested sequence of matriculation for students seeking a Bachelor of Fine Arts degree with a major in Studio Art or Art History.

Freshman Year
Art-Drawing 1 and 2: 1302 and 1306 ......................................................... 63
Art-Design 1 and 2: 1303, 1304 or 2303 .................................................6
Art History 3304, 3305 or 3308 .................................................................6
Communication 1303 .......................................................................... 3
English 1301, 1302 ............................................................................. 6
Physical Education 1150 and one activity course .................................. 2
Social Science....................................................................................... 3
Math........................................................................................................ 3
TOTAL 32

Sophomore Year
Art-Ceramics 1 and 2: 2305, 2306 ......................................................... 6
Art-Painting: 2301, 2302 ....................................................................... 6
Art Design 1303, 1304, or 2303 ......................................................... 3
Art – Drawing II 1303 or 3310...........................................................(3
computer Requirement.......................................................................... 3
English 2301 or other literature .......................................................... 6
Fine Arts Requirement ...................................................................... 3

248
United States History ................................................................. 6
Mathematics 1310 or above ......................................................... 3
Political Science 2305, 2306 ...................................................... 6

**TOTAL 42**

**Junior Year**

Art-Sculpture 2309 ................................................................. 3
*Art-Printmaking 3302 ........................................................... 3
Art-Advanced Studio 3301 ...................................................... 3
Art-Jewelry 3326 ..................................................................... 3
Art-Area of Specialization 4301 .............................................. 3
Fine Arts: select from Foreign language; Journalism; Music;
    Theatre or IT 2304 .............................................................. 3-4
Laboratory Science .................................................................. 8
Electives .................................................................................. 3

**TOTAL 38-39**

**Senior Year**

Art-Seminar in Art 3306 .......................................................... 3
Art-Special Topics 3310 .......................................................... 3
Art-Area of Specialization 4301 .............................................. 3
Art-Exhibition Capstone Project 4301 ..................................... 3
Multicultural Social Science ...................................................... 3
Electives .................................................................................. 3

**TOTAL 27**

**GRAND TOTAL 121-122**

A full summer session is recommended immediately proceeding 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.

*These classes may be offered every other year.

**UNDERGRADUATE COURSES IN ART**

* A visiting artist workshop is offered under these numbers during some
summer terms.

Subject titles and course numbers in parentheses at the end of the course
description represent the course equivalent in the Texas Common Course
Numbering system.

1301 *Introduction to the Visual Arts (3-0).* An introductory course leading to
an understanding of the Visual Arts. (ARTS 1301)

1302 *Drawing I (2-4).* An introduction to drawing fundamentals with stress
upon observations and techniques involving various drawing media. (ARTS
1316)

1303 *Design I (2-4).* An introduction to the fundamentals of two-
dimensional design. (ARTS 1311)

1304 *Design II (2-4).* Three-dimensional design and color theory. (May be
taken before Design I) (ARTS 1312)
1306 Drawing II (2-4). Continuation of drawing skills and techniques as begun in Drawing I (1302) with emphasis on compositional skills. Prerequisite: Art 1302 or permission of instructor.

1307 Art and Architecture of the Western World I (3-0). A survey of the art and architecture of the Western World from prehistoric times through the Gothic Period. Qualifies for general education credit.

1308 Art and Architecture of the Western World 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.

2301 Painting I (2-4). Exploring opaque painting media (oil or acrylic) with emphasis on color and composition. (ARTS 2316)

2302 Watercolor (2-4). Exploring transparent painting media (watercolor or tempera) with emphasis on methods and techniques.

2303 Graphic Design (2-4). An introduction to the basic processes and techniques of advertising 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.

2305 Ceramics I (2-4). An introduction to basic ceramic processes, including wheel throwing, hand building, glazing and firing. (ARTS 2346)

2306 Ceramics II (2-4). A further exploration of intermediate ceramic processes, including wheel throwing, glazing and kiln firing. (ARTS 2347) Prerequisite: Art 2305 or permission of instructor.

2309 Sculpture (2-4). Exploratory studies in the principles, materials, and techniques of sculpture. (ARTS 2326)

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.

3302 Printmaking (2-4). An introduction to the basic printmaking processes including colligraphic, intaglio, stencil, and relief.

3303 Theory and Practice for Children (2-2). (Elementary Art Theory). A survey and analysis of the theories and practices of teaching art to children. Topics include artistic development, art programming content, philosophies, methodologies, objectives and assessment.

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.)

3307 Women in Art (3-0). Art history class tracing the overlooked area of women in art.

3308 Contemporary Art History (3-0). A survey of painting, sculpture, architecture, and other arts from Post-Impressionist to Contemporary Period.

3309 Crafts (2-2). An introduction to art theories and methods governing the teaching of craft activities in the classroom. Required for Art Education
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.)

3311 *Life Drawing (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.

Prerequisites: Art 1302 or the permission of the instructor.

3312 *Rock Art (1-3).* Art history class tracing the indigenous art of American Indians in this area.

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.

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.

3315 *Art Theory II and Practice for Adolescents (2-2).* A survey of advanced methods related to the understanding of aesthetic achievement in the secondary art programs. This course required for art education majors. The theories and practice of adolescent art learning. Topics include learning environment, artistic development, presentation methodologies, objectives, assessments and other current topics.

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.

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.

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.

3319 *Photography: Specific 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.

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.
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.

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.

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.

3326 Jewelry (1-4). Basic techniques in working with the process for creating jewelry, hollowware, and small sculpture.

4301 Art Studio Concentration (2-4)*. Advanced investigation into an art subject area; i.e., drawing and painting, design and advertising art, ceramics, printmaking, jewelry, weaving and fibers, and in exceptional cases, art education. This course is often offered in summer terms under visiting artists. The course may be repeated for credit up to three times with number designate for area of specialization. Prerequisite: Art 3301.

Master of Art
(Art Major-36 hours)

The Master of Art degree with a major in art is designed for students interested in pursuing a basic level of mastery within a specific art studio or art research field and who may be interested in teaching or research at the college level, those who are preparing themselves for the world of the professional artist, preparing for careers in secondary education, or those who are preparing for continued graduate studies.

The Master of Art degree with a major in Art may be tailored to meet the needs of the individual student by selecting an area of specialization in Studio Art, Art Education or Art History. The degree may be obtained by completing either PLAN 1 or PLAN 2.

PLAN 1
Nine (9) semester credit hours in graduate core art classes Nine (9) semester credit hours in an approved minor 15 semester credit hours in a selected area of specialization Three (3) semester credit hours of proposal and exhibition

PLAN 2
Nine (9) semester credit hours in graduate core art classes Nine (9) semester credit hours in an approved elective 12 semester credit hours in a selected area of Art Research Six (6) semester credit hours of proposal and thesis

All MA candidates with a major in an Art Studio area must devote three semester hours to the preparation of an exhibition of work of a quality
suitable for presentation to the public.

All MA candidates with a major in an art research area must devote six semester hours of credit to research methodology (proposal) and a written thesis according to their area of specialization.

The exhibition or thesis option is a requirement for the completion of the Master of Arts in Art together with a philosophical statement and the successful completion of both written and oral graduate examinations. The Art Program will, at the discrimination of the student and the committee, accept toward the master's degree six semester credit hours of course work in another area.

When seeking admission into the program, prospective students are required to submit transcripts, a letter of intent and a slide portfolio or CD ROM portfolio of their art work for review by the art faculty. An individual must have a bachelor's degree in art or have completed at least 36 hours in art and art history to be eligible for acceptance into the program. Students wanting to take graduate level studio art classes must have completed undergraduate classes in studio art.

**GRADUATE COURSES IN 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.

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.

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.

5306 Art History (3-0). Study of the visual arts of the world. The course may be repeated for credit where topic varies.

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.

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.

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 School of Arts and Sciences and filed in the office of the Provost and Vice President for Academic and Student Affairs.

COMMUNICATION

The humanistic study and practice of human communication—whether applied to individuals relating to them or 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 focuses in Human Communication or Mass 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.

A human communication focus 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 human communication gives students tremendous flexibility in terms of career choices because effective communication is widely recognized as vital to such fields as advertising, public relations, international relations, health and human services, law, and government.

A mass communication focus provides a strong understanding of mass communication, encompassing the broadcast industry, new media and basics of public relations and advertising. 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 mass media studies (mass communication education) prepares students for current employment and opportunities created by developing technologies. Students who complete the Mass Communication focus will have many career options, especially in the broadly defined fields of journalism, radio, television, new media, advertising, strategic public relations, and integrated communications.

The communication program sponsors the SRSU Speech Team; LISN (the Lobo Information and Sports Network comprised of KSRU Radio and KSRU TV); and Lambda Pi Eta (National Communication Honor Society).
The SRSU Speech Team participates in Intercollegiate Competition in Parliamentary Debate and individual events including Persuasive Speaking, Informative Speaking, After Dinner Speaking and Oral Interpretation. Additionally, each year the Communication Program and Speech Team host the Sul Ross-Big Bend Fall U.I.L. Academic Tournament. High School students from across West Texas gather on campus to participate in debate and individual speaking events as well as all U.I.L. Academic areas.

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 in VHS, S-VHS, MiniDV and DVCAM formats. The Sul Ross State University Campus Radio, along with the Theatre Program, the Communication Program produces live radio theatre through the Sul Ross Radio Theatre Project. 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, National Parliamentary Debate Association, and the Texas State Communication Association.

Oral Communication Requirement: Communication 1303 is the course normally taken to satisfy this requirement. Courses which may also fulfill the requirement and which may be taken with approval of the student's academic advisor are: Communication 3306 and Theatre 2304.

**Bachelor of Arts**

*(Communication Major with Human Communication Focus- 120 hours)*

**Core Curriculum**

<table>
<thead>
<tr>
<th>Component</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Skills Component</strong></td>
<td>46</td>
</tr>
<tr>
<td>English 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics, select from 1310, 1315, 1316, 1342 or 2413</td>
<td>3</td>
</tr>
<tr>
<td>Communication, Comm 1303</td>
<td>3</td>
</tr>
<tr>
<td><strong>Basic General Knowledge</strong></td>
<td></td>
</tr>
<tr>
<td>Fine Arts, select from FA 1301, Art 1301</td>
<td>3</td>
</tr>
<tr>
<td>Music 1312 or 1313 or Thea 1302</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology, PE 1150 and one activity class</td>
<td>2</td>
</tr>
<tr>
<td>Literature, Eng 2301 or other literature</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or 1402, Chem 1401 or 1402, Geol 1401, 1402, or 2402, Phy 1401, 1402, 2401 or 2402</td>
<td>3</td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301 or 1302, Phil 1301, Psy 1302 or Soc 2303</td>
<td>3</td>
</tr>
<tr>
<td><strong>Integrity, Tolerance, Ethical Values and Citizenship</strong></td>
<td></td>
</tr>
<tr>
<td>American History, select two from Hist 1301, 1302, or 3309</td>
<td>6</td>
</tr>
<tr>
<td>State Government, PS 2306</td>
<td>3</td>
</tr>
<tr>
<td>Federal Government, PS 2305</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural, select from Hist 2301 or 2302</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAS 2301, PS 2307 or WS 2301</td>
<td>12-14</td>
</tr>
<tr>
<td><strong>General Education</strong></td>
<td></td>
</tr>
<tr>
<td>English, select one from Eng 2304 or Jour 2301</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts, select one from Thea 2303 or 2304</td>
<td>3</td>
</tr>
</tbody>
</table>
Bachelor of Arts

(Communication Major with Mass Communication Focus- 120 hours)

Core Curriculum

Basic Skills Component ................................................................. 46
- English 1301 and 1302 ................................................................. 6
- Mathematics, select from 1310, 1315, 1316, 1342 or 2413 .......... 3
- Communication, Comm 1303 ..................................................... 3

Basic General Knowledge

- Fine Arts, select from FA 1301, Art 1301 ......................................... 3
- Music 1312 or 1313 or Thea 1302 ............................................... 3
- Kinesiology, PE 1150 and one activity class ................................. 2
- Literature, Eng 2301 or other literature ...................................... 3
- Laboratory Science, select two from Astr 1401, Biol 1401 or 1402, Chem 1401 or 1402, Geol 1401, 1402, 2401 or 2402 .................................................. 3
- Social Science, select from Anth 1301, Eco, 2300 or 2305, Geog 1301 or 1302, Phil 1301, Psy 1302 or Soc 2303 ........................................ 3

Integrity, Tolerance, Ethical Values and Citizenship

- American History, select two from Hist 1301, 1302 or 3309 ....... 6
- State Government, PS 2306 ......................................................... 3
- Federal Government, PS 2305 ..................................................... 3
- Multicultural, select from Hist 2301 or 2302 ................................ 3
- MAS 2301, PS 2307 or WS 2301 .................................................. 3

General Education ................................................................. 9-11

- Fine Arts, select one from Thea 2303 or 2304 .............................. 3
- Foreign Language, two courses in one language ........................ 6-8

Major ................................................................. 36

- Communication Core: 2305; 2308; 3306; 4310 .............................. 12
- Mass Communication Focus: 1304, 2306, 2307, 3305 .................. 21
- Journalism 2301 ............................................................................ 3

Minor (at least 6 hours advanced) ............................................... 18

Electives (at least 3 hours advanced) ............................................ 9-11

Total 120
Bachelor of Arts

(Communication Major with Secondary Teacher Certification)
Speech Communication (36 semester credit hours): COMM 1303, 1304, 2303, 2304, 2305, 2308, 3304, 3305, 3306, 3309 or 4305, 3311 or 4307, 4301, 4302, 4310.

Communication as a Second Teaching Area (minor) Speech Communication (24 semester credit hours): COMM 1303, 1304, 2305, 3304, 3305, 4310

Communication as a Minor
18 semester credit hours of coursework to include 1303, 2305, 3306; 3304 or 4301; plus additional 6 semester credit hours

Bachelor of Arts

(Communication Major - Mass Communication Focus)
The following is a suggested sequence of courses for students seeking the Bachelor of Arts Degree with a major in Communication - focusing in Mass Communication. Since many communication courses are offered every other year, Schedule adjustments may be necessary.

First Year
Communication 1303*, 1304, 2306 or 2307 ...................................................9
English 1301, 1302 .................................................................................6
History 1301, 1302 ..................................................................................3
Physical Education 1150 and one activity course .....................................2
Spanish 1401, 1402 ...............................................................................8
Theatre 2304** .....................................................................................3

TOTAL 31

Second Year
Communication 2305, 2306 or 2307, 2308 .................................................69
English 2301 or other literature ...............................................................6
History 1302 .........................................................................................3
Mathematics ...........................................................................................3
Laboratory Science ...............................................................................4
Political Science 2305, 2306 .................................................................6
Theatre 2304** .....................................................................................3

TOTAL 31

Third Year
Communication 3304 or 4301, 3305, 3306 ...............................................9
Journalism 2301 English 2304 .................................................................3
Laboratory Science ...............................................................................4
Minor ....................................................................................................12
Social Science 2301, 2302 .....................................................................3

TOTAL 31

Fourth Year

257
(Communication Major - Human Communication Focus)

The following is a suggested sequence of courses for students seeking the Bachelor of Arts Degree with a major in Communication - focusing in Human Communication. Since many communication courses are offered every other year, Schedule adjustments may be necessary.

Hours

First Year
Communication 1303*, 2303, 2305 ......................................................... 6
English 1301, 1302 ................................................................................. 6
History 1301, 1302 .................................................................................. 6
Laboratory Science ................................................................................. 4
Physical Education 1150 and one activity course .................................. 2
Theatre 2304** .......................................................................................... 3
TOTAL 27

Second Year
Communication 2305, 2304, 2308****, 3306 ......................................... 9
English 2301 or other literature ................................................................. 3
Fine Art* .................................................................................................. 3
Foreign Language ..................................................................................... 8
Mathematics ............................................................................................ 3
Political Science 2301, 2302 ................................................................. 6
Theatre 2304** .......................................................................................... 3
TOTAL 31

Third Year
Communication 3304, 3311*** or 4307***, 3309 or 4305 ....................... 9
English 2304 or Jour 2301 ................................................................. 3
Laboratory Science .................................................................................. 4
Minor ........................................................................................................ 12
Social Science 2301, 2302 ..................................................................... 3
TOTAL 31

Fourth Year
Communication 4301, 4302, 4310 ......................................................... 69
Communication, Advanced ................................................................. 63
Minor, Advanced ..................................................................................... 6
Electives .................................................................................................. 13
TOTAL 31
GRAND TOTAL 120

*Meets Oral Communication requirement.
** Meets 3 SCH of Fine Arts requirement.
***Meets Multicultural Social Science requirement.
****Meets Computer Science competency requirement.

UNDERGRADUATE COURSES IN COMMUNICATION

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

1101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

1303 Introduction to Speech Communication (3-0). Theory and practice of speech communication behavior in interpersonal, small group, and public communication situations. Meets oral communication requirement. (SPCH 1311)

1304 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.

2101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

2303 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.

2305 Small Group Communications (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. (SPCH 2333)

2306 Basic Television (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.

2307 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.

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. Course meets university computer competency requirement.

3101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

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.

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.

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.

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.

3306 Communication in Business and Professions (3-0). This course will focus on the study of communicative skills in both the oral and written aspects of presentation in the fields of business and the professions. 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 the employee. Meets oral communication requirement.

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.).

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.

3309 Family Communications (3-0). The family unit is studied from a communications 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.

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.
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.

3313 Advanced Television 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.

4101 Communication Practicum (0-2). Supervised instruction for students in extracurricular activities related to video operations and forensics. May be repeated once for credit.

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.

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.

4303 Studies in Speech. Directed individual study and practice in a selected area of speech. May be repeated for credit when topic varies.

4304 Special Topics (3-0). A course dealing with topics in speech communications. May be repeated for credit when topic varies.

4305 Communication in Human Relations (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. Prerequisite: Communication 2303: Interpersonal Communication.

4306 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.

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. This course may be used to meet the university's multicultural requirement.
4311 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.

GRADUATE COURSES IN COMMUNICATION

5303 Topical Seminar in Speech Communication (3-0). Special topics in the study of speech communication. May be repeated for credit when topic varies.

5304 Speech Communication Workshop (1-4). Advanced study and analysis of speech communication performance areas. Course may be repeated for credit.

5305 Individual Study in Speech Communication. Individually guided research in speech communication. May be repeated for credit when topic varies.

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.

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.

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 communication; classical or organizational structure theories; behavioral and systems theories; sense-making theories; organizational climate and cultures and; information flow and communication networks.

5310 Internet and Society (3-0). Recognizing and understanding the role of human communication in the development and spread of the internet and related technologies is a vital component of the larger goal of developing critical consumers of mass communication media. The course is designed to provide students with a greater historical, theoretical and practical understanding of the social and cultural foundation and implications of the Internet and related technological systems as shaped by human
communication. This course will focus on the social context within which the key communicative/technological developments have made the present Internet what it is, are taking place.

UNDERGRADUATE COURSES IN FINE ARTS

1301 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. This course is intended for application to the Core Curriculum requirement or as an elective course open to all undergraduate students.

