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UNIVERSITY CALENDAR  
OFFICIAL ACADEMIC CALENDAR, 2012-2014  

Fall Semester: August 26-December 15, 2012

August 24, Friday  Payment deadline for students who pre-registered, 4:00 p.m.
August 26, Sunday  Opening of Residence Halls  
                    Late orientation for new and transfer students
August 27, Monday  Faculty Meeting, 9:00 a.m.  
                    School and Departmental Meetings, 10:30 a.m.  
                    Late orientation for new and transfer students
August 28, Tuesday Last day for regular registration  
                    Late orientation for new and transfer students  
                    Last day for students to register in Education block courses
August 29, Wednesday Classes, late registration, and Schedule changes begin
September 3, Monday  Labor Day Holiday
September 4, Tuesday  Last day for late registration and Schedule changes
September 6, Thursday New Student Convocation, Marshall Auditorium, 10:15 a.m.
September 14, Friday Twelfth class day
September 21, Friday  Last day for students enrolled in Education block courses  
                    to drop a course and receive a "W"
September 24, Monday  Deadline for applying to student teach during the Spring  
                    Semester, 2013  
                    University as a Community Meal on the Mall
September 28, Friday  Last day to apply for graduation in May, 2013
October 16, Tuesday  Mid-Semester
November 16, 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.
November 21, Wednesday Residence Halls close, 9:00 a.m.
November 21-25  Thanksgiving Holidays (begin after the last Scheduled class  
                meets on November 20)
November 25, Sunday  Residence Halls open, Noon
December 5, Wednesday  Last class day
December 6 and 7 Thursday-Friday  Dead Days
December 10--13 Sunday-Thursday  Final Examinations
December 15, Saturday  Fall Commencement, Pete P. Gallego Center, 10:00 a.m.  
                       Closing of Residence Halls
Spring Semester: January 12 – May 11, 2013

January 2 – 16
Inter-term Semester

January 12, Saturday
Weekend Format Classes begin

January 14, Monday
Opening of Residence Halls, 8 a.m.
Faculty meeting, 9:00 a.m.
School and Departmental Meetings, 10:30 a.m.
Orientation for new and transfer students

January 14-16
Lobo Days Orientation/Welcome Week

January 16, Wednesday
Last day for regular registration
Orientation for new and transfer students
Last day for students to register in Education block courses

January 17, Thursday
Classes, late registration, and Schedule changes begin

January 21, Monday
Martin Luther King, Jr. Holiday

January 22, Tuesday
Last day for late registration and Schedule changes

January 30, Wednesday
Last day for students enrolled in Education block courses
to drop a course and receive a “w”

February 4, Monday
Twelfth class day

February 6, Wednesday
Last day to apply for graduation in August or December 2013

February 8, Friday
Deadline for applying to student teach during the
Fall Semester, 2013

March 8, Friday
Mid-semester

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

March 11 – 15
Spring Vacation. No Classes

March 17, Sunday
Residence Halls open, Noon

March 25, Monday
University as a Community Meal on the Mall

April 5, 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 22, Monday
Honors Convocation, Marshall Auditorium, 7:30 p.m.

May 1, Wednesday
Last Class Day

May 2-3
Dead Days

May 6 - 9
Final Examinations

May 11, Saturday
Spring Commencement, Pete P. Gallego Center, 10:00 a.m.
Closing of Residence Halls
# First Summer Term: June 3 - July 9, 2013

- **June 3, Monday**: Opening of Residence Halls, Noon  
  Last day to register without a late fee
- **June 4, Tuesday**: First day of classes  
  Late registration and schedule changes begin
- **June 7, Friday**: Last day for late registration and schedule changes  
  Fourth Class Day
- **June 8, Saturday**: Weekend Format classes begin
- **June 14, Friday**: Last day to register for Shortened Format courses
- **June 17, Monday**: Shortened Format classes begin
- **June 18, Tuesday**: Mid-term
- **June 27, Thursday**: Last day to drop a course with a “W.” Drops must be processed with Enrollment Services by 4:00 p.m.
- **June 28, Friday**: Registration Days, all day
- **July 4, Thursday**: Fourth of July Holiday
- **July 9, Tuesday**: Final Examinations, End of Term
- **July 10, Wednesday**: Summer I students check out of residential halls

# Second Summer Term: July 11 – August 17, 2013

- **July 10, Wednesday**: Summer II students check into residential halls
- **July 11, Thursday**: First day of classes  
  Late registration and schedule changes begin
- **July 12, Friday**: Registration Days, all day
- **July 13, Saturday**: Weekend Format classes begin
- **July 16, Tuesday**: Fourth Class Day  
  Last day for late registration and schedule changes
- **July 17, Wednesday**: Wednesday/Thursday Format classes begin
- **July 19, Friday**: Last day to register for Shortened Format classes
- **July 22, Monday**: Mid-term  
  Shortened Format classes begin
- **July 27, Friday**: Registration Days, all day
- **August 5, Monday**: Last day to drop a course with a “W.” Drops must be processed with Enrollment Services by 4:00 p.m.
- **August 9, Friday**: Registration Days, all day
- **August 15, Thursday**: Final Examinations  
  End of Term - Official graduation date on transcript
- **August 16, Friday**: Last day to check out of residential halls, by noon
- **August 16 – 24th**: Residential halls closed. Only students who are preapproved with an academic group (Rodeo, nursing, volleyball, football, Pack Leaders and Resident Advisors)
UNIVERSITY CALENDAR
OFFICIAL ACADEMIC CALENDAR, 2013-2014

Fall Semester: August 25 - December 14, 2013

August 23, Friday  Payment deadline for students who pre-registered, 4:00 p.m.
August 24, Saturday Opening of Residence Halls
                            Lobo Days for new and transfer students
August 25, Sunday  Student Convocation
                           Lobo Days for new and transfer students
August 26, Monday  Faculty Meeting, 9:00 a.m.
                           School and Departmental Meetings, 10:30 a.m.
                           Lobo Days for new and transfer students
August 27, Tuesday  Last day for regular registration
                           Lobo Days for new and transfer students
                           Last day for students to register in Education block courses
August 28, Wednesday First day of classes
                           Late registration and schedule changes begin
September 2, Monday  Labor Day Holiday, no classes
September 3, Tuesday Last day for late registration and schedule changes
September 13, Thursday Twelfth class day
September 20, Friday  Last day for students enrolled in Education block courses
to drop a course and receive a "W"
September 23, Monday  Deadline for applying to student teach during the Spring semester, 2014
September 30, Monday  University as a Community Meal on the Mall
October 15, Tuesday  Mid-semester
November 15, Friday  Last day to withdraw from the University or to drop courses with grade of "W." Drops must be processed with Enrollment Services by 4:00 p.m.
November 27, Wednesday Residence Halls close, 9:00 a.m.
November 27-29, Wednesday - Friday Thanksgiving Holidays (begin after the last scheduled class meets on November 26)
December 1, Sunday  Residence Halls open, Noon
December 4, Wednesday Last class day before finals
December 5 and 6 Thursday-Friday Dead Days
December 9-12, Monday-Thursday Final Examinations
December 13, Friday  Graduation Rehearsal, Pete P. Gallego Center, 2 p.m.
December 14, Saturday Fall Commencement, Pete P. Gallego Center, 10:00 a.m.
                           Closing of Residence Halls, 9 a.m.
Spring Semester: January 13 – May 10, 2014

January 