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.

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.

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.

UNDERGRADUATE COURSES IN JOURNALISM*

Journalism Minor:
Students will complete 18 SCH in Journalism including Journalism 2301 and 3301 plus 12 additional SCH with at least 3 advanced, selected from Journalism, IT2304, or COMM 2308.

1102 Journalism Laboratory (0-2). Practical application of newspaper reporting and writing. (May be repeated twice).
Prerequisite: Permission of the instructor.

2101 Journalism Laboratory (0-2). Practical application of newspaper editorial desk work.
Prerequisite: Permission of the instructor.

2301 Newswriting (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.
Prerequisite: English 1302 or permission of instructor.

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

MUSIC

The Music Program of the Department of Fine Arts and Communication offers opportunities for students of all backgrounds. Music majors are 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, and pep band. These ensembles are open to both music majors and non-majors. Scholarship funds are readily available for those interested in participating in these ensembles. Further, substantial Scholarships are available for students who wish to major in music.

For the student interested in music as a career, the Bachelor of Arts provides an in depth understanding of music. The degree may serve as a foundation for careers in music business and music related activities. The Bachelor of Arts coupled with the certification requirements of the Education Department qualifies a student to teach music in private and public Schools, grades K-12. Considering the increasing number of teaching positions, the BA in music with certification is a most practical degree for students with an interest in music. For those students not interested in certification, there are also many opportunities in the music field such as 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.

Students may choose music as a minor. A Music minor carries no certification but 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.

Bachelor of Arts
(Music Major – Instrumental Concentration 120 hours)

Core Curriculum

<table>
<thead>
<tr>
<th>Basic Skills Component</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics, select from 1310, 1315, 1316, 1342, or 2413</td>
<td>3</td>
</tr>
<tr>
<td>Communication, select from Comm 1303 or Thea 2304</td>
<td>3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Basic General Knowledge</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Fine Arts, select from FA 1301, Art 1301, Music 1312 or 1313</td>
<td></td>
</tr>
<tr>
<td>Thea 1302</td>
<td>3</td>
</tr>
<tr>
<td>Kinesiology, PE 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Literature 2301</td>
<td>3</td>
</tr>
<tr>
<td>Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or 1402, Chem 1401 or 1402, Geol 1401, 1402, 2401 or 2402</td>
<td>8</td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301 or 1302, Phil 1301, Psy 1302, or Soc 2303</td>
<td>3</td>
</tr>
</tbody>
</table>
Integrity, Tolerance, Ethical Values, and Citizenship
American History, select two from Hist 1301, 1302, or 3309 ..................3
State Government, PS 2306 ........................................................................ 3
Federal Government, PS 2305 ..................................................................3
Multicultural, select from Hist 2301, or 2302, MAS 2301, PS 2307 or
WS 2301 ....................................................................................................3

General Education ................................................................. 14
English, select one 2000 or higher course ..................................................3
Fine Arts, select one course from foreign language, journalism, music
or IT .........................................................................................................3
Foreign Language, two courses in one language .....................................3

Major ................................................................. 48
Music 1111-01, 1111 (four enrollments with number indicating
principal instrument), 1114 (two enrollments), 1115, 1116, 1121, 1131,
1312, 1321, 1331, 2141, 2341, 3111-01, 3111 (three enrollments with
number indicating the principal instrument). 3141, 3311, 3313, 3316, 3341,
3411, 4215, 4216, 4311, and Piano Proficiency Examination

Electives ........................................................................ 12-14

Total 120

Some courses are offered in alternate semesters or in alternate years and
some have prerequisites. Therefore, to insure 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.

Bachelor of Arts (Music Major with
Teacher Certification)
Required Education Courses: ED 3300, 3302, 3305, 4312, 4314, 4605.

Option II
Music: Mus 1114 or 1314 (three enrollments), 1121, 1131, 1312, 1321,
1331, 1411, 1412, 2141, 2341, 2411, 3111
(three enrollments with number indicating the principal instrument or voice),
3141, 3313, 3316, 3411, 3341, 4311, and Piano Proficiency Examination.

Option III
Vocal: 1111-01, 1111-03 (four enrollments), 1115, 1121, 1131, 1312, 1314,
1315, 1411, 1412, 2141, 2411, 2341, 3111 -01 (three enrollments), 3111 -03 (three
enrollments), 3141, 3310 or 3317, 3313, 3316, 3341, 3411, 4216, 4311, and Piano Proficiency Examination.

Instrument: 1111-01 (two enrollments), 1111 (four enrollments with number
indicating the principal instrument), 1114 (four enrollments), 1115, 1116,
1121, 1131, 1312, 1321, 1331, 1411, 1412, 2141, 2411, 2341, 1111-01,
3111 (three enrollments with number indicating the principal instrument),
3141, 3313, 3316, 3411, 3341, 4215, 4216, 4311, and Piano Proficiency Examination.
All-Level Option I
Required Education Courses: ED3300, 3301, 3302, 4312, 4314, 4603.
Vocal: 1111-01, 1111-03 (four enrollments), 1115, 1121, 1131, 1312, 1314, 1321, 1331, 2141, 2341, 3111-01 (three enrollments), 3111-03 (three enrollments), 3141, 3311, 3313, 3316, 3341, 3411, 4216, 4311, and Piano Proficiency Examination.  
Instrument: 1111-01, 1111 (four enrollments with number indicating the principal instrument), 1114 (two enrollments), 1115, 1121, 1131, 1116, 1312, 1321, 1331, 3111-01, 3111 (three enrollments with number indicating the principal instrument), 3141, 3311, 3313, 3316, 3341, 4215, 4216, 4311, and Piano Proficiency Examination.

Music as a Minor
Eighteen semester credit hours in music are required for a music minor (without teacher certification). Courses must include Music 1313 or Music 1121 and 1321. 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 the 18 SCH total.

Second teaching field music coursework: 3 hours of 3111 (principal instrument or voice); Piano Proficiency Examination; 3 hours of 1114 or 1314; 1121, 1131, 1312, 1321, 1331, 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, 1115, 1121, 1312, 1314, 3111-01, 3111-03, 3112, 3311, 3313 or 4311.

Transfer students are advised that Sul Ross State University administers transfer entrance tests and auditions covering all transfer music coursework included in "The Transfer Curriculum in Music," as adopted by the Coordinating Board, Texas College and University System. As a result of these tests and auditions, additional music courses may be required beyond the published degree plan.

Bachelor of Arts  
(Music Major)  
(Vocal Concentration)

The following are suggested courses for students seeking the Bachelor of Arts degree with a major in music, vocal concentration.

Freshman Year
Music 1115, 1111-01, 1111-03 (two enrollments), 1121, 1131 1312 or 1314*, 1321, 1331 ................................................................. 15  
Communication ...................................................................................... 3  
English 1301, 1302 ........................................................................... 6  
United States History .............................................................................. 6  
Physical Education 1150 and one activity course ..................................... 2  

TOTAL 32
### Sophomore Year
- Music 1111-03 (two enrollments), 1312 or 1314*, 2141, 2341, 2411, and 3141, 3341 3411 .......................................................... 13
- Computer Requirement .................................................................................................................. 3
- English 2301 or other literature ...................................................................................................... 6
- Fine Arts 1301 or Art 1301 or Theatre 1302 .............................................................................. 3
- Political Science 2305, 2306 ........................................................................................................ 6

**TOTAL 31**

### Junior Year
- Music 3111-01 (two enrollments), 3111-03 (two enrollments), 3316* or 4216*. 3311, 3313* or 4311* ....................................... 12-13
- Foreign Language ........................................................................................................................... 6-8
- Mathematics 1310 or higher ......................................................................................................... 3
- Social Science ............................................................................................................................... 3
- Electives ....................................................................................................................................... 2

**TOTAL 26-29**

### Senior Year
- Music 3111-01, 3111-03, 3313* or 4311*3316* or 4216* ................................................................. 7-8
- Multicultural Social Science ......................................................................................................... 3
- Laboratory Science ....................................................................................................................... 8
- Elective ......................................................................................................................................... 12-14

**TOTAL 31-32 GRAND**

**TOTAL 120**

A Piano Proficiency Examination must be passed before the last semester.
*These courses are offered in alternate years.

### Bachelor of Arts
(**Music Major**)

(****Instrumental Concentration****)

The following are suggested courses for students seeking the Bachelor of Arts degree with a major in music, instrumental concentration.

### Freshman Year
- Music 1115, 1111-01, 1111-(two enrollments in principle Instrument), 1121, 1131, 1312 or 1314*, 1321, 1331 1411, and 1412 ........................................................................................................... 15
- Communication ............................................................................................................................. 3
- English 1301, 1302 ......................................................................................................................... 6
- United States History .................................................................................................................... 6
- Physical Education 1150 and one activity course ....................................................................... 2
- Elective ......................................................................................................................................... 1

**TOTAL 33**

### Sophomore Year
- Music 1111-(two enrollments), 1114, 1116, 2141, 2341, 2411, and 3141, 3341 3411 ....................................................................... 12
- Computer Requirement ................................................................................................................. 3
- English 2301 or other literature .................................................................................................... 6
- Fine Arts 1301 or Art 1301 or Theatre 1302 .............................................................................. 3
- Political Science 2305, 2306 ....................................................................................................... 6
- Electives ....................................................................................................................................... 2
Junior Year
Music 1114, 3111-01, 3111-(two enrollments), 3311, 3313* or 4311*, 3316* or 4216* ............................................................... 12-13
Foreign Language ........................................................................................................... 6-8
Mathematics 1310 or higher ..............................................................3
Social Science .............................................................................................................3
Electives ....................................................................................................................2

TOTAL 32-35

Senior Year
Music 3111-, 3313* or 4311*, 3316* or 4216*, 4215 ........................................... 8-9
Multicultural Social Science .......................................................................................3
Laboratory Science ......................................................................................................8
Elective ......................................................................................................................1

TOTAL 32-33

GRAND TOTAL 120

A Piano Proficiency Examination must be passed before the last semester.
*These courses are offered in alternate years.

UNDERGRADUATE COURSES IN MUSIC

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 10 Trombone
02 Voice 11 Euphonium
03 Flute 12 Tuba
04 Oboe 13 Percussion
05 Clarinet 14 Guitar
06 Saxophone 15 Violin Family
07 Bassoon 17 Organ
08 French Horn
09 Trumpet

1112 Vocal Ensembles (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.
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/Pep Band - This group prepares and performs concert literature as well as pep band music. Performances include both formal 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.

1114 Instrument Class Instruction (2-0). (May be repeated for credit-maximum 2 SCH each.) Class instruction for music majors and minors who have not had previous study, and for other interested students. Emphasis is on the ability to play and compose for the instruments studied:
01 Strings
02 Percussion
03 Brass
04 Woodwind

1115 Piano Class (0-2). (May be repeated for credit once only) Class instruction for Music majors and minors, and for other students who have not had previous study.

1116 Voice Class (0-2). (May be repeated for credit once only) 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.

1117 Individual Studies (0-1). Individual study of selected topics in music.

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.

1121 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.

1131 Ear Training II (2-0). Continuation of MUS 1121. Meets two hours per week.

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.
<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Piano</td>
<td>09</td>
<td>Trumpet</td>
</tr>
<tr>
<td>02</td>
<td>Voice</td>
<td>10</td>
<td>Trombone</td>
</tr>
<tr>
<td>03</td>
<td>Flute</td>
<td>11</td>
<td>Euphonium</td>
</tr>
<tr>
<td>04</td>
<td>Oboe</td>
<td>12</td>
<td>Tuba</td>
</tr>
<tr>
<td>05</td>
<td>Clarinet</td>
<td>13</td>
<td>Percussion</td>
</tr>
<tr>
<td>06</td>
<td>Saxophone</td>
<td>14</td>
<td>Guitar</td>
</tr>
<tr>
<td>07</td>
<td>Bassoon</td>
<td>15</td>
<td>Violin Family</td>
</tr>
<tr>
<td>08</td>
<td>French Horn</td>
<td>17</td>
<td>Organ</td>
</tr>
</tbody>
</table>

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.

1312 Music Literature (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. (MUSI 1308)

1313 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.

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.

1321 Music Theory I (3-0). A study of basic musical elements with emphasis on terminology, scales, intervals, chords, tonal relationships, and simple part writing.

1331 Music Theory II (3-0). Continuation of MUS 1321. Prerequisite: MUS 1321 or equivalent.

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.

2141 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 1131.

2341 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 1331.
### 3111 Individual Instruction (V2-6).
(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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Piano</td>
</tr>
<tr>
<td>02</td>
<td>Voice</td>
</tr>
<tr>
<td>03</td>
<td>Flute</td>
</tr>
<tr>
<td>04</td>
<td>Brass Ensemble</td>
</tr>
<tr>
<td>05</td>
<td>Clarinet</td>
</tr>
<tr>
<td>06</td>
<td>Saxophone</td>
</tr>
<tr>
<td>07</td>
<td>Bassoon</td>
</tr>
<tr>
<td>08</td>
<td>French Horn</td>
</tr>
<tr>
<td>09</td>
<td>Trumpet</td>
</tr>
<tr>
<td>10</td>
<td>Trombone</td>
</tr>
<tr>
<td>11</td>
<td>Euphonium</td>
</tr>
<tr>
<td>12</td>
<td>Tuba</td>
</tr>
<tr>
<td>13</td>
<td>Percussion</td>
</tr>
<tr>
<td>14</td>
<td>Guitar</td>
</tr>
<tr>
<td>15</td>
<td>Violin Family</td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

### 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
03 Vocal Ensemble

### 3113 Instrumental Ensembles (0-3).
(May be repeated for credit.)

01 Concert Band
02 Symphonic Wind Ensemble
03 Stage Band
04 Ensemble Brass Ensemble
05 Woodwind Ensemble
06 Football Show band
07 Guitar Ensemble
08 Specialty
09 Orchestra
10 Percussion Ensemble

### 3117 Individual Studies (0-1).
Individual study of selected academic topics in music.

### 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 2141.

### 3211 Individual Instruction (1-9).
(May be repeated for credit.)
Two thirty-minute lesson 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Instrument</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Piano</td>
</tr>
<tr>
<td>02</td>
<td>Voice</td>
</tr>
<tr>
<td>03</td>
<td>Flute</td>
</tr>
<tr>
<td>04</td>
<td>Oboe</td>
</tr>
<tr>
<td>05</td>
<td>Clarinet</td>
</tr>
<tr>
<td>06</td>
<td>Saxophone</td>
</tr>
<tr>
<td>07</td>
<td>Bassoon</td>
</tr>
<tr>
<td>08</td>
<td>French Horn</td>
</tr>
<tr>
<td>09</td>
<td>Trumpet</td>
</tr>
<tr>
<td>10</td>
<td>Trombone</td>
</tr>
<tr>
<td>11</td>
<td>Euphonium</td>
</tr>
<tr>
<td>12</td>
<td>Tuba</td>
</tr>
<tr>
<td>13</td>
<td>Percussion</td>
</tr>
<tr>
<td>14</td>
<td>Guitar</td>
</tr>
<tr>
<td>15</td>
<td>Violin Family</td>
</tr>
<tr>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

### 3217 Individual Studies (0-1).
Individual study of selected academic topics in music.

### 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.)

3311 Music Materials for Children (3-0). A study of music materials and skills which are effective in providing a musical background for children.

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.

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.

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.

3317 Problems in Music. Individual or small group study of specific topics in music on the upper division level. May be repeated for credit when topic varies.

3341 Music Theory IV (3-0). Continuation of MUS 2341, plus analytical techniques used in the understanding of formal structures found in musical compositions. Prerequisite: MUS 2341 or equivalent.

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 relate to the music to be performed.

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.

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 2411 or its equivalent.

4311 History and Literature of Music (3-0). 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: Permission of the instructor.
**GRADUATE COURSE IN MUSIC**

5319 Individual Research Problems in Music. 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.

5321 Seminar in Music 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.

**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) may fulfill the General Education Core Curriculum requirement with the student’s academic advisor’s approval.

Fine Arts requirement: Theatre 1302 (Introduction to Theatre) may fulfill the General Education Core Curriculum requirement with the student’s academic advisor’s approval.
Bachelor of Fine Arts
(Theatre Major, Technical Design/Production – 120 hours)

Core Curriculum
Basic Skills Component .................................................................46
English 1301 and 1302 .................................................................6
Mathematics, select from 1310, 1315, 1316, 1342, or 2413 ...............3
Communication, select from Comm 1303 or Thea 2304 .................3

Basic General Knowledge
Fine Arts, Thea 1302 .................................................................3
Kinesiology, PE 1150 and one activity course ...............................2
English 2301 or other literature ................................................3
Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or
1402, Chem 1401 or 1402, Geol 1401, 1402 or 2402, Phys 1401, 1402,
2401 or 2402 ...........................................................................8
Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301
or 1302, Phil 1301, Psy 1302, or Soc 2303 .................................3

Integrity, Tolerance, Ethical Values, and Citizenship
United States History, select two from Hist 1301, 1302, or 3309 .......3
State Government, PS 2306 .......................................................3
Federal Government, PS 2305 ..................................................3
Multicultural, select from Hist 2301, or 2302, MAS 2301, PS 2307 or
WS 2301 ..................................................................................3

General Education .................................................................9
English, select one 2000 or higher course ....................................3
Fine Arts, select from Art 1302 or FA 2301 ..................................3
Computer Science, Comm 2308, FA 2301, or journalism ..............3

Major ................................................................. 60
Theatre 1301, 2301, 2308 (two enrollments), 2310, 2311, 3302, 3303, ...
54 3305, 3307, 3309, 3310, 3312, 3313, 3314, 3315, 3316, 3318, 4303, and
4307
IT select one from 2303 or 2307 .................................................3
Electives (at least 3 hours advanced) ..............................................6
Total 120

Bachelor of Fine Arts
(Theatre Major, Acting/Directing – 120 hours)

Core Curriculum
Basic Skills Component .................................................................46
English 1301 and 1302 .................................................................6
Mathematics, select from 1310, 1315, 1316, 1342, or 2413 ...............3
Communication, select from Comm 1303 or Thea 2304 .................3

Basic General Knowledge
Fine Arts, Thea 1302 .................................................................3
Kinesiology, PE 1150 and one activity course ...............................2
English 2301 or other literature ................................................3
Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or
1402, Chem 1401 or 1402, Geol 1401, 1402 or 2402, Phys 1401, 1402,
2401 or 2402 ...........................................................................8
Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301
or 1302, Phil 1301, Psy 1302, or Soc 2303 .................................3
Integrity, Tolerance, Ethical Values, and Citizenship
United States History, select two from Hist 1301, 1302, or 3309 ................3
State Government, PS 2306 ....................................................................3
Federal Government, PS 2305 .................................................................3
Multicultural, select from Hist 2301, or 2302, MAS 2301, PS 2307 or
WS 2301 ..................................................................................................3
General Education .................................................................................9
English, select one 2000 or higher course .............................................3
Fine Arts, Mus 1111-02 (two enrollments) and Mus 1116
Computer Science, Comm 2308, FA 2301, or journalism .....................3
Major ................................................................................................... 57
Theatre 1301, 2303, either 2306 or 2307, 2308, 2310, 2311, 3301, 3302,
3306, 3308, 3309, 3312, 3316, 4303, 4304, 4306, and 4307
Electives (at least 3 hours advanced) .....................................................8
Total 120

Theatre as a Minor
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
Theatre 1301, 1302, and select from 2301, 3301, 3312 ...............................12
Communication 1303 or Theatre 2304 ...................................................3
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

UNDERGRADUATE COURSES IN THEATRE
(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

1101, 1102 Theatre Workshop (0-3). Practical courses designed for freshman students who do acceptable work in the dramatic productions of the department. Non-theater majors and minors must receive permission from the instructor to enroll. (DRAM 1120, DRAM 1121)

1113 Ballet Folklorico de las Americas (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.

1301 Acting I (2-2). A practical laboratory of the principles and technique of acting for the stage. (DRAM 1351)

1302 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? Course meets the Fine Arts requirement.

2101, 2102 Theatre Workshop (0-3). Practical courses designed for sophomore students who do acceptable work in the dramatic productions of the department. Non-theater majors and minors must receive permission from the instructor to enroll.

2301 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.

2303 Voice for the Actor (3-0). Vocal techniques, including diction and dialect, for performing on the stage.

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. Required for non-certification communication majors and certification theatre majors. Meets the oral communication requirement.
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.

2306 Movement for the Performing Arts (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.

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.

2309 Dance Across World Cultures (1-2). This course introduces the student to the study of dance from a multicultural perspective, with particular emphasis given to the social, religious, political and historical relevance of dance throughout the world. Students will learn dance techniques and choreography from diverse cultures, with the expectation that greater depths of culture appreciation and understanding arise from participation in the performance traditions studies. Fulfills the multicultural course requirement.

2308 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.

2309 Stage Management (2-1). A course encompassing the basic theatrical stage management skills and procedures, such as budgeting and personnel management, for the pre-rehearsal, rehearsal and performance periods of a production.

3101, 3102 Theatre Workshop (0-3). Practical courses designed for junior students who do acceptable work in the dramatic productions of the department. Non-theater majors and minors must receive permission from the instructor to enroll.

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.

3301 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

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.

3304 Special Topics (3-0). A course dealing with topics in the study of theatre, such as theatrical design, mask characterization, stage combat, acting for the camera, etc. May be repeated when topic varies.

3305 Research (0-3). Individual research on selected subjects to meet student needs and interests in theatre. May be repeated when topic varies.

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.
3309 Stage Make-up (1-2). A practical laboratory of the principles and techniques of stage and film make-up.

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. Required for all theatre certification majors and all Early Childhood education majors.

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.

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

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

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

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.

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.

3317 Acting III: Method Acting (2-2). Specific instruction linked to the method developed by Constantine Stanislavski as a useful tool for actor training. A focused study of the physical and emotional process that will help create a subtext for roles in which students are working on.

3318 Directing I (2-1). The technology and application of directing for the stage. Prerequisite: THEA 3312.

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.
4101, 4102 Theatre Workshop (0-3). Practical courses designed for senior students who do acceptable work in the dramatic productions of the department. On-theater majors and minors must receive permission from the instructor to enroll.

4303 Advanced Theatre Production Workshop (1-4). Designed for students interested in applying advanced backstage production theory and skills to theatre productions which range from showcase to formal productions. Course may be repeated for credit but not more than once for credit toward a theatre major or minor.

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.

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.

4306 Acting III (2-2). An advanced study of acting styles and periods for the stage.
Prerequisite: Theatre 3301 or instructor's permission.

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.

GRADUATE COURSES IN THEATRE

5303 Seminar in Theatre Arts and Techniques (3-0). An advanced study of problems of analysis, design, rehearsal and performance in theatre. May be repeated for credit when topic varies.

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.

5305 Individual Research (0-4). Directed individual research in selected areas of theatre and dramatic arts. May be repeated for credit when topic varies.
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; suiting 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.
At the time of entrance into the program each student must complete a degree plan with a General Studies advisor.

Bachelor of Arts in General Studies -120 hours
English 1301, 1302, 2301 or other literature and 3 SCH sophomore or advanced .................................................. 12
Communication 1303 or Theatre 2304 ........................................................... 3
Computer Science: select from Computer Science 1301;
Office Systems 1384 or English 2304 ............................................................ 3
Fine Arts: select from Fine Arts 1301; Art 1301; Music 1312, 1313
or Theatre 1302 plus an additional 3 SCH selected from: art,
Journalism, music, theatre, or IT2304 ............................................................ 6
Foreign Language .......................................................................................... 8
United States History 6 SCH selected from History 1301,
1302 or 3309 .................................................................................................. 6
Kinesiology: PE1150 and one activity course .............................................. 2
Laboratory Science: Eight semester hours selected from
Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402;
Geology 1401, 1402, 2404; Physics 1401, 1402, 2401,2402 ......................... 8
Mathematics: select from 1310, 1315, 1316, or 1342 .......................... 3
Social Sciences: select from Anthropology 1301; Economics 2300,
2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302;
Sociology 2303 ............................................................................................. 3
Multicultural Social Science; select from History 2301,
2302; Mexican American Studies 2301; Political Science 2307;
Women's Studies 2301 .................................................................................. 3
Political Science 2305, 2306 ........................................................................ 6
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Electives (must have total of 39 SCH advanced)</td>
<td>57</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>120</strong></td>
</tr>
</tbody>
</table>
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.

**Core Curriculum**

**Basic Skills Component** .................................................46

- English 1301 and 1302 ..................................................6
- Mathematics, select from 1310, 1315, 1316, 1320, or 1342 ..........3
- Communication, select from Comm 1303 or Thea 2304 ..........3
- Computer Science or English 2304 or OFS 1384 ...............3

**Basic General Knowledge**

- Fine Arts, select from FA 1301, Art 1301, Music 1312 or 1313 or Thea 1302 ..........................................................3
- Kinesiology, PE1150 and one activity course ..........................2
- Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or....8
- Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301 ....3
- American History, select two from History 1301, 1302 or 3309 ....6
- State Government, PS 2306 ...........................................3
- Federal Government, PS 2305 ...........................................3
- Multicultural, select from Hist 2301 or 2302, MAS 2301, PS 2307 or ....3
- WS 2301

**Integrity, Tolerance, Ethical Values, and Citizenship**

- American History, select two from History 1301, 1302 or 3309 ....6
- State Government, PS 2306 ...........................................3
- Federal Government, PS 2305 ...........................................3
- Multicultural, select from Hist 2301 or 2302, MAS 2301, PS 2307 or ....3
- WS 2301

**General Education** ....................................................9-11

- Fine Arts, select one course from art, journalism, music, theater ....3
- IT 2304 or linguistics
- Foreign Language, two courses in one language .........................3

**Major** ..............................................................................36

- English 2301 or 2306; 2302; 2303; 3303; 3304:3309:3310:3312; 4306:4308; plus 6 SCH additional advanced hours in English

**Minor** (At least 6 hours advanced) ........................................18

**Electives** ...........................................................................9

**Total 120**

The following is a recommended sequence of courses for students seeking a Bachelor of Arts in English.
Bachelor of Arts  
(English Major)

**Freshman Year**

English 1301, 1302 ................................................................. 6  
Oral Communication Core Requirement ..................................... 3  
Fine Arts Core Requirement .................................................... 6  
Mathematics Core Requirement .................................................. 3  
United States History Core Requirement .................................... 6  
Foreign Language .................................................................. 6-8  
Physical Education 1150 and one activity course ....................... 2  

**TOTAL 32-34**

**Sophomore Year**

English 2301/2306; 2302; 2303; English elective .................. 12  
Laboratory Science ..................................................................... 8  
Multicultural Social Science ......................................................... 3  
Political Science ..................................................................... 6  
Social Science ........................................................................ 3  

**TOTAL 32**

**Junior Year**

English 3303; 3312; 3309; 3310 .................................................. 12  
OFS 1384, CS 1301, English 2304 or equivalent ....................... 3  
Minor ................................................................................. 3  
Electives ................................................................................ 6  

**TOTAL 30**

**Senior Year**

English 3304; 4306; 4308; English elective ............................. 12  
Minor ................................................................................. 9  
Electives ................................................................................ 3  

**TOTAL 24**

**Bachelor of Arts**  
(English Major with Secondary Teaching Certification)

Required Education Courses: ED 3300, 3301, 3302, 3303, 4308, 4313, 4314, 4315, 4322, 4605  
Required English Courses: ENG 2301, 2302, 2303, 3303, 3304, 3309, 3310, 3312, 4306, 4308, 4316 plus 3 SCH  
Required Communication Courses: COMM 2305, 3305

**English major with a concentration in writing** (non-certification): English 2304; 2302; 2303; 3301; 3304, 3309 or 3310; 3320; 3321; 3322; 4306 or 4308; and 9 additional SCH in English.

**English as a Minor**

3309, 3310, 4306, 4308, plus 6 additional SCH in English.  
(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)
UNDERGRADUATE COURSES IN ENGLISH

0300 Writing Skills (3-1). This course is designed for students whose 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 degree requirements. (ENG 0300)

1301 Composition and Rhetoric I (3-0). This is an introductory college course which emphasizes the composition of short essays and reading skills. Required of all students. (ENGL 1301)
Prerequisite: English 0300 or sufficient English, verbal, and reading scores to meet the requirements of English 0300 as described above.

1302 Composition and Rhetoric 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. (ENGL 1302)
Prerequisite: English 1301.

All sophomore and advanced English courses require completion of the freshman English courses as a prerequisite.

2301 Literary Types (3-0). Techniques of critical analysis of major literary types: prose, fiction, poetry, and drama. (ENGL 2339)

2302 World Literature I (3-0). A study of masterpieces of world literature from ancient times to 1600. (ENGL 2331)

2303 World Literature II (3-0). A study of masterpieces of world literature from 1600 to present. (ENGL 2332)

2304 Technical and Professional Writing (3-0). The study and practice of writing technical and professional reports related to scientific, industrial, and commercial fields. (ENGL 2311) Meets computer literacy requirements.

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.

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.

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.

3301 Contemporary Literature (3-0). A study which emphasizes works of fiction, drama, and poetry since 1960.

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.

3304 Shakespeare (3-0). Shakespeare's principal histories, comedies, and tragedies.
3305 Principles of Linguistics (3-0) Introduction to the study of language with attention to phonology, morphology, and syntax. Includes study of the similarities and differences of English and other languages, especially Spanish.

3306 Language and Culture (3-0) A study of the function of language within social and cultural contexts. Course is cross-listed with Anthropology and Sociology.

3307 Sociolinguistics (3-0). A study of the relationship between language and society including language varieties, speech communities, language and culture, and speech acts and speaking.

3308 Language and Gender (3-0) A study of the role of language in the construction of gender identities, in the use of direct and indirect speech acts, in the creation of gendered metaphors and stereotypes, and in the concept of “language of power.”

3309 English Literature from Beowulf to 1800 (3-0). English literature of the Anglo-Saxon Period, Middle Ages, Renaissance, and Age of Reason.

3310 English Literature from 1800 to the Present (3-0). English literature of the Romantic, Victorian, and Modern Periods.

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 resources available. Course cannot be used to satisfy Core Curriculum requirements in English. Prerequisite: English major or Interdisciplinary Studies major.

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.

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.

3321 Creative Writing: Poetry (3-0). Emphasis on poetry. Provides intensive study of various poetic forms. Focuses on writing and critiquing original poetry.

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.

3323 Creative Writing: Nature Writing (3-0). An intensive study of various forms of nature writing. Focuses on writing and critiquing the natural history essay, travel writing, the ramble, and others.

3324 Creative Writing: Introduction to Novel Writing (3-0). An intensive study of techniques and aims unique to writing and critiquing original novel chapters.

4101 Readings and Review in English (1-0). A review of content and pedagogy designed to prepare students for the TExES in English/Language Arts as well as other types of tests for which a review would be useful. Prerequisite: English 2302, 2303, 3309, 3310, 3312, 4306, 4308, or
permission of the Department Chair.

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.

4303 Literary Studies (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: Autobiography, Multicultural Literature, Graphic Novels. May be repeated for credit when topic varies.

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.

4306 American Literature to 1865 (3-0). A study of American literature from Colonial times through the Civil War.


4309 Readings and Research. Individually guided study and research in English, American or international literature or the English language. May be repeated for credit when the topic varies.

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. Fulfills multicultural requirement.

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. Fulfills multicultural requirements.

4315 Film as Narrative (3-0). A study of narrative in cinematic form, considering both original film creations and adaptation from other literary genres.

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.

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.

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.

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.
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 (36 SCH English courses)
- the major/minor plan (24-30 SCH in English; 6-12 SCH in
- the thesis option in literature or writing (24 SCH English;
  6 SCH thesis)
- the portfolio option in creative writing (33 SCH English; 3 SCH portfolio)

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, ecocriticism, folklore, women's literature, and creative writing.

GRADUATE COURSES IN ENGLISH

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.

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.

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, Multicultural Literature. May be repeated for credit when the topic changes.

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.

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; Romanticism; Victorian Poets. May be repeated for credit when the topic varies.

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: Transcendentalism; American Romanticism; Rise of Realism; Twentieth-Century Fiction. May be repeated for credit when the topic varies.
5308 Studies and Research Techniques in the English Language (3-0). A study of specific problems concerned with language, such as structural and transformational grammar, dialectical variants, semantic development, and phonological change.

5309 Readings and Research. Individually guided research in English or American literature or the English language. May be repeated for credit when the topic varies.

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 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.

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 School, and filed in the Office of the Provost and Vice President for Academic and Student Affairs.

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 students desiring to enter other career fields. An endorsement in English-as-a-Second-Language can be earned in addition to the degree in Spanish.

CAREER OPPORTUNITIES
Bilingual Program Officer
Court Interpreter
Government Positions
Public Relations Officer
Publishing Positions
Social Worker
Teacher
Translator

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.

Bachelor of Arts
(Spanish Major-120 hours)

The Spanish program provides professional training for students interested in preparing for careers in interpretation and translation; and students desiring to enter other career fields. An endorsement in English-as-a-Second Language can be earned in addition to the degree in Spanish.

Core Curriculum
Basic Skills Component .................................................................46
2010 – 2012 CATALOG

English 1301 and 1302 .................................................................6
Mathematics, select from 1310, 1315, 1316, 1320, or 1342 ..........3
Communication, select from Comm 1303 or Thea 2304 ..............3
Computer Science or English 2304 or OFS 1384 .........................3

Basic General Knowledge
Fine Arts, select from FA 1301, Art 1301, Music 1312 or 1313 or Thea 1302 .................................................................3
Kinesiology, PE1150 and one activity course .............................2
Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or 1402, Chem 1401 or 1402, Geol 1401, 1402 or 2402, Phys 1401, 1402, 2401 or 2402
Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301 or 1302, Phil 1301, Psy 1302, or Soc 2303

Integrity, Tolerance, Ethical Values, and Citizenship
American History, select two from History 1301, 1302 or 3309 ..........6
State Government, PS 2306
Federal Government, PS 2305
Multicultural, select from Hist 2301 or 2302, MAS 2301, PS 2307 or WS 2301

General Education ...................................................................... 9-11
Fine Arts, select one course from art, journalism, music, theater, ..........3
IT 2304, or linguistics
English 2301 or other literature-3 SCH sophomore or advanced ........... 6-8

Bachelor of Arts (Spanish Major)

Freshman Year
Spanish 2301, 2302 .................................................................6
English 1301, 1302 ..................................................................6
Oral Communication Core Requirement ........................................3
Fine Arts Core Requirement .......................................................3
Mathematics Core Requirement ..................................................3
United States History Core Requirement ......................................3
Physical Education 1150 and one activity course ..........................2

TOTAL 32

Sophomore Year
Spanish 2305, 3301 plus 3 SCH Spanish elective .......................9
English 2301 (or other literature) plus English elective sophomore or advanced .........................................................6
Laboratory Science ....................................................................8
Political Science .........................................................................6
Social Science ..........................................................................3

TOTAL 32

The following is a recommended sequence of courses for students seeking a Bachelor of Arts in Spanish.
Junior Year
Spanish 3310, 3311, 3315 or 3316 plus 3 SCH Spanish Elective ............. 12
OFS 1384 or equivalent ........................................................................... 3
Minor ........................................................................................................... 9
Multicultural Social Science .................................................................... 3
Electives .................................................................................................... 6
   TOTAL 33

Senior Year
Spanish 4310, 4311, BSL 3303 ................................................................. 9
Minor ........................................................................................................... 9
Electives ..................................................................................................... 5
   TOTAL 23

Bachelor of Arts
(Spanish Major with Teacher Certification)
Required Education Courses: ED3300, 3301, 3302, 3303, 4314, 4322, 4605
Span 2301, 2302, 2305, 3301, 3302, 3311, 3315 or 3316, 4310, 4311, 4312,
BSL 3303 and 3 SCH advanced courses in Spanish or BSL.

Spanish as a second teaching field: 1401, 1402 (for non-Spanish speakers);
2301, 2302, 3301, 3310, 3311, 3315 or 3316, 4310, 4311.

Spanish as a Minor
Spanish 2301, 2302, 3315 or 3316, and 9 SCH to include 6 advanced.

UNDERGRADUATE COURSES IN SPANISH
(Subject titles and course numbers in parentheses at the end of the course
description represent the course equivalent in the Texas Common Course Numbering system.)

1401, 1402 First-Year College Spanish (4-0). The first and second
semesters of college Spanish for students without previous knowledge of
the language. An introduction to the four basic language skills: listening,
speaking, reading, and writing, with special emphasis on listening and
speaking. The student who satisfactorily completes this series will be
prepared to register for Spanish 2301. (SPAN 1411, 1412)

2301 2302 Second-Year College Spanish (3-0). For the non-native speaker
of Spanish, this series is the continuation of Spanish 1401, 1402. (Native
speakers, see note below.) Review of grammatical patterns, selected
readings, and brief compositions. (SPAN 2313, 2315)

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 Spanish 2301. 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 2302.

2305 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 2301 or consent of instructor.

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 2302 or consent of instructor.

3308 Studies in Spanish (3-0). A topics course with an in-depth study of specific areas of Spanish and Spanish American literatures and other areas related to Spanish language and Hispanic culture. May be repeated for credit if topic varies. Topics will be chosen from:
2. Studies in Spanish Literature: Medieval, Golden Age, Modern
4. Studies in Mexican Literature
Prerequisite: Spanish 2302 or consent of instructor.

3310 Spanish Literature I (3-0). A survey of major Spanish authors and works from the 11th to the 17th centuries. Prerequisite: Spanish 2302 or consent of the instructor.

3311 Spanish Literature II (3-0). A survey of major Spanish authors and works from the 18th to the 20th centuries. Prerequisite: Spanish 2302 or consent of the instructor.

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 2302 or consent of the instructor.

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 2302 or consent of the instructor.

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 2302 or consent of instructor.

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-economical, literary and political view of contemporary Latin America will be presented. Prerequisite: Spanish 2302 or consent of instructor.

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 2302 or consent of the instructor.

4308 Readings and Research. Directed studies on specific topics of Spanish language, Spanish literature and Spanish American literature. May
GRADUATE COURSES IN SPANISH

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.

UNDERGRADUATE COURSES IN FRENCH

1401 First-Year College French (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.

1402 First-Year College French (4-0). A continuation of French 1401 with additional practice in the four basic skills of listening, speaking, reading, and writing.
Prerequisite: French 1401 or consent of the instructor. (FREN 1412)

2301 Second-Year College French (3-0). Third semester of college French. A continuation of French 1401 and 1402. Continued development and review of speaking, reading, and writing skills in French. Includes literary and cultural readings.
Prerequisite: French 1402 or consent of instructor.

Prerequisite: French 2301.

UNDERGRADUATE COURSES IN BILINGUAL/ENGLISH AS A SECOND LANGUAGE

These courses are offered to support the requirements for the bilingual specialization in elementary education and the ESL endorsement.

BSL 3303 Structure and 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. Designed to provide background knowledge for working with Spanish speaking ESL students as well as students of Spanish.

BSL 3328 Foundations of Bilingual Education (3-0). A study of the evolution, rationale, legislation, philosophy, goals, and objectives of bilingual education.
**BSL 3329 Principles and Concepts of Second Language Learning (3-0).** A study of current theories of and approaches to second language learning.

**BSL 4328 Language Arts for the Bilingual Student (3-0).** A study of approaches to achieving language arts competencies for the bilingual student.

**BSL 4329 Content Areas for the Bilingual Student (3-0).** A study of approaches to achieving competencies in social studies, science, mathematics, music, and art for the bilingual student.

**BSL 4330 Bilingual Literature (3-0).** Writing in two languages from a linguistic prospective. Covers children's books, poetry, novels and short stories.

**GRADUATE COURSES IN LINGUISTICS**

**5306 Language Acquisition (3-0).** This course focuses on current issues in the field of second language acquisition from a theoretical perspective. Linguistic, sociolinguistic, and cognitive approaches are considered.

**5331 Teaching Second Language Composition (3-0).** This course provides an in-depth survey of the practice of teaching English composition to students whose native language is not English. Topics include rhetorical theory, modes of written English discourse, contrastive rhetoric, teaching methodology, the writing process, evaluating compositions, using computers to write and the problems of non-native writers.

**5341 Linguistics and Reading (3-0).** This course considers the role of linguistics in reading. Topics include language, memory, learning, and culture. The development of reading in both first and second languages is discussed.

**5388 Bilingualism (3-0).** This course considers the positive and negative claims as to the effects of bilingualism on the cognitive, social, and academic development of children as well as examining the assumptions behind various language policies and programs for bilingual children.

**WOMEN'S STUDIES**

Coordinator: Sharon Hileman, Ph.D.

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.

UNDERGRADUATE COURSES IN WOMEN'S STUDIES
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. Required course for Women's Studies minor. Fulfills Multicultural requirement.

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. Fulfills multicultural requirement.

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.

GRADUATE COURSES IN WOMEN'S STUDIES
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.

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.
LIBERAL ARTS
School of Arts and Sciences
e-mail: arts-sciences@sulross.edu

Liberal Arts Advisors:

Nancy Antrim, Ph.D., Language and Literature
James W. Downing, Ph.D., Behavioral and Social Sciences
Sharon L. Hileman, Ph.D., Languages and Literature
Esther Rumsey, Ph.D., Fine Arts and Communication
And James C. Zech, Ph.D., Biology

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 School of Arts and Sciences. At least 6 hours and no more than 18 hours must be taken in each discipline. In addition, students will complete LA 5101 and LA 5301, LA 5101 and LA 5301 may not be taken concurrently.

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.

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.
The School of Professional Studies was formed June 1, 1986, following the merger of the Division of Business Administration, the Division of Teacher Education, and the department of Criminal Justice. The School consists of the following departments:

- Business Administration
- Criminal Justice
- Education
- Industrial Technology
- Law Enforcement Academy
- Physical Education
- Vocational Nursing

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**

1. Bachelor of Arts with majors in Administrative Systems & Business Technology and interdisciplinary Studies includes teacher certification
2. Bachelor of Business Administration
5. Diagnostician, Counseling, School Administration, Reading Specialist, and Physical Education.
6. Master of Science with a major in Criminal Justice
DEPARTMENT OF BUSINESS ADMINISTRATION

Department of Business Administration
School of Professional Studies
Dolph Briscoe Administration Building, 316
Box C-35, Alpine, TX 79832
(432) 837-8066
Fax: (432) 837-8003
E-mail: mwill@sulross.edu

Associate Professor and Interim Chair: Mazie E. Will, M.S., CPS/CAP
Professors: William C. Green, Ph.D., and
Robert C. Matthews, M.B.A., C.P.A.
Associate Professor: Pamela C. Marett, Ph.D.
Lecturer: Linda McAnally, M.B.A.

The Department of Business Administration at Sul Ross State University offers three degrees, two minors and a certificate program: the Bachelor of Business Administration Degree (BBA), 120 semester credit hours; the Master of Business Administration Degree (MBA), 36 semester credit hours; a Bachelor of Arts Degree in Administrative Systems & Business Technology (BA in ASBT), 120 semester credit hours; a minor in Business Administration, 18 semester credit hours; and a minor in ASBT, 18 semester credit hours; and a Certificate in Office Technology, 41 semester credit hours.

Department of Business Administration
Bachelor of Business Administration Degree (BBA)
120 semester credit hours

The Bachelor of Business Administration Degree program provides a broad base of business knowledge, understanding, and skills. The business studies include the fields of economics, accounting, marketing, finance, global business, human resources, and information systems.

In this program you may take business courses your first year! The required university and business courses can be synchronized to provide a career centered curriculum. The concurrent address of Business and University courses ensures that each enhances, bolsters, and reinforces the other.

When selecting the required five business course electives, you may decide to be a business generalist or you may opt for a business field specialty. When choosing the five free elective courses, discover your interests or enhance your knowledge in the interest area of your choice.

You will be happier in a career that combines the solid foundation of the BBA degree personal interests.
Bachelor of Business Administration Degree

Career Opportunities

The Bachelor of Business Administration degree program prepares the undergraduate for managerial and administrative positions in any type of organization. This includes: regional, national, and international private industry and enterprise; non-profit organizations; non-governmental organizations; and local, state, and federal government offices and agencies. The business undergraduate is equipped to pursue employment as a business generalist or in a functional favorite (accounting, economics, etc.) and in a personal interest area (music, film, science, transportation, etc.).

Department of Business Administration

Bachelor of Arts Degree

Administrative Systems & Business Technology

120 semester credit hours

The Bachelor of Arts degree in Administrative Systems & Business Technology prepares you for employment as an administrative support specialist, project coordinator, training coordinator, supervisor, or office manager. The planned sequence of courses provides incremental skill development. It provides students with an understanding of the impact of technology on business office routines and procedures, and the skills necessary to work with people and automated equipment. Students who want to teach business education in middle School and high School may take additional prescribed courses in education to pursue teacher certification.

Minor in Business Administration

18 semester credit hours

Students desiring a minor field in Business Administration must complete six prescribed courses.

Minor in Administrative Systems & Business Technology

18 semester credit hours

Students desiring a minor field in ASBT must complete six prescribed courses.
CERTIFICATE IN OFFICE SYSTEMS
(Tech Prep Articulation Program)
41 semester credit hours

This program provides intensive office skills training leading to a certificate in office technology. With a 2.0 (C) average, a student may transfer to a degree program at any time during or after completing this program of study. Admission requirements and standards of conduct are the same as those required for other programs. Students who transfer from another institution of higher education to pursue this certificate program must complete at least 12 semester credit hours in residence, including ASBT 3384.

Master of Business Administration
One Year Full-Time Program
36 semester credit hours

The one year full time Master of Business Administration (MBA) degree program is designed to prepare individuals to deal with all aspects of the complex and competitive world of organizations. The MBA program imparts the latest organizational knowledge and perspectives. Students learn how to recognize and define changes critical to organizations regionally, nationally, and globally. The MBA professors apply academic theory, the practical lessons they have learned, and the knowledge gained from their research to their courses. The MBA curriculum includes the core content of economics, finance, marketing, management, and accounting.

The Department of Business Administration MBA program attracts people from diverse cultures and leverages these differences into learning opportunities. Through this program lasting relationships with faculty, students, and alumni are formed that provide a powerful professional and personal advantage.

The Department of Business Administration offers the Executive MBA graduate program at Chihuahua in collaboration with La Universidad Autónoma de Chihuahua, awarding a Master of Business Administration degree from Sul Ross.

The SRSU EMBA at Chihuahua has provided experienced managers with executive-level education fundamental to success since 1998.

The program is taught in English at La Universidad Autónoma Chihuahua. The curriculum provides students with a solid base in the functional areas of business in a format suited to working managers. Students may complete the program in two years or take up to six years to complete the degree. The program provides special emphasis on the Mexican business environment.
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.

Department of Business Administration

Degree Requirements

Bachelor of Business Administration

(120 hours)

Accounting 2330, 2331, 3333 ..............................................................9
Administrative Systems and Business Technology 1384 .....................3
Economics 2300 ..............................................................................3
Finance 3340 .................................................................................3
General Business Administration 1353, 3350, 3351, 3352 .................12
Management 3360 .........................................................................3
Marketing 3370, 4379 ....................................................................6
Business Electives .........................................................................15
Free Electives .............................................................................14
Economics 2305 .............................................................................3
Bachelor of Arts
Administrative Systems & Business Technology
(120 hours)

Accounting 2330 .................................................................3
Administrative Systems & Business Technology 1382, 1383, 1384, 2380, 2381, 3380, 3381, 3382, 3383, 3384, 3385, 4350 ........................................36
Communications: General Business Administration 4354 ...................3
General Business Administration 3351 ........................................3
English 1301, 1302, 2301 or any other literature, any other 2000 level or higher course .............................................................12
Fine Arts: Select from Fine Arts 1301, Art 1301, Music 1312, 1313 or Theatre 1302 .................................................................3
History 1301, 1302 .................................................................6
Laboratory Science: Select from Astronomy, Biology, Chemistry, Geology or Physics .................................................................8
Math 1315, 1325 .......................................................................6
Physical Education 1150, 1153 .....................................................2
Political Science 2305, 2306 .........................................................6
Free Electives (at least 9 Advanced Electives) .......................................21
History 1301, 1302 .................................................................6
Laboratory Science: Select from Astronomy, Biology, Chemistry, Geology or Physics .................................................................8
Math 1310 or higher ....................................................................3
Multicultural…GBA 4355 ............................................................3
Physical Education 1150, one activity course ....................................2
Political Science 2305, 2306 .........................................................6
Social Science ..............................................................................3

Total 120

Master of Business Administration
One Year Full-Time
(36 hours)

Accounting 5307 .........................................................................3
Economics 5303 and 5305 .............................................................6
Finance 5306 ..............................................................................3
General Business Administration 5301, 5304, 5309 ................................9
Management 5304 and 5312 .........................................................6
Marketing 5303 and 5305 .............................................................6
Business Elective ........................................................................3

Total 36
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 2330; Economics 2300 and 2305; Finance 3340; Marketing 3370; Management 3360; and General Business Administration 3352.

**Executive Master of Business Administration**

At Chihuahua

(36 hours)

Accounting 5307 ............................................................................................3  
Economics 5302, 5304 ..................................................................................6  
Economics 5301, 5303 or GBA 5308, 53023 .................................................3  
Finance 5306 .................................................................................................3  
General Business Administration 5301, 5302, 5304 5308, 5309 ..........................15  
Management 5304 and 5312 .................................................................6  
Marketing 5303 and 5305 ..............................................................................6  

Total 36

**Minor in Business Administration**

(18 hours)

Students desiring a minor field in Business Administration must complete the following courses:

Accounting 2300 ............................................................................................3  
Economics 2300 and 2305 .............................................................................6  
Finance 3340 .................................................................................................3  
Management 3360 .........................................................................................3  
Marketing 3370 ..............................................................................................3  

Total 18

**Minor in Administrative Systems & Business Technology**

(18 hours)

Students desiring a minor field in ASBT must complete the following courses:

ASBT 1383, 2380, and 12 SCH advanced ASBT **18**

**Certificate in Office Technology**

Administrative Systems & Business Technology 1382, 1383, 1384, 2380, 2381, 3380, 3382, 3384 ..................................................24  
English 1301 ..................................................................................................3  
Communication 1303 or General Business 4354 ...........................................3  
Physical Education 1150, 1153 ......................................................................2  
Administrative Systems and Business Technology or Business Electives .................................................9  

303
UNDERGRADUATE COURSES IN BUSINESS ADMINISTRATION

Accounting – ACC

ACC 2330 Principles of Accounting I (3-0). An introduction to financial accounting to include the accounting cycle, preparation of financial statements and general analysis of financial statements for firms operating primarily as sole proprietorships and partnerships.

ACC 2331 Principles of Accounting II (3-0). Principles of accounting as applied to partnerships and corporations, departmental and branch accounting, manufacturing, budgets, and analysis of financial statements.


Prerequisites: ACC 2330 and ACC 2331

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 2331

ACC 3333 Accounting for Managers (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 2331.

ACC 4330 Principles of Taxation (3-0). Principles of taxation with emphasis upon federal income tax as it applies to individuals.

Prerequisite: ACC 2331

ACC 4332 Advanced Accounting (3-0). Complex financial accounting problems, including consolidated statements, not-for-profit accounting, partnerships and multinational accounting. (Various)

Prerequisite: ACC 333

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 Computer Application in Accounting and Auditing (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 Business and Professional Ethics (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. Prerequisite: ACC 2331.

Administrative Systems & Business Technology-ASBT

ASBT 1382 Keyboarding & Input Technologies (3-0). Keyboarding training and skill development will be covered. Students will use computer-based software to analyze skill levels and direct their progress from basic alphabetic and 10-key keyboarding to intermediate skill levels. Voice recognition techniques will be introduced. Basic document formatting will be covered. (WECM: POFT 1429)

ASBT 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. (WECM: POFI 2401 or POFT 2401) Prerequisite: ASBT1382 or demonstrated keyboarding skill.

ASBT 1384 Business Computer Applications (3-0). Students learn to use an industry-standard office suite for spreadsheet, presentation, word processing, and database applications, developing skills from the simple to the more complex. (WECM: POFI 1301 or POFI 1401)

ASBT 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)

ASBT 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.

ASBT 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.

ASBT 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.

ASBT 3382 Desktop Publishing Applications (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.
ASBT 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.

ASBT 3384 Practicum and Internship in Business (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.

ASBT 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.

ASBT 4350 Special Topics in ASBT (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.

Economics-ECO

ECO 2300 Principles of Microeconomics (3-0). Study of market processes with emphasis on decision making at the margin; extensive use of supply/demand models.

ECO 2305 Principles of Macroeconomics (3-0). Analysis of aggregate economic performance. Discussions of fiscal and monetary policies, national income, price levels, interest rates, and unemployment. Prerequisite: ECO 2300 recommended.

ECO 4305 Advanced Readings and Research in Economics and Finance. Selected topics in economics and/or finance to be offered as a seminar or individual study. Prerequisites: ECO 2300, ECO 2305, and ECO 3300

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 5302 Seminar in Economic Issues – Free Enterprise (3-0). Controversial issues are analyzed using basic economic theory. Probable topics to be discussed include pollution, inside trading, legalization of drugs, budget deficits, racial and sexual discrimination, inflation, anti-trust policy, abortion, price controls, and international trade restrictions.

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 2300.

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.
Finance – FIN

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.
Prerequisites: ACC 2330, Math 1315, GBA 3352.

FIN 4340 Management of Financial Institutions (3-0). An overview of the financial systems of the United State with emphasis on the nature and management of financial intermediaries. Attention is also given to the legal environment of the financial sector as well as to the effects of legislative changes on the structure of these markets.
Prerequisites: FIN 3340 and ECO 2305.

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.

General Business Administration- GBA

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 Business Statistics (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 1315

GBA 4350 Advanced Readings and Research in Business Administration. Selected seminar topics in business administration.

GBA 4354 Management Communication (3-0). Role of communication in a business organization including communication models, semantics and networks. Internal and external communication in the form of memos, letters and reports, written and oral, are treated. Common professional components in business are encountered (organization theory, interpersonal behavior, leadership, human resource management, and business policies.) Specific emphasis is placed on emerging communication technology, international communication, cultural diversity, and ethics.
Prerequisites: ENG 1301
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. Prerequisite: GBA 3352.

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 (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 Consumer Behavior* (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. Prerequisite: 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 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.
DEPARTMENT OF CRIMINAL JUSTICE

Department of Criminal Justice
School of Professional Studies
Office: Morelock Academic Building, 109
Phone: (432) 837-8166
Fax: (432) 837-8273
e-mail: rhunter@sulross.edu

Associate Professor and Chair: Robert J. Hunter, Ph.D.
Professor: Raymond G. Kessler, MA, J.D.
Associate Professor: Lorie Rubenser, Ph.D.

PROGRAM DESCRIPTION

The Criminal Justice degree program is designed to meet the needs of students pursuing a career in several areas of the criminal justice system. The program leads to a Bachelor of Science degree in Criminal Justice which will qualify graduates for employment in many public service professions. Opportunities currently exist for men and women in law enforcement 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, and private industry.

The Criminal Justice and Chemistry Departments have cooperated to develop a unique series of courses in criminal investigation, criminalistics and forensics. A course in Forensic Chemistry (Chem. 3302) has been developed in which students are taught modern techniques in the analysis of physical evidence including casts, blood stains, drugs, and other scientific evidence. After completing Chem 3302, students may take Chem 4401, Instrumental Analysis. Students interested in this sequence should contact the Chemistry Department for more information.

Transfer students should be aware that the Sul Ross State University Department of 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. Further, except as required by law, the Department will not award or accept credit for any law enforcement or correctional (In-Service Occupational) training. Academy credits will be evaluated on an individual basis.

Criminal Justice majors are required to complete a total of 120 semester credit hours, including 36 hours of Criminal Justice. Details of these requirements are listed below.

Students majoring or minoring in Criminal Justice are also required to have at least a "C" in each of the Criminal Justice courses utilized for their major or minor requirements. If a grade of "C" is not earned, the course must be
repeated until a “C” is earned.

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. No student will be allowed to substitute any transfer course for CJ 4309.

**SCHOLARSHIPS**

The 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 Criminal Justice Students. Check the CJ department web site regularly at www.sulross.edu/cj 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 Major**

(120 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Criminal Justice 1301, 2305, 4304, 4309</td>
<td>12</td>
</tr>
<tr>
<td>24 hours of Criminal Justice electives including 18 hours of upper division (3000 or 4000 level) Criminal Justice courses</td>
<td>24</td>
</tr>
<tr>
<td>English 1301, 1302, 2304, and any other 2000 level or higher literature course</td>
<td>12</td>
</tr>
<tr>
<td>Communications 1303, 3306 or Theatre 2304</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts: select from Fine Arts 1301; Art 1301, 3304, 3305, Music 1312, or Theatre 1302</td>
<td>3</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics: 1342 and one other course 1310 or higher</td>
<td>6</td>
</tr>
<tr>
<td>Multicultural Studies: CJ 4301</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Science: select Chemistry 3402 and 12 SCH from Astronomy 1401; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2402; or Physics 1401, 1402, 2401, total of 4 courses – 2 subjects, all with labs)</td>
<td>16</td>
</tr>
<tr>
<td>Social Science: select from Anthropology 1301; Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301;Psychology 1302; Sociology 2303</td>
<td>3</td>
</tr>
<tr>
<td>Minor (see advisor from selected minor department)</td>
<td>18-24</td>
</tr>
<tr>
<td>University Electives</td>
<td>6</td>
</tr>
<tr>
<td><strong>TOTAL 120-126</strong></td>
<td></td>
</tr>
</tbody>
</table>
MINOR IN CRIMINAL JUSTICE

Students wishing to minor in Criminal Justice must take CJ 1301, Introduction to Criminal Justice, CJ 4304, Criminology, and 12 hours of upper division (3000 or 4000 level) CJ courses. For these 12 hours, students should consult with a Criminal Justice faculty member.

UNDERGRADUATE COURSES IN CRIMINAL JUSTICE

(Subject titles and course numbers in parentheses at the end of the course descriptions below represent the course equivalent in the Texas Common Course Numbering system.)

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. (CRIJ1301) (Required)

1305 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. (CRIJ 1307)

1307 The Courts Systems and Practices (3-0). The judiciary in the criminal justice system; right to counsel; pre-trial release; grand juries; adjudication process; types and rules of evidence; sentencing. (CRIJ 1306).

1313 Juvenile Justice System (3-0). Study of the juvenile justice system and juvenile crime and delinquency. Theories of delinquency. (CRIJ1313)

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

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

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

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

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.

2304 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. (CRIJ 2328).

2305 Legal Aspects of Law Enforcement (3-0). Police authority; responsibilities; constitutional restraints; laws of arrest, search and seizure;
2010 – 2012 CATALOG

police liability. (CRIJ 2323) (Required)

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. CRIJ 2313).

2321 Special Topics in Criminal Justice (3-0). Study of selected issues in criminal justice. May be repeated when topic varies.

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.

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.

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.

3307 Organized Crime (3-0). Analysis of crime problems of an organized nature; economic impact upon society; laws regulating organized crime; investigation techniques.

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.

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.

3318 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.

3327 Substantive Criminal Law (3-0). Study of the substantive criminal law with examples and issues from the Texas Penal Code.

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)

4302 Seminar in Special Problems in Criminal Justice (3-0). Exploration and analysis of contemporary problems related to police, courts or corrections.

313
May be repeated for credit when topics vary.

4302 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.

4303 Criminology (3-0). Study of factors that contribute to crime; criminological theories; criminal types; research methods; types of crimes; crime trends. (Required)

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".

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.

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.

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

4312 Use of Force in CJ (3-0). Study of the use of force in Criminal Justice and the basic legal rules governing such force.

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.

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.

4316 Forensic Ballistics (3-0). Students will be able to demonstrate specific knowledge in the identification of various weapons systems. Students will demonstrate their knowledge of firearm ballistics through the evaluation of various ballistic markers. Students will be able to compare and contrast various ballistic systems and identify specific traits of each. Students will be able to discuss the historical evolution of firearms development.

4317 Individual Research (3-0). Research projects to be offered as individual study under the supervision and guidance of the instructor. Prerequisite: Permission from the Department Chair.

4318 Homeland Security (3-0). This course will explore the creation and evolution.

4346 Border Security Search and Seizure (3-0). Study of the basic American border and airline security efforts and rules of search and seizure.

GRADUATE PROGRAM IN CRIMINAL JUSTICE

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. Students may select the 30 semester credit hour thesis option, or the 36 SCH non-thesis option. Students interested in ultimately obtaining a doctoral degree should elect the thesis option. 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. Electives are also available from other disciplines.

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 required. This requirement background must be evidenced by fulfilling the following requirements:

Students will be required to take or must have taken 12 SCH undergraduate coursework in criminal justice with a 3.0 grade point average or higher in all courses; or CJ4309, Senior Seminar (Students may elect to take the entire course or may challenge the Senior Exam. Students opting to challenge the exam must score a minimum score of 70%).

Students may use the challenge option twice. If students do not achieve a passing score, they will be required to take and pass the senior seminar.
course (CJ 4309) with a grade of B or better, or complete 12 SCH of undergraduate Criminal Justice courses, with a B or better, prior to enrolling in graduate courses.

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  
Department of Criminal Justice  
Box C-12  
Alpine, Texas 79832  
(432)837-8166  
e-mail: rubenser@sulross.edu

Master of Science with a Major 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) select either the thesis (total 30 SCH) or non-thesis (total 36 SCH) options; (3) complete an appropriate number of electives, and (4) successfully complete the comprehensive examination.

I. Required Core. Both thesis and non-thesis students must complete the following 12 SCH core:
   - CJ 5304, Seminar on Liability and Immunity in Criminal Justice
   - CJ 5318, Seminar in Criminal Justice Theories
   - CJ 5325, Graduate Seminar
   - CJ 5334, Legal Research

II. Thesis Option (30 SCH). In addition to the 12 SCH required core, students selecting the thesis option must complete 6 SCH hours of thesis, 3 SCH of basic descriptive statistics, and 9 SCH of electives, for a total of 30 SCH. Students must pass a comprehensive exam and complete all coursework with a 3.8 GPA prior to registering for thesis hours. Additional preparatory course work may be required at the committee’s discretion. Students considering the thesis option should therefore form a committee early in their academic career. See the Criminal Justice Graduate Handbook.

Required Core........................................................................ 12 SCH
Graduate Level Statistics......................................................... 3 SCH*
CJ Electives................................................................................ 9 SCH
CJ 6301 Thesis.......................................................................... 3 SCH
CJ 6302 Thesis.......................................................................... 3 SCH

Total 30

* An undergraduate statistics course may be substituted for the graduate statistics course with permission of the graduate coordinator.
If this substitution is approved the student will be required to take an additional graduate elective.

III. Non-thesis Option (36 SCH). In addition to the 12 SCH required core, students electing not to write a thesis must complete 24 hours of electives (see below) for a total of 36 SCH.

Required Core ........................................................................ 12 SCH
Criminal Justice Electives ....................................................... 24 SCH

Total 36

IV. Electives. Electives for both thesis and non-thesis options may be selected from the following courses:

CJ 5301, Overview and Administration of the Criminal Justice System
CJ 5311, Advanced Law Enforcement Administration
CJ 5313, Seminar in Policing
CJ 5314, Seminar in Corrections
CJ 5315 Seminar in Courts and Judiciary
CJ 5316, Women and Crime
CJ 5317, Juvenile Delinquency
CJ 5319, Use of Force in Criminal Justice
CJ 5321, Domestic Violence
CJ 5323, Homeland Security
CJ 5327 Seminar on the US Supreme Court (variable topic course)
CJ 5331, Topics in Criminal Justice (variable topic course)
CJ 5332, Independent Research
CJ 5333, Internship
CJ 5340, Seminar on Firearms and Violence

Students may select from the following electives from other departments in order to fulfill the outside elective requirement:

PS 5303, Public Administration Survey
PS 5308, Case Studies in Public Administration
PS 5310, Public Budgeting and Finance
PS 5311, Intergovernmental Relations
PS 5312, Agency Politics
PS 5313, Public Policy Analysis
PS 5314, Public Management
PS 5315, Local Government Administration
PS 5317, Special Topics in Public Admin. Seminar in U.S. Government
GBA 5304, Management Information Systems
MGT 5304, Seminar in Management
ACC 5307, Accounting for Management
COMM 5307, Public Relations; and
SOC 5303, Multicultural Society;

Other graduate level courses are available upon 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 plan. Undergraduate courses (4000 level) may be available for graduate credit with approval of the instructor and Graduate Coordinator.
maximum of 6 SCH may be taken for graduate credit.

V. Comprehensive Exam

All graduate students must pass a comprehensive examination which may be scheduled though the Graduate Coordinator any time after the student has been admitted to candidacy and has completed 24 SCH including the 4 required courses. The exam will be made available to qualified students on Blackboard and will be graded instantly upon completion. Students who have completed at least 18 hours of course work including the 4 required courses may also request a practice exam be made available in the Blackboard format through the Graduate Coordinator.

Exams will consist of 200 multiple choice questions. Students must score a minimum of 70% to pass.

If a student does not pass the Comprehensive Exam the first time, they must retake the entire exam at a time to be scheduled through the Graduate Coordinator. A student who fails their second attempt 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.

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.

All students will be required to answer questions from each of the three core areas: legal, theory, and research methods.

For further information on graduate admissions, theses, comprehensive written examinations and other admissions and graduation requirements see "Academic Regulations for Master’s Degree Programs" in this catalog and the Criminal Justice Graduate Handbook.

GRADUATE COURSES IN CRIMINAL JUSTICE

All Graduate Courses are Writing Intensive.

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.

5304 Seminar on Liability and Immunity in Criminal Justice (3-0). Theory and basic principles of liability and immunity of criminal justice personnel and agencies under both state and federal law. Emphasis on civil rights and tort liability. Impact on the criminal justice system and techniques for minimizing liability. Covers correctional, private security and law enforcement aspects. (Required)

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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

5325 Graduate Seminar (3-0). Professional ethics and professionalism, role of the private sector in criminal justice, opportunities for employment and doctoral level study, criminal justice data sources, history and future of discipline and current developments. Prerequisite: CJ 5304, CJ 5318 and CJ 5334

5327 Seminar on the U.S. Supreme Court (3-0). Variable topic course. Study of the history, impact, personnel, and decision-making processes of the U.S. Supreme Court. Course may be repeated when topic changes.

5331 Topics in Criminal Justice (3-0). Intensive study of selected issues in Criminal Justice. May be repeated when topic varies.

5332 Independent Research (3-0). Individual study of a selected criminal justice topic under guidance of the faculty. May be repeated for credit with a different topic (Various). Prerequisite: Permission of Department Chair, Graduate Coordinator and faculty member involved.

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.

5334 Legal Research and Analysis on Criminal Justice (3-0). Basic legal research and analysis, use and interpretation of legal materials. (Required)

5340 Seminar on Firearms and Violence (3-0). Variable topic course which will cover topics such as gun control, Second Amendment, firearms and suicide, and related issues. May be repeated when topic changes.

6301 Thesis (0-6). Satisfactory completion of this course will result in an acceptable prospectus presented to the thesis committee. The student must have completed all coursework with a 3.8 GPA, and passed all sections of the comprehensive exams. The student will enroll each semester or summer term in which assistance is provided by the thesis committee or when use is made of the library or other research facilities of Sul Ross State University. Students should be aware that faculty may not be available during one or both summer sessions and plan accordingly. This course may not be taken for elective credit. Prerequisite: Permission of the Graduate Coordinator and
successful completion of all coursework and Comprehensive Exams. Students must also complete the Thesis Committee Agreement form prior to registration. See the Criminal Justice Graduate Handbook for details.

6302 Thesis (0-6). After satisfactory completion of CJ 6301, the student will enroll in this course each semester or summer term in which assistance is provided by the thesis committee or when use is made of the library or any other research facilities of Sul Ross State University. Satisfactory completion of this course will result in a completed thesis presented to, and accepted by, their 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. Students should be aware that faculty may not be available during one or both summer sessions and plan accordingly. This course may not be taken for elective credit. Prerequisite: CJ 6301 and permission of the Graduate Coordinator and department Chair.

Dual Degree Program
The 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 Political Science - Public Administration.

The following courses are required for this course of study:
- CJ 5301, Overview and Administration of the Criminal Justice System
- CJ 5304, Seminar on Liability and Immunity in Criminal Justice
- PS 5307, Scope and Methods of Social Science or CJ 5334, Legal 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 5308, Case Studies in Public Administration
- PS 5312, Agency Politics
- PS 5314, Public Management
- PS 5315, Local Government Administration
- PS 5316, Special Topics in Public Administration

Students will also take 18 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.
LAW ENFORCEMENT ACADEMY

Law Enforcement Academy
School of Professional Studies
Office: Morelock Building, 106
Phone: (432) 837-8614
Fax: (432) 837-8741
e-mail: kpowell@sulross.edu

Director: Kellie L Powell

PROGRAM DESCRIPTION
On May 5, 1982, the Texas Commission on Law Enforcement Officer Standards and Education (TCLEOSE) licensed Sul Ross State University as a certified Texas law enforcement academy. The Sul Ross State University Law Enforcement Academy serves law enforcement and corrections personnel in the SRSU service area. It is the mission of the Law Enforcement Academy to provide quality training to area agencies at the lowest possible cost. Professionalism and a community service philosophy are stressed in all training programs.

The Academy provides two types of training programs. First, a basic police academy is conducted each year. This police academy exceeds the requirements of the TCLEOSE 618-hour Basic Peace Officer course. Cadets who successfully complete the basic police academy are eligible to sit for the TCLEOSE Basic Peace Officer examination. Those who pass this exam with a score of 70% or above are then certified by TCLEOSE and are eligible for hire by Texas law enforcement agencies.

Secondly, the Academy provides continuing education and in-service training for law enforcement and corrections personnel in the Sul Ross State University service area. A variety of courses is offered each semester. These courses are designed to fulfill TCLEOSE mandated training requirements and to meet the unique training needs of area agencies.

Rio Salado College in Tempe, Arizona, has entered into an agreement with TCLEOSE to award 39 hours of undergraduate credit to cadets who successfully pass the TCLEOSE licensing exam. A fee of approximately $1400 is required.

Within most agencies, formal education is a prerequisite for advancement. The Law Enforcement Academy encourages all cadets to pursue an undergraduate degree. Cadets, who enroll and are accepted to the University, may take the academy for 12 hours of lower level undergraduate Criminal Justice credit. Students who chose this enrollment option should register for the following Criminal Justice Courses:

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 and 1323

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 and 1323
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

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

Admission to the basic police academy is open to all persons who meet TCLEOSE requirements for certification as a Texas peace officer. Admission to in-service and continuing education programs are open to certified law enforcement and corrections personnel.

The Academy takes pride in using instructors who are experienced law enforcement and corrections officers and personnel. Active and retired officers, FBI agents, chiefs of police, sheriffs and others with specific areas of expertise are brought in to insure the student receives quality training. The cost of attending the basic police academy is approximately $1500-$1800. This includes application fees, tuition, and necessary uniforms and supplies. It does not include the cost of meals, lodging and uniforms.
DEPARTMENT OF EDUCATION

Department of Education
School of Professional Studies
Office: Morelock Academic Building, 305
Phone: (432) 837-8170
Fax: (432) 837-8390
e-mail: ekim@sulross.edu

Associate Professor, Director of Teacher Education, and Certification Officer: Jim Hector, Ed.D.

Professors: Kip Sullivan, Ed.D.

Associate Professor: Tyra Manning, Ed.D.,

Assistant Professors: Tamara Olive, Ph.D., Clay Rasmussen, Ph.D., Rebecca Schlosser, Ed.D. and Patricia R. Seawell

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 4, Grade 4-8, Grade 8-12, or All-Level. 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, counseling, School administration, reading specialist, master reading teacher, and educational diagnostician. Degree options and certification programs are described under Graduate Programs in Education within this section.

SCHOLARSHIPS

Metha Sprinkle/Vally 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 Counseling.

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.

**W.E. (Bill) and Anne E. Williams Memorial Scholarship.** Awarded to a United States citizen fully admitted to the Teacher Education Program in junior or senior year who has a 3.0 grade point average and is in good disciplinary standing.

**Mathew 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 being revised by the State Board of Education. As this transition occurs, changes must 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.

<table>
<thead>
<tr>
<th>Areas of Specialization EC-Grade 4:</th>
<th>Areas of Specialization Grade 4-8:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Generalist</td>
<td>Bilingual Generalist</td>
</tr>
<tr>
<td>Bilingual Generalist</td>
<td>English/Language Arts &amp; Reading</td>
</tr>
<tr>
<td></td>
<td>Mathematics</td>
</tr>
<tr>
<td></td>
<td>Science</td>
</tr>
<tr>
<td></td>
<td>Social Studies</td>
</tr>
</tbody>
</table>

**Major Fields in Grades 8-12 Teaching Fields**

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>Ag Science &amp; Tech Prod</th>
<th>Physical Science</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Education (6-12)</td>
<td>Social Studies</td>
</tr>
<tr>
<td>Computer Science</td>
<td>Science</td>
</tr>
<tr>
<td>English/Language Arts / Reading</td>
<td>Spanish</td>
</tr>
<tr>
<td>History</td>
<td>Speech</td>
</tr>
<tr>
<td>Life Science</td>
<td>Technology Education</td>
</tr>
<tr>
<td>Mathematics</td>
<td>Theatre Arts</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.
Bachelor of Science  
(Interdisciplinary Studies: 121 hours)  
(Early Childhood - Grade 4 Generalist)

<table>
<thead>
<tr>
<th>Hours</th>
<th>General Education</th>
<th>Interdisciplinary Studies</th>
<th>Professional Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>52</td>
<td>English: 1301,1302,2301,3312 ........................................... 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics: 1310, 1315, or 1342 ........................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication: COMM 1303 ................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine Arts: Art 3309 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Science: GEOG 3301 ..................................................... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>American History: 1301 or 1302 and 3309 ............................. 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political Science: 2305 and 2306 ......................................... 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multicultural: ED 2311 .......................................................... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class ............... 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Science: ED 3307 ................................................... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical/Life Science: BIOL 1401 and 1402 ............................ 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45</td>
<td>Early Childhood - Grade 4 Generalist Specialization:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2310 AND 2311 ............................................................. 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 3301 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOL 3302 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MUS 3311 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>PE 1302 AND 2303 ............................................................. 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4306 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOG 2302 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 3311 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 3308, 4308, 4313, 4315 and 4318 ..................................... 15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>ED 3300, ED 3301, ED 3302, ED 3303</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4314, ED 4322 and ED 4601 ........................................... 24</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total 121</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Consult with Advisor in Education (MAB 305).

Bachelor of Arts  
(Interdisciplinary Studies: 121 hours)  
(Early Childhood - Grade 4 Bilingual Generalist)

<table>
<thead>
<tr>
<th>Hours</th>
<th>General Education</th>
<th>Interdisciplinary Studies</th>
<th>Professional Education</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>58</td>
<td>English: 1301,1302,2301,3312 ........................................... 12</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mathematics: 1310, 1315, or 1342 ........................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication: COMM 1303 ................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine Arts: Art 3309 ............................................................ 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Science: GEOG 3301 ..................................................... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>American History: 1301 or 1302 and 3309 ............................. 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political Science: 2305 and 2306 ......................................... 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multicultural: ED 2311 .......................................................... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class ............... 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Science: ED 3307 ................................................... 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical/Life Science: BIOL 1401 and 1402 ............................ 8</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Foreign Language: SPAN 2301 and 2302 .................................. 6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>Interdisciplinary Studies .................................................. 39</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Early Childhood - Grade 4 Bilingual Generalist Specialization:
MATH 2310 AND 2311 ................................................................. 6
BIOL 3301 .................................................................................. 3
GEOL 3302 .................................................................................. 3
ED 4308 ..................................................................................... 3
ENG 3311 ................................................................................... 3
ED 4306 ..................................................................................... 3
ED 4313 ..................................................................................... 3
BSL 3328, 3329, 4328, AND 4329 ............................................ 12
SPAN 3301 .................................................................................. 3

Professional Education ................................................................. 24
ED 3300, ED 3301, ED 3302, ED 3303
ED 4314, ED 4322 and ED 4601 .................................................... 24

Total 121

Consult with Advisor in Education (MAB 305).

Bachelor of Arts
(Interdisciplinary Studies: 121 hours)
(Grades 4-8 Bilingual Generalist)

General Education ................................................................. 58
English: 1301, 1302, 2301, 3312 ............................................... 12
Mathematics: 1310, 1315, or 1342 ........................................ 3
Communication: COMM 1303 ................................................. 3
Fine Arts: Art 3309 ..................................................................... 3
Social Science: GEOG 3301 ..................................................... 3
American History: 1301 or 1302 and 3309 ............................. 6
Political Science: 2305 and 2306 ............................................... 6
Multicultural: ED 2311 ............................................................. 3
Kinesiology: PE 1150 and any PE 1153 Activity Class .......... 2
Computer Science: ED 3307 ..................................................... 3
Physical/Life Science: BIOL 1401 and 1402 ......................... 8
Foreign Language: SPAN 2301 and 2302 ............................. 6

Interdisciplinary Studies ......................................................... 39
Grades 4-8 Bilingual Generalist Specialization:
MATH 2310 AND 2311 ................................................................. 6
BIOL 3301 .................................................................................. 3
GEOL 3302 .................................................................................. 3
ED 4308 ..................................................................................... 3
ED 4313 ..................................................................................... 3
ED 4306 ..................................................................................... 3
ENG 3311 ................................................................................... 3
BSL 3328, 3329, 4328, and 4329 ............................................ 12
SPAN 3301 .................................................................................. 3

Professional Education ................................................................. 24
ED 3300, ED 3301, ED 3302, ED 3303
ED 4314, ED 4322 and ED 4601 .................................................... 24

Total 121

Consult with Advisor in Education (MAB 305).
# Bachelor of Arts

## (Interdisciplinary Studies: 121 hours)

### Grades 4-8 English Language Arts & Reading

<table>
<thead>
<tr>
<th>Hours</th>
<th>General Education</th>
<th>Interdisciplinary Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>English: 1301, 1302, 2301, 3312</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Mathematics: 1310, 1315 or 1342</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication: COMM 1303</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine Arts: Art 3309</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Science: GEOG 3301</td>
<td></td>
</tr>
<tr>
<td></td>
<td>American History: 1301 or 1302 and 3309</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political Science: 2305 and 2306</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multicultural: ED 2311</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Science: ED 3307</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical/Life Science: BIOL 1401 and 1402</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENG 2302 or 2303, 3303, 3311, 3320, 3321 or 3322</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4306, 4308, 4313, 4315, and 4318</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 2310 AND 2311</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 3301</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GEOL 3302</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4313</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1316, 1342, 2310, 2311, 2340, 2413, 3301</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and 3350</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4313</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 3311</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 3300, ED 3301, ED 3302, ED 3303</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4314, ED 4322 and ED 4601</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total 121</td>
<td></td>
</tr>
</tbody>
</table>

Consult with Advisor in Education (MAB 305).

---

# Bachelor of Arts

## (Interdisciplinary Studies: 121 hours)

### Grades 4-8 Mathematics

<table>
<thead>
<tr>
<th>Hours</th>
<th>General Education</th>
<th>Interdisciplinary Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>52</td>
<td>English: 1301, 1302, 2301, 3312</td>
<td>45</td>
</tr>
<tr>
<td></td>
<td>Mathematics: MATH 1315</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Communication: COMM 1303</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Fine Arts: Art 3309</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Social Science: GEOG 3301</td>
<td></td>
</tr>
<tr>
<td></td>
<td>American History: 1301 or 1302 and 3309</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Political Science: 2305 and 2306</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Multicultural: ED 2311</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Computer Science: ED 3307</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Physical/Life Science: BIOL 1401 and 1402</td>
<td></td>
</tr>
<tr>
<td></td>
<td>MATH 1316, 1342, 2310, 2311, 2340, 2413, 3301</td>
<td></td>
</tr>
<tr>
<td></td>
<td>and 3350</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4313</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BIOL 3311</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Professional Education</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 3300, ED 3301, ED 3302, ED 3303</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ED 4314, ED 4322 and ED 4601</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total 121</td>
<td></td>
</tr>
</tbody>
</table>
GEOL 3302.................................................................................... 3
PLUS 12 SCH MATH 3000 or higher ............................................ 12

Professional Education ......................................................... 24
ED 3300, ED 3301, ED 3302, ED 3303
ED 4314, ED 4322 and ED 4602................................................ 24

Total 121

Consult with Advisor in Education (MAB 305).

Bachelor of Science
(Interdisciplinary Studies: 120 hours)
(Grades 4-8 Science)

General Education .................................................................. 52
English: 1301, 1302, 2301, 3312 ................................................... 12
Mathematics: 1310, 1315, or 1342 .............................................. 3
Communication: COMM 1303 .................................................. 3
Fine Arts: Art 3309 ................................................................. 3
Social Science: GEOG 3301 ...................................................... 3
American History: 1301 or 1302 and 3309.............................. 6
Political Science: 2305 and 2306.............................................. 6
Multicultural: ED 2311 ............................................................ 3
Kinesiology: PE 1150 and any PE 1153 Activity Class ............. 2
Computer Science: ED 3307 ..................................................... 3
Physical/Life Science: BIOL 1401 and 1402............................... 8

Interdisciplinary Studies .......................................................... 44
Grades 4-8 Science Specialization:
MATH 2310 AND 2311 ........................................................... 6
BIOL 3301, 3306, 2404, 2405, 4406 ........................................... 18
ED 4313 and 4306................................................................. 6
CHEM 1401 .............................................................................. 4
GEOL 1401, 3301, 3302 ......................................................... 10

Professional Education .......................................................... 24
ED 3300, ED 3301, ED 3302, ED 3303
ED 4314, ED 4322 and ED 4601.............................................. 24

Total 120

Consult with Advisor in Education (MAB 305).

Bachelor of Science
(Interdisciplinary Studies: 121 hours)
(Grades 4-8 Social Studies)

General Education .................................................................. 52
English: 1301, 1302, 2301, 3312 ................................................... 12
Mathematics: 1310, 1315, or 1342 .............................................. 3
Communication: COMM 1303 .................................................. 3
Fine Arts: Art 3309 ................................................................. 3
Social Science: GEOG 3301 ...................................................... 3
American History: 1301 or 1302 and 3309.............................. 6
Political Science: 2305 and 2306.............................................. 6
Multicultural: ED 2311 ............................................................ 3
Kinesiology: PE 1150 and any PE 1153 Activity Class ............. 2
Computer Science: ED 3307 ......................................................... 3
Physical/Life Science: BIOL 1401 and 1402 ......................... 8

**Interdisciplinary Studies** ................................................................. 45

Grades 4-8 Social Studies Specialization:
MATH 2310 AND 2311 ................................................................. 6
BIOL 3301 ...................................................................................... 3
GEOL 3302 ..................................................................................... 3
ED 4313 and 4306 ................................................................. 6
ECO 2300 ...................................................................................... 3
HIST 3300, 3307, 3309, and 3311 ................................................. 12
PS 3303 and 4302 ......................................................................... 6
GEOG 1302 ................................................................................... 3
SOC 2303 ...................................................................................... 3

**Professional Education** .......................................................... 24
ED 3300, ED 3301, ED 3302, ED 3303 ................................. 24
ED 4314, ED 4322 and ED 4601 .................................................. 24

**Total 121**

Consult with Advisor in Education (MAB 305).

**TEACHER EDUCATION PROGRAM**

Sul Ross offers a variety of certification programs at the following teaching levels:

- Early Childhood through Grade 4
- Grades 4 through 8
- Grades 8 through 12
- All Level (Early Childhood through Grade 12)

Students interested in becoming certified teachers in Texas may apply to the program early in their junior year (after at least 60 semester credit hours college coursework).

**Admission Requirements:**

- Minimum of 60 semester credit hours applicable to degree
- Grade point average (GPA) of 2.5 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:** See Advisor in Education for posted requirements.

**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, or 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, or professional development component of teacher education is delivered in three semesters (or blocks) of coursework:

Block I
- ED 3302 Development and Learning Theories
- ED 4314 Reading Skills for Content Subjects

Block II
- ED 3301 Curriculum & Instruction
- ED 3303 Methods & Materials

Block III
- ED 3300 Principles of Education
- ED 4322 Classroom Management
  - Student Teaching

Teaching Fields/Certification Programs:

*Early Childhood through Grade 4 (Bachelor's degree in Interdisciplinary Studies)*
- Generalist
- Bilingual Generalist

*Grades 4 through 8 (Bachelor's degree in Interdisciplinary Studies)*
- Bilingual Generalist
- English/Language Arts/Reading
- Mathematics
- Science
- Social Studies

*Grades 8-12 (Bachelor's degree with a major in the chosen teaching field)*
- Agricultural Science & Technology (formerly Vocational Ag Production)
- Business Education (6-12)
- Computer Science
- English/Language Arts/Reading
- History
- Science
- Life Science
- Physical Science
- Mathematics
- Social Studies
- Spanish
- Speech
- Technology Education (formerly Industrial Technology)
- Theatre

*All Level (Early Childhood through Grade 12) (Bachelor's degree with a major in the chosen teaching field)*
APPROVAL FOR STUDENT TEACHING

1. Must be admitted to Teacher Education.
2. Must have submitted an Application to Student Teach by posted deadline.
3. Must have completed 90 semester credit hours or more toward degree.
4. Must have an overall grade point average of 2.5 on a 4.0 scale.
5. 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.
6. State requirements include a criminal background inquiry before placement in public Schools.
7. Must have completed 12 semester credit 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 Director of Teacher Education.

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 SCH/12 upper division SCH) in an approved area/content field 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.

Applicants must:
- Hold a baccalaureate degree from an accredited four-year university
- Be accepted to the SRSU Graduate Program as a graduate student seeking a degree as Master of Education - General
- Send official transcripts of ALL college/university work to the Graduate Admissions Office.

Requirements for PBICP:
- Complete the SRSU Post Baccalaureate Initial Certification application form and meet all requirements indicated
- Pay PBICP application fee. Sul Ross graduates are exempt from the application fee ($30), which includes one deficiency plan;
additional deficiency plans are $20 each.
• Have a 4-year degree/major in teaching field or have at least 24 semester credit hours (12 of which are upper division) in the field for which you are seeking certification
• Meet 2.5 GPA as posted
• Have a grade of “C” or better in the following: 3 SCH computer science; 3 SCH speech; 12 SCH English
• Satisfactory report of criminal background inquiry
• Enroll in the certification course work as indicated on your deficiency plan
• Have daily access to the Internet and email
• Basic Skills: See advisor in Education for posted requirements

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 4:
   Early Childhood Generalist
   Bilingual Generalist

Areas of Specialization Grades 4-8:
   Bilingual Generalist
   English/Language Arts/Reading
   Mathematics
   Science
   Social Studies

Major Fields in Grades 8-12 Teaching Fields
These are approved certification areas. Please see an advisor in that department for specific requirements. TExES exams are required for certification.

   Business Education (6-12)  Physical Science
   Computer Science         Social Studies
   English/Language Arts/Reading  Spanish
   History                  Speech
   Life Science             Theatre Arts
   Mathematics             Agricultural Science & Technology

All-Level Teaching Fields
Please see an advisor in the Education Department for specific requirements. TExES exams are required for certification.

   Art
   Music
   Physical Education
UNDERGRADUATE COURSES IN EDUCATION

Educational certification programs are being revised. As this transition occurs, changes must be made in course offerings, content and sequence. It is important to check with an advisor in the major field each semester for updated information.

Undergraduate or post-baccalaureate students seeking teacher certification may not register for Block III courses until all of the standards for admission to Teacher Education or the post-baccalaureate program have been met.

Professional Education

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.

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 32 hours of field experience. Prerequisite: Completion of Block I.

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 32 hours of field experience. Prerequisite: Admitted to Block I.

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.

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. Prerequisite: Approval of advisor.

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. Prerequisite: Completion of Block I.

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.
Prerequisite: Completion of Block I.

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 32 hours of field experience. Prerequisite: Admission to Teacher Education

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. Prerequisite: Approval of the Director of Teacher Education; Completion of Blocks I and II.

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 the Director of Teacher Education; completion of Blocks I and II.

4601 Student Teaching: Early Childhood through Grade 4 (0-6). Prerequisite: Approval of the Director of Teacher Education.

4602 Student Teaching in the Middle School (0-6). Prerequisite: Approval of the Director of Teacher Education.

4603 Student Teaching: All-Level Certification (0-6). Prerequisite: Approval of the Director of Teacher Education.

4605 Student Teaching in the Secondary School (0-6). Prerequisite: Approval of the Director of Teacher Education.

Specializations

2311 Diversity in American Society (3-0). Survey of diverse populations found in American society including issues of race, ethnicity, gender, age, religion, sexual orientation, exceptionalities and socio-economic status.

3307 Technology in the Instructional Setting (3-0). 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.

3303 Language Acquisition and Emergent Literacy (3-0). 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.

4303 Measurement and Evaluation (3-0). A survey of available standardized educational tests and their interpretation and uses, and principles of test development.

4306 Survey of Exceptional Children (3-0). A survey of exceptional children involving categorical identification, learning characteristics, instructional intervention, and adjustment needs.
4308 The Teaching of Reading (3-0). Intensive study of reading assessment, readiness, beginning reading, remedial reading, reading devices, and the use of audio-visual aids in reading.

4313 Reading Comprehension and Enrichment (3-0). 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.

4315 Reading Diagnosis and Remediation (3-0). Strategies for teaching reading to pupils who have problems in auditory learning, visual learning, language learning, and the slow learner. Prerequisite: Ed 4308.

4318 Word Identification Skills (3-0). 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.

4327 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.

4399 Special Topics (3-0). A course covering various topics in the field of education. Maybe repeated for credit when topic varies. Prerequisite: Approval of advisor.

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 chosen specialized fields through several master’s degree programs. You may choose a general master’s degree with options available for certification. Other master’s programs lead to certification in counseling, diagnostian, reading specialist, master reading teacher, principal and superintendent. A master’s degree requires completion of a minimum of 36 SCH of prescribed course work. A grade point average of 3.0 or higher on a 4.0 scale with no grade lower than a “C” is required for a master’s degree and certification programs. For information pertaining to specific certification, see a departmental advisor. Master’s Comprehensive Examination must be taken in last semester of required coursework.

MASTER OF EDUCATION WITH MAJOR IN SCHOOL ADMINISTRATION

Requirements for M.Ed, and Principal Certificate

The Master of Education in School Administration with principal certification is a 39 hour program with a comprehensive examination 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. To receive the M.Ed. with certification, the student must complete each of the following:

Required Course Work: (39 SCH)
* ED 5302 The Principalship
ED 5307 Graduate Research
ED 5316 Diversity in Public Education
ED 5318 Management & Development of Human Resources
ED 5319 School Law
* ED 5330 Introduction to School Administration
ED 5336 Leadership and Evaluation of Instruction (ILD)
ED 5338 Professional Development Appraisal Systems (PDAS)
ED 6304 Organization & Theory in Administration
ED 6315 Design and Implementation of the Instructional Program
ED 7304 Leadership in Educational Administration
ED 7306 School Finance
ED 7313 Administrative Internship

*Must be taken within the first 12 semester credit hours

Additional Program Requirements
1. Hold a valid Texas teaching certificate or the equivalent
2. Serve for at least two years in a Texas Education Agency accredited School.
3. Consult with Graduate Advisor and file a degree plan.
4. Request and receive advancement to candidacy
5. Apply to and successfully complete the Comprehensive Exam
6. Make application for graduation with the Dean's Office
7. Attend an approved review course for the TExES Principal Examination
8. Pass the TExES Principal Examination
9. Apply for certification and pay appropriate state fees

With the approval of the Graduate Advisor, a maximum of twelve (12) semester credit hours of equivalent course work may be substituted or transferred from an accredited institution for the prescribed courses. All course work for the master's degree must be completed within a 6 year period. All coursework for the principal certification must be completed within ten years.

Requirements for M.Ed. (degree only)

The Master of Education in School Administration is a 36 SCH program with a Comprehensive Examination. To receive the M.Ed. without certification, the student must complete each of the following:

Required 36 semester credit hours:
* ED 5302 The Principalship
* ED 5307 Graduate Research
ED 5316 Diversity in Public Education
ED 5318 Management & Development of Human Resources
ED 5319 School Law
* ED 5330 Intro to School Administration
ED 5336 Leadership & Evaluation of Instruction (ILD)
ED 5338 Professional Development Appraisal Systems (PDAS)
ED 6304 Organization & Theory in Administration
ED 6315 Design & Implementation of Instructional Program
ED 7304 Leadership in Administration
ED 7306 School Finance

*Must be taken within the first 12 semester credit hours.
Additional Program Requirements

1. Consult with Graduate Advisor and file a degree plan
2. Request and receive advancement to candidacy
3. Apply to and successfully complete the Comprehensive Exam
4. Make application for graduation with the Dean's Office

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 course work must be completed within a 6 year period.

REQUIREMENTS FOR PRINCIPAL CERTIFICATE (ONLY)

Students who possess a Masters degree in Education from an accredited institution who only seek certification as a principal must complete these requirements:

1. Have a Master of Education 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. Attend an approved review course for the TExES Principal Examination
5. Pass the TExES Principal Examination
6. Apply for certification and pay appropriate state fees
7. Serve for at least two years in a Texas Education Agency accredited School
8. Complete a prescribed thirty (30) sch hours of course work as shown below:
   ED 5302  The Principalship
   ED 5319  School Law
   ED 5330  Introduction to School Administration
   ED 5336  Leadership and Evaluation of Instruction (ILD)
   ED 5338  Professional Development Appraisal System (PDAS)
   ED 6304  Organization & Theory in Administration
   ED 6315  Design and Implementation of the Instructional Program
   ED 7304  Leadership in Administration
   ED 7306  School Finance
   ED 7313(I) Administration Internship

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

Students who possess a Masters 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 and file a certification plan
4. Attend an approved review course for the TExES Superintendent Examination
5. Pass the TExES Superintendent Examination
6. Apply for certification and pay appropriate state fees
8. Complete the prescribed 18 hours of course work consisting of these courses:
   - ED 7304  Leadership in Administration
   - ED 7308  The Superintendency
   - ED 7311(1)  Superintendent Internship
   - ED 7311(11)  Superintendent Internship
   - ED 7321  Superintendent/School Board Relations
   - ED 7322  Superintendent Finance Issues

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.

MASTER OF EDUCATION WITH A MAJOR AS AN EDUCATIONAL DIAGNOSTICIAN

A master’s degree in Educational Diagnostician requires 36 semester hours in Education for the handicapped, psycho educational 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 5316  Diversity in Public Education
- ED 5320  Advanced Methodology for Exceptional Children
- ED 5321  Resource Room Test Administration
- ED 5319  School Law
- ED 5323  Appraisal of Educational Disabilities
- ED 5324  Advanced Educational Psychology
- ED 5325  Advanced Educational Remediation
- ED 6308  Advanced Human Growth and Development
- ED 6314  Diagnosis and Correction of Reading Disabilities

#  Required for degree; must be taken at Sul Ross within first 12 hours
*  Course requirements for Generic Special Education Certification, consult with an advisor.
+  Must be taken at Sul Ross State University - Alpine campus

For certification, the applicant must:
- complete the 36 SCH Diagnostician program;
- hold a valid Texas teaching certificate with endorsement, teaching field, or specialization area in special education;
- hold an earned master’s degree;
- complete a minimum of two years teaching in a T.E.A. accredited
School, with at least one year in special education;
e. pass TExES in Educational Diagnostician examination.

MASTER OF EDUCATION WITH A MAJOR IN COUNSELING
A master's degree in Counseling requires 36 semester credit hours from the Core. 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 Internship in Guidance and Counseling
  *(Must be taken at SRSU)*

* Must be taken at Sul Ross within the first 15 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)
a. complete the 36 SCH School Counselor program;
b. have a master's degree;
c. have a minimum of two years teaching in a T.E.A. accredited School; and
d. pass the TExES examination (#152 School Counselor).

COURSES REQUIRED FOR LICENSED PROFESSIONAL COUNSELOR (LPC) (36 Hours from the Core plus 12 Hours from these courses)
ED 5322 Behavior Management
ED 6341 Psychopathology
ED 6342 Addictive Disorders
ED 6345 Family Counseling
* ED 7316B Internship in Guidance and Counseling
  *(Required course; must be taken at SRSU)*

*Must be taken in the final semester of LPC coursework.

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
A master’s degree in Reading Specialist requires 36 semester credit hours from a Reading Component, Resource Component, and Professional Component. All coursework requires approval of the major advisor. All coursework must be completed in a six year period.

COURSE REQUIREMENTS
*# ED 5307 Graduate Research
+ ED 5308 Foundations of Reading
+ ED 5316 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
   PLUS 6 hours electives with approval of advisor

* Required for degree and certification  
* Required for certification only  
* Must be taken at Sul Ross within first 12 hours.

For certification, the applicant must:
a. hold a valid Texas teaching certificate;  
b. complete the 36 SCH master’s degree;  
c. gave a minimum of three years teaching in a T.E.A. accredited School;  
d. pass the TExES in Reading Specialist #151.

MASTER READING TEACHER
ED 5308 Foundations of Reading  
ED 6311 Emergent Literacy & Language Development  
ED 6313 Teaching Reading in the Content Areas  
ED 6314 Diagnosis & Correction of Reading Disabilities  
ED 6317 Organization & Supervision of Reading Programs  
Pass the MRT TExES #85

MASTER OF EDUCATION DEGREE - GENERAL
A master’s degree in Education General requires 36 semester credit hours from Resource & Electives and Area of Specialization. All coursework requires approval of the major advisor and must be completed within 6 years.

Resource & Electives (24 SCH)
* ED 5307 Graduate Research  
ED 5308 Foundations of Reading  
ED 5316 Diversity in Public Education  
ED 5322 Behavior Management  
ED 5324 Advanced Educational Psychology  
ED 6308 Advanced Human Growth & Development  
ED 6313 Teaching Reading in the Content Areas  
ED 6315 Design and Implementation of the Instructional Program
*Must be taken within the first 12 SCH.

Area of Specialization (12 SCH)

Options include:
   - Curriculum and Instruction
   - Special Education
   - Master Reading Teacher

*These are supplemental certifications and require an initial Texas Classroom Teacher Certificate. Consult with an advisor in Education (MAB 305).

MASTER OF EDUCATION DEGREE - GENERAL
WITH ALTERNATIVE CERTIFICATION

A master's degree in Education-General requires 36 SCH from Resource & Electives and Area of Specialization. All coursework requires approval of the major advisor and must be completed within 6 years.

Resource & Electives (24 SCH)

* ED 5307 Graduate Research
ED 5310 Organization and Structure of Public School Curriculum
ED 5311 Improvement of Instruction in Public Schools
ED 5316 Diversity in Public Education
ED 5324 Advanced Educational Psychology
ED 5360 Professional Roles and Responsibilities
ED 6313 Teaching Reading in the Content Areas

*Must be taken immediately after certification courses are completed.

Area of Specialization (15)

Options include:
   - Curriculum and Instruction
   - Special Education
   - Master Reading Teacher

*These are supplemental certifications and require an initial Texas Classroom Teacher Certificate. Consult with an advisor in Education (MAB 305).

GRADUATE COURSES IN EDUCATION

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 TAKS objectives. Three areas covered are: best practices for ELL (Spanish), mathematics vocabulary, and dual language problem solving.

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.
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.

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.

5305 Technology in the Educational Setting (3-0). This course will focus upon 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.

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: Special education certification or 15 hours toward certification.

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.

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.

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.

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.

5312 Advanced Survey, Exceptional Children (3-0). A survey of exceptional children involving categorical identification, advocacy litigation, legislation at the national and state levels, and state guidelines, abnormalities and behavior disorders which negatively affect learning.

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 7302.

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.

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.

5316 *Diversity in Public Education* (3-0). A study of theory, research and methodology relative to the needs of multicultural and special student populations.

5317 *History and Philosophy of Education* (3-0). A survey of the historical development of educational systems and philosophies with emphasis on the contributions of eastern civilization to American educational thought.

5318 *Management and Development of Human Resources* (3-0). A comprehensive study of the human resource function in public Schools. Included are job analysis, staffing needs, recruitment, selection, placement, induction, evaluation, appraisal, and development of School personnel at all levels.

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.

5317 *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.

5321 *Resource Room Test Administration* (3-0). Use of informal assessment as a basis for identifying strengths and weaknesses, preferred learning modalities, and designing and implementing individualized instructional programs.

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.

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. Factors involved in multicultural assessment will be addressed. Prerequisite: Special education certification or 15 hours toward certification.

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.

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.
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.

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.

5336 Leadership and Evaluation of Instruction (3-0). 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.

5338 Professional Development Appraisal System (3-0). 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 5336.

5339 Administration of Year-Round Schools (3-0). An investigation of the year-round education concept from an administrative perspective. Study will include the educational philosophy, curriculum, benefits, difficulties, constraints, finances, personnel issues, and community issues. Various year-round plans will be examined. On-site visits will be made to year-round Schools in the area. Prerequisite: Approval of advisor.

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.

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.


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.

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.

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.

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.

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.

6311 Emergent Literacy and Language Development (3-0). This course will focus upon the correlation between the development of language and literacy during the preSchool, kindergarten, and primary grades. Prerequisite: ED 5308 or enrollment in ED 5308 concurrently.

6312 Advanced Studies in Early Childhood Education (3-0). An advanced study of the growth and development of infancy and early childhood with detailed case studies of a kindergarten child.

6313 Teaching Reading in the Content Areas (3-0). Development of reading skills in elementary, middle, junior high, and high School subject area content classes.

6314 Diagnosis and Correction of Reading Disabilities (3-0). Symptoms and causes of reading disabilities; methods of diagnosing and remediation of reading problems. Prerequisite: ED 5308.

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.

6316 Seminar in Counseling (3-0). Issues and topics in counseling; may be repeated twice if course content varies.

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.

6318 Literacy Through Literature (3-0). This course will focus upon using literature in the elementary, junior high, and secondary classroom to teach the skills necessary for independent reading. Prerequisite: ED 5308

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.
Prerequisite: Approval of advisor.

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: Approval of instructor.

6342 Addictive Disorders (3-0). Introduces counseling students to the field of addictions, including basic pharmacology, conceptualizations of addictions, assessment, models of treatment, prevention, and family issues. Prerequisite: Approval of advisor.

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. Prerequisite: Approval of instructor.

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 instructor.

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: ED 5314 and 7301.

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.

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.

6372 Information Resources for Career Development (3-0). A course designed to train counselors in the collection, evaluation, and interpretation of 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.

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.

7301 Clinical Practice in Counseling (3-0). 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. Training is done through role-play, coaching, and experiential activities. Includes presentation of case studies applicable to current issues, multicultural concerns, legal decisions, and ethics in the field. Prerequisites: ED 5314, ED 7315.

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.

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.

7304 Leadership in Educational Administration (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. Prerequisite: Professional Mid-Management certificate or approval of instructor.

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.

7306 School Finance (3-0). Consideration of problems relating to public School finance; guiding principles of finance, operational finance, trends and needs in State and Federal participation and support in School finance. Prerequisite: Professional Mid-Management certificate or approval of instructor.

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.

7308 The Superintendency (3-0). This course examines the role of superintendent of the local School district. Major emphasis will focus upon the role and relationships required in a climate of restructuring and change for quality education. Prerequisite: Must have completed Professional Mid-Management Administrator requirements.

7309 State and Federal Programs in Public Schools (3-0). A study of federal and state programs currently being used in public Schools.

7310 Public School Buildings (3-0). A study of past and present building architecture with a special emphasis on building types.

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 certification program. Clock hours must be accumulated during two consecutive semesters. 7311:1 is required for enrollment in 7311:11.

7312 Practicum in Reading (0-3). A problems course that provides internship experiences for a student seeking the reading specialist certificate. Prerequisite: Must have completed 18 hours of reading or be in last semester of coursework; consent of advisor.

7313:1 and 7313:11 Administration Internship (0-3) and (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 300 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. Clock hours must be accumulated during two consecutive semesters. 7313:1 is required for enrollment in 7313:11.

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.

7316 Internship 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 150 clock hours under supervision in the conduction of counseling and guidance activities. May be taken twice, with permission of advisor. Prerequisite: ED 5314, 7303, 7315, 7301, and consent of advisor.

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; students spend a minimum of 90 clock hours under supervision of School and university faculty. Prerequisite: Completion of 24 hours of special education coursework.

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.

7321 Superintendent/School Board Relations (3-0). Surveys the governance aspect of public education in Texas. Reviews roles, responsibilities, and functions of the superintendent and board members.

7322 Superintendent Finances Issues (3-0). An in-depth analysis of the superintendent’s role in developing a comprehensive School district budget. All aspects of financing public Schools in Texas are reviewed.
DEPARTMENT OF INDUSTRIAL TECHNOLOGY

Department of Industrial Technology
School of Professional Studies
Office: Industrial Technology Building, 101
Phone: (432)837-8138
email: mcroy@sulross.edu

PROGRAM DESCRIPTION
A minor is offered through the department giving students an opportunity to benefit from a wide variety of practical, hands-on courses. A cooperative minor in photography is also offered through the Industrial Technology and Fine Arts and Communication departments.

The Industrial Technology program is designed to serve several purposes and meet a variety of needs. Among these are: to prepare students for leadership roles and careers in a variety of industries and to provide students majoring in other disciplines an opportunity to supplement and enrich their chosen fields. 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.

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.
UNDERGRADUATE COURSES IN INDUSTRIAL TECHNOLOGY

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system.)

1303 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. (ENGR 1304).

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.


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.

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.

2304 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. (ARTS 2356).

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.

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.

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.

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.

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.

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.

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.

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 in 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.

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.

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.

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.

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.

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.

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.

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.

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.

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.

4307 Advanced Welding Technology (2-4). Advanced theory and practical application of knowledge in the area of welding. Prerequisite: IT 2307 or special permission.

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.

4315 Upholstery (2-4). Techniques, practices, and procedures of upholstering.

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.
DEPARTMENT OF PHYSICAL EDUCATION

Department of Physical Education
School of Professional Studies
Office: (432) 837-8226
Fax: (432) 837-8234
e-mail: rgrant@sulross.edu

Professor and Chair: Roger Grant, Ed.D.
Professor: Melanie A. Croy, Ed.D., Chet Sample, Ed.D.
Assistant Professor: Kay Whitley, M.Ed.


PROGRAM DESCRIPTION
The Department of Physical Education at Sul Ross State University gives professional training to young men and women aspiring to become physical education teachers, directors of recreational programs, athletic coaches, athletic trainers and instructors of driver education. The department offers a program of activities planned to meet the degree requirements in general education and to provide opportunities for the individual students to develop physical fitness and motor skills conducive to total wellness and the satisfying pursuit of lifetime sports and activities during leisure time.

Majors in this department can receive a Bachelor of Science degree in Kinesiology and Sports Science at the undergraduate level and then continue their education at the graduate level for a Master of Education degree in Physical Education.

CAREER OPPORTUNITIES
Physical Education:
- Elementary Teacher
- Secondary Teacher
- Athletic Coach/Personal Trainer
- Health Spa Work
- Corporate Fitness
- Pre-Physical Therapy
- Aerobics Instructor
- Recreational Program Director

Athletic Training:
- Athletic Trainer

Driver Education:
- In-car Instructor
- Classroom Instructor
DEPARTMENTAL INFORMATION

Physical education and athletic offices are located in the Pete P. Gallego Center. The Graves-Pierce Complex is connected to the 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 machine equipped room, a free weight room, racquetball courts, a sauna and a whirlpool. The physical education classrooms and physiology lab 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.

SCHOLARSHIPS

The following Scholarships are awarded to outstanding students in the Physical Education Department. The students must apply for the Scholarships before March 1st each spring. The Scholarships are awarded for one year, divided into two equal semesters.

The W. H. Perryman Scholarships
The Dan Bustamante Memorial Scholarship
The Joe Don Looney Memorial Scholarships
The James Cleveland Memorial Scholarships
The David Sanchez Memorial Scholarship
The Estavan Martinez Memorial Scholarship
The Norm Cash Scholarship

Bachelor of Science
(Kinesiology and Sports Science Major—120 hrs)
Non-Certification

<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kinesiology and Sports Science</td>
<td>30</td>
</tr>
<tr>
<td>P.E. 1302, 1303, 2304, 3307, 4301, 4302, 4303</td>
<td>24</td>
</tr>
<tr>
<td>Select 9 SCH from: 3301, 3302, 3303, 3304, 3308, 3309</td>
<td>6</td>
</tr>
<tr>
<td>4304, 4305, 4306, 4307, 4308, 4309</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302, 3312 and 3 SCH sophomore literature or Advanced</td>
<td>12</td>
</tr>
<tr>
<td>Communication 1303 or Theatre 2304</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts: select from Fine Arts 1301; Art 1301, Music 1312, 1313; or Theatre 1302</td>
<td>3</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics: select from 1310, 1315, 1316, 1320 or 1342</td>
<td>6</td>
</tr>
<tr>
<td>Physical Education 1150 and 1156</td>
<td>2</td>
</tr>
<tr>
<td>Multicultural Studies: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301</td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2305 and 2306</td>
<td>6</td>
</tr>
</tbody>
</table>

Science: must include Biology 2403; 12 hrs. select from (at least two different sciences)

<table>
<thead>
<tr>
<th>Subject</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; or Physics 1401, 1402, 2401, 2402</td>
<td>16</td>
</tr>
</tbody>
</table>

355
### Bachelor of Science

(Kinesiology and Sports Science Major with All-Level Physical Education Teacher Certification: 130 hrs)

The professional certification program can be altered by the State at anytime. Therefore, the student is responsible to stay updated.

For teacher certification information contact the Sul Ross Department of Education or see information at [http://sulross.edu](http://sulross.edu).

<table>
<thead>
<tr>
<th>Hours</th>
<th>Kinesiology and Sports Science</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P.E. 1302, 1303, 3305, 2303, 2304, 3307, 4301, 4302, 4303</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>Select 9 SCH from: 3301, 3302, 3303, 3304, 3308, 3309, 4304, 4305, 4306, 4307, 4308, 4309</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302, 3312 and 3 SCH sophomore or advanced literature</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Communication 1303 or Theatre 2304</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Fine Arts: select from Fine Arts 1301, Art 1301, Music 1312, 1313, or Theatre 1302</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mathematics: select from 1310, 1315, 1316, 1320 or 1342</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Physical Education: 1150 and 1156</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Multicultural Studies: select from Education 2311</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305 and 2306</td>
<td>6</td>
</tr>
<tr>
<td>Science: must include Biology 2403, and select 12 SCH from: Astronomy 1401, 1402, Biology 1401, 1402, Chemistry 1401, 1402, Geology 1401, 1402, 2402 or Physics 1401, 1402, 2401, 2402 (the 16 SCH must include SCHs from at least two different sciences)</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Social Science: select from Anthropology 1301, Economics 2300, 2305, Geography 1302, 2302, and Philosophy 1301; Psychology 1302; Sociology 2303</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Education: Courses mandated by the State</td>
<td>21</td>
<td></td>
</tr>
<tr>
<td>Electives: select from any subject area</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

**Total 130**

**Kinesiology and Sports Science Minor**

PE 1302, 1303, 2304, 4301, 4302, and 3 SCH advanced electives.
ATHLETIC TRAINING LICENSURE

Students may also complete course work and apprenticeship experience to become an athletic trainer. Athletic training concerns all aspects of the athletes' health and safety. Students in the athletic training program help with the prevention of athletic injuries, provide immediate care and treatment for injured athletes, as well as assist with the rehabilitation of various sports related injuries.

The athletic training program is an apprenticeship program that provides required courses and clinical practicum laboratory experience that allows students the opportunity to acquire supervised hours. These hours are required to qualify students for the State of Texas Examination for Licensure. The apprenticeship hours are based on the academic calendar and should be completed during a minimum of five consecutive semesters, Fall/Spring. Academic credits should include at least three semester hours from each of the following areas: 1) human anatomy/human physiology, 2) exercise physiology, 3) health, disease, nutrition, wellness, drug and alcohol education, 4) first aid and CPR, 5) kinesiology, 6) athletic training, 7) advanced athletic training, and 8) therapeutic exercise, therapeutic modalities, or administration of athletic training programs.

DRIVER EDUCATION CERTIFICATION

Teaching Endorsements

A driver education endorsement may be added as an additional specialization on any current Texas Teacher Certificate by the Texas Education Agency. Students enrolled in a teacher certification program may add driver and traffic safety education as an area of specialization. You must complete a nine hour program with a grade of "C" or better in each course, possess a Texas driver's license, and meet the driving record evaluation established for Texas School bus drivers before you are recommended for endorsement to the Education Department. No ExCET test is required. Listed below are the courses you would take:

Safety Education 4301  Basic Driver and Traffic Safety Education I
Safety Education 4302  Basic Driver and Traffic Safety Education II
Safety Education 4303  Methods of Teaching Driver and Safety Education

Teaching Assistants

Teaching assistants may be employed in public or commercial driver education programs. A teaching assistant in driver education must have been a licensed driver for a minimum of five years, be a high School graduate, and possess a Texas driver's license. In addition, teaching assistants must meet the driving record evaluation standards established for Texas School bus drivers.

Teaching assistants may be qualified to conduct in-car training by completing the six hours of course work listed below with a grade of "C" or better in both classes:

Safety Education 4301  Basic Driver and Traffic Safety Education I
Safety Education 4302  Basic Driver and Traffic Safety Education II
Teaching assistants may be approved to assist certified teachers in the classroom phase and to conduct all laboratory phases. Training qualifications required for this position may be met by completing the following course work with a grade of "C" or better in class.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety Education 4301</td>
<td>Basic Driver and Traffic Safety Education I</td>
</tr>
<tr>
<td>Safety Education 4302</td>
<td>Basic Driver and Traffic Safety Education II</td>
</tr>
<tr>
<td>Safety Education 4303</td>
<td>Methods of Teaching Driver and Safety Education</td>
</tr>
</tbody>
</table>

Recommended Sequence of Courses for a Bachelor of Science

Kinesiology and Sports Science Major - 120 hrs

<table>
<thead>
<tr>
<th>Year</th>
<th>Courses</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Freshman</strong></td>
<td>PE 1302, 1303</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Communication*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Math*</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Fine Arts*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>PE 1150</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Social Science*</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>PE 1156</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sophomore</strong></td>
<td>PE 2304</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>English 2301 and *</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Science - Biology 2403 and *</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Electives 2403</td>
<td>3</td>
</tr>
<tr>
<td><strong>Junior</strong></td>
<td>PE 3305, 3307 and 3 hrs. electives</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Multicultural Studies*</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Science*</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>Minor*</td>
<td>9</td>
</tr>
<tr>
<td><strong>Senior</strong></td>
<td>PE 4301, 4302, 4303</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Minor*</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>Electives*</td>
<td>9</td>
</tr>
</tbody>
</table>

**GRAND TOTAL 120**

*See Bachelor of Science Degree requirements in this section
A total of 130 semester hours are required to graduate; 39 hours (13 courses) of those must be numbered 3000 level or higher. A grade lower than a "C" will not be accepted in the major field.

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. Currently, there are ten programs of physical therapy in the state of Texas. All ten 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.

PHYSICAL EDUCATION ACTIVITY COURSES*

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.

1153 Individual Activities (0-2). Individual sports of Archery, Aerobics, Golf, and Weight Training and Conditioning.

1154 Team Activities (0-2). Team sports of Basketball, and Volleyball.

1155 Dual Activities (0-2). Dual sports of Badminton, Racquetball, Handball, and Tennis. II


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. One section is offered for students participating in intercollegiate rodeo. A stock charge of $25 is required for those students. Prerequisite: Membership on an intercollegiate athletic team.

UNDERGRADUATE COURSES IN PHYSICAL EDUCATION

(Subject titles and course numbers in parentheses at the end of the course description represent the course equivalent in the Texas Common Course Numbering system). The semester in which the course is normally offered is in parenthesis.

1302 Safety and 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)

1303 Introduction to Sports and Fitness (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.

2303 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. (PHED 1331) (Fall/Spring)

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)

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)

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)

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

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)

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. (Fall/Spring)

3307 Kinesiology (3-0). A study of the analysis of human motion and posture subject to both mechanical and biological laws and principles. (Fall/Spring) Prerequisite: PE1303

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 1303

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 competitive sports programs. (Spring)

4102 Workshop in Sports and Fitness (1-0). A course that may be repeated for credit when course content varies. (Various)

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.

4104 Athletic Training Practicum (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)

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 1303

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 1303

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 1303, 3307, 4301, 4302 or permission of the instructor

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 1302, Safety and First Aid

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

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

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

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)

COURSES IN SAFETY EDUCATION

4301 Basic Driver and Traffic Safety Education (3-0). A basic course in Driver and Traffic Safety Education emphasizing the skills and techniques of driving in a modern world. The study and acquisition of available materials in the field. (Summer I)
Prerequisite: PE 1302

4302 Methods of Teaching Driver and Traffic Safety Education (3-0). A course that deals with the problems and procedures necessary in setting up a driver education program in the public Schools. Simulation: Multi-media classroom teaching and Multi-car driving range techniques will be covered as well as the technique not utilizing the above equipment. (Summer I)
Prerequisites: Safety Education 4301

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

GRADUATE PROGRAM IN PHYSICAL EDUCATION
Graduate study is offered through the Department of Physical Education leading to the Master of Education degree with a major in Physical Education.

The Master of Education degree with a major in Physical Education is a thirty-six (36) hour program with eighteen (18) hours in Physical Education, twelve (12) hours in Education and six (6) graduate hours elective. These courses must be selected with the advice and approval of their Graduate Advisor in Physical Education. No more than twelve (12) hours of graduate transfer work may be counted on the degree.

GRADUATE COURSES IN PHYSICAL EDUCATION
5301 Research and Testing (3-0). Research and testing in health and physical education; skills and physical fitness; the place of tests in health and physical education; and essential statistical procedures. Course may be taken more than one time when course content varies. (Fall/Spring/Summer)

5302 Problems in Physical Education (3-0). This course covers special aspects of physical education. There is a critical review of selected studies, literature, practices and procedures in the field. This is all applied to the solution of individual problems. Course may be taken more than one time when course content varies. (Various)

5303 Seminar in Health and Physical Education (3-0). A seminar with emphasis on research in health and physical education in both the elementary and secondary School fields. The course will include methods of research, selecting problems and preparing a written report on the study. Course may be taken more than once when course content varies. (Various)

5304 Individual Research. Topics will be selected by the instructor in consultation with the student. Course may be taken more than one time when course content varies. (Various)

GRADUATE COURSES IN SAFETY EDUCATION
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)

362
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)

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)
VOCATIONAL NURSING PROGRAM
Vocational Nursing Program
School of Professional Studies
Office: Ferguson, 106
Phone: (432) 837-8171
Fax: (432) 837-8677
e-mail: dkuenstl@sulross.edu

Director and Lecturer: Donna Kuenstler, BSN, R.N.
Clinical Instructor: Kristin Wright, A.S.N., R.N.

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 School 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. Must be accepted into the Vocational Nursing Program.

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 I .................................................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 SCH** 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 SCH** 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 1460 Clinical —Practical Nurse III ..............................................4
- VNSG 2331 Advanced Nursing Skills ..................................................3

**Total SCH** 19

**GRAND TOTAL 50**
COURSES IN VOCATIONAL NURSING

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. Includes jurisprudence requirements stipulated by the Texas Board of Nursing. Incorporates knowledge necessary to make the transition from student to graduate vocational nurse. (Fall)

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)

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)

1306 Maternal/Newborn Nursing (2-2). A study of the biologic, psychologic, and sociologic concepts applicable to basic needs of the family including childbearing and neonatal care. Topics include physiologic changes related to pregnancy, fetal development, and nursing care of the woman and family during pregnancy, labor and delivery and the puerperium. (Summer)

1360 Clinical - Practical Nurse 1(0-0). 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)

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)

1407 Pediatric Nursing (4-1). The student will discuss primary nursing care of the pediatric client and family during health and disease, utilize growth and development concepts, drug therapy concepts as applicable to the pediatric client. (Fall)

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)

1460 Clinical - Practical Nurse III (0-0). 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)
1461 Clinical - Practical Nurse 11(0-0). 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)

1500 Nursing in Health and Illness 7(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)

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)

1500 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)

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. Includes NCLEX-PN preparatory labs. (Fall)
## INDEX

Academic Center for Excellence ................................................................. 156  
Academic Advising .................................................................................. 69  
   Pre-Professional .................................................................................... 70  
   Technical Programs ................................................................................. 70  
Academic Honors .................................................................................... 79  
Academic Organization ............................................................................. 93  
Academic Probation and Suspension ......................................................... 78  
Accreditations .......................................................................................... 2  
Administration  
   Academic ............................................................................................... 10  
   Central ....................................................................................................... 10  
   System ......................................................................................................... 10  
   Administrative Staff .................................................................................. 24  
Admissions .................................................................................................. 37  
   Graduate .................................................................................................. 105  
   Undergraduate ......................................................................................... 38  
Agricultural Business ................................................................................. 123  
Agricultural Education ............................................................................. 122  
Alumni Affairs ........................................................................................... 68  
Animal Science, Department of ............................................................... 116  
   Animal Health Management Concentration ........................................ 123  
   Animal Production Concentration ....................................................... 124  
   Equine Science Concentration .............................................................. 125  
   Meat Science Concentration ................................................................. 125  
   Reproductive Physiology Concentration .............................................. 126  
   Graduate Courses .................................................................................... 135  
   Undergraduate Courses ......................................................................... 128  
Anthropology, Courses in ......................................................................... 164  
Appeal Procedure for Suspended Students ................................................ 79  
Application for Graduation ....................................................................... 91  
Archives of the Big Bend ........................................................................... 34  
Art ................................................................................................................ 247  
   Graduate Courses .................................................................................... 253  
   Undergraduate Courses ......................................................................... 249  
Astronomy, Courses in ............................................................................. 227  
Athletics, Eligibility .................................................................................. 29  
Athletics, Philosophy ................................................................................ 28  
Athletics Training Licensure ..................................................................... 367  
Auditing a Course ...................................................................................... 75  
Behavioral and Social Sciences, Department of ....................................... 161  
Bilingual/English as a Second Language, Courses in  
   Undergraduate Courses ......................................................................... 293  
Biology, Department of ........................................................................... 195  
   Graduate Courses .................................................................................... 205  
   Undergraduate Courses ......................................................................... 200  
Board of Regents ...................................................................................... 10  
Bookstore ................................................................................................... 65  
Borderlands Research Institute ............................................................... 36  

368
2010 – 2012 CATALOG

Graduate Courses in Chemistry ................................................... 231
Graduate Program in Geology .................................................... 236
Undergraduate Courses in Chemistry .......................................... 229
Undergraduate Programs in Geology ........................................... 231

Education, Department of ......................................................... 324
Admission to the Teacher Education Program ............................. 330
Graduate Courses ...................................................................... 342
Graduate Programs ................................................................... 336
Post-baccalaureate Certification Requirements ........................... 332
Student Teaching ..................................................................... 332
Teacher Certification Programs ................................................. 331
Undergraduate Courses ......................................................... 334

Employment Service .................................................................. 62

English ..................................................................................... 283
Graduate Courses ................................................................. 288
Graduate Program ................................................................... 288
Undergraduate Courses ......................................................... 285

Environmental Studies ............................................................... 241

Equine Science ......................................................................... 125

Faculty .................................................................................... 12
Adjunct ................................................................................... 22
Retired ................................................................................... 24
Rio Grande College ................................................................. 19
Farrier Technology ................................................................... 118
Faskin Ranch ............................................................................ 115
Financial Aid ........................................................................... 66
Fine Arts and Communication, Department of ......................... 243
Fine Arts, Courses in .............................................................. 263
Food Services .......................................................................... 56
French, Courses in ................................................................... 293

Full-Time Student
Graduate ................................................................................ 110
Undergraduate ................................................................. 76

General Academic Regulations ............................................... 69
General Campus Regulations ................................................... 47
General Information ................................................................. 26
General Studies ................................................................. 280
Geography, Courses in ............................................................ 165

Grading System ....................................................................... 76
Grade Point Average ............................................................... 77
Grade Point Average Requirement Table ................................ 78
Incomplete Grades ................................................................. 76
No Grade ................................................................................ 75
PR Grades ............................................................................. 77
Withdraw Grades ................................................................. 77

Graduation under a Particular Catalog ........................................ 90, 111
Graduation with Honors .......................................................... 91
Graham-Leach-Billey Act ........................................................... 48

Health Insurance Portability and Accountability Act ................ 48

370
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Service</td>
<td>61</td>
</tr>
<tr>
<td>Historical Background</td>
<td>26</td>
</tr>
<tr>
<td>History</td>
<td>166</td>
</tr>
<tr>
<td>- Graduate Program</td>
<td>171</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>169</td>
</tr>
<tr>
<td>Honors Program</td>
<td>158</td>
</tr>
<tr>
<td>Industrial Technology, Department of</td>
<td>350</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>351</td>
</tr>
<tr>
<td>Intercollegiate Athletics</td>
<td>28</td>
</tr>
<tr>
<td>International Students</td>
<td>42</td>
</tr>
<tr>
<td>Journalism, Courses in</td>
<td>263</td>
</tr>
<tr>
<td>Languages and Literature, Department of</td>
<td>282</td>
</tr>
<tr>
<td>Law Enforcement Academy</td>
<td>322</td>
</tr>
<tr>
<td>Library and Information Technologies, Division of</td>
<td>31</td>
</tr>
<tr>
<td>Liberal Arts</td>
<td>296</td>
</tr>
<tr>
<td>Linguistics, Graduate Courses</td>
<td>294</td>
</tr>
<tr>
<td>Master's Degree Programs</td>
<td>104</td>
</tr>
<tr>
<td>- Admission to Candidacy</td>
<td>111</td>
</tr>
<tr>
<td>- Admissions</td>
<td>105</td>
</tr>
<tr>
<td>- Comprehensive Examination</td>
<td>113</td>
</tr>
<tr>
<td>- Degree Plan</td>
<td>111</td>
</tr>
<tr>
<td>- Graduate Committee</td>
<td>112</td>
</tr>
<tr>
<td>- Graduate Council</td>
<td>109</td>
</tr>
<tr>
<td>- Graduate Record Examination</td>
<td>104</td>
</tr>
<tr>
<td>- Second Master's Degree</td>
<td>113</td>
</tr>
<tr>
<td>- Thesis</td>
<td>112</td>
</tr>
<tr>
<td>- Undergraduate Courses for Graduate Credit</td>
<td>109</td>
</tr>
<tr>
<td>Mathematics</td>
<td>215</td>
</tr>
<tr>
<td>- Graduate Courses</td>
<td>222</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>217</td>
</tr>
<tr>
<td>Maximum Course Load</td>
<td>76</td>
</tr>
<tr>
<td>- Graduate</td>
<td>110</td>
</tr>
<tr>
<td>- Undergraduate</td>
<td>76</td>
</tr>
<tr>
<td>Meat Technology</td>
<td>120</td>
</tr>
<tr>
<td>Meat Science</td>
<td>125</td>
</tr>
<tr>
<td>Media &amp; Instruction Technology Services</td>
<td>33</td>
</tr>
<tr>
<td>Mexican American Studies</td>
<td>172</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>172</td>
</tr>
<tr>
<td>Mission</td>
<td>27</td>
</tr>
<tr>
<td>Museum of the Big Bend</td>
<td>34</td>
</tr>
<tr>
<td>Music</td>
<td>264</td>
</tr>
<tr>
<td>- Graduate Courses</td>
<td>273</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>268</td>
</tr>
<tr>
<td>National Honor Societies</td>
<td>80</td>
</tr>
<tr>
<td>Natural Resource Management, Department of</td>
<td>138</td>
</tr>
<tr>
<td>- Graduate Courses</td>
<td>153</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>148</td>
</tr>
<tr>
<td>Section</td>
<td>Page</td>
</tr>
<tr>
<td>-------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>Office of Information Technology</td>
<td>36</td>
</tr>
<tr>
<td>Orientation Programs</td>
<td>67</td>
</tr>
<tr>
<td>PASS Program</td>
<td>67</td>
</tr>
<tr>
<td>Philosophy, Courses in</td>
<td>173</td>
</tr>
<tr>
<td>Physical Education, Department of</td>
<td>354</td>
</tr>
<tr>
<td>- Activity Courses</td>
<td>359</td>
</tr>
<tr>
<td>- Graduate Courses</td>
<td>362</td>
</tr>
<tr>
<td>- Graduate Program</td>
<td>362</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>359</td>
</tr>
<tr>
<td>- Pre-Physical Therapy</td>
<td>359</td>
</tr>
<tr>
<td>Physical Science, Courses in</td>
<td>239</td>
</tr>
<tr>
<td>Physics, Courses in</td>
<td>239</td>
</tr>
<tr>
<td>Political Science</td>
<td>173</td>
</tr>
<tr>
<td>- Graduate Courses</td>
<td>180</td>
</tr>
<tr>
<td>- Graduate Program</td>
<td>177</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>175</td>
</tr>
<tr>
<td>Post Office</td>
<td>64</td>
</tr>
<tr>
<td>- Pre-Professional Advising</td>
<td>70</td>
</tr>
<tr>
<td>- Pre-Law Program</td>
<td>181</td>
</tr>
<tr>
<td>- Pre-Dentistry</td>
<td>229</td>
</tr>
<tr>
<td>- Pre-Engineering</td>
<td>217</td>
</tr>
<tr>
<td>- Pre-Health Professions</td>
<td>199</td>
</tr>
<tr>
<td>- Pre-Medicine</td>
<td>229</td>
</tr>
<tr>
<td>- Pre-Nursing</td>
<td>199</td>
</tr>
<tr>
<td>- Pre-Pharmacy</td>
<td>229</td>
</tr>
<tr>
<td>- Pre-Physical Therapy</td>
<td>359</td>
</tr>
<tr>
<td>- Pre-Veterinary Medicine</td>
<td>128</td>
</tr>
<tr>
<td>Privacy Rights</td>
<td>47</td>
</tr>
<tr>
<td>Probational Admission</td>
<td></td>
</tr>
<tr>
<td>- Graduate</td>
<td>106</td>
</tr>
<tr>
<td>- Undergraduate</td>
<td>38</td>
</tr>
<tr>
<td>Programa de Asistencia Estudiantil.</td>
<td>46</td>
</tr>
<tr>
<td>Psychology</td>
<td>182</td>
</tr>
<tr>
<td>- Graduate Courses</td>
<td>189</td>
</tr>
<tr>
<td>- Undergraduate Courses</td>
<td>184</td>
</tr>
<tr>
<td>Range Management</td>
<td>145</td>
</tr>
<tr>
<td>Range and Wildlife Management</td>
<td>151</td>
</tr>
<tr>
<td>Readmission</td>
<td></td>
</tr>
<tr>
<td>- Graduate</td>
<td>109</td>
</tr>
<tr>
<td>- Undergraduate</td>
<td>42</td>
</tr>
<tr>
<td>Recreational Programs</td>
<td>58</td>
</tr>
<tr>
<td>Refunds</td>
<td>54</td>
</tr>
<tr>
<td>Registration</td>
<td>46</td>
</tr>
<tr>
<td>Religious Holy Day Absences</td>
<td>74</td>
</tr>
<tr>
<td>Reproductive Physiology</td>
<td>126</td>
</tr>
<tr>
<td>Residence Status</td>
<td>46</td>
</tr>
<tr>
<td>Rio Grande College</td>
<td>37</td>
</tr>
<tr>
<td>Rodeo Program</td>
<td>115</td>
</tr>
</tbody>
</table>
Veterans Education Benefits.................................................................88
Veterinary Technology ........................................................................121
Vocational Nursing Program .................................................................364
Undergraduate Courses........................................................................366
Wildenthal Memorial Library .................................................................32
Wildlife Management............................................................................144
Women’s Studies .................................................................................294
Undergraduate Courses........................................................................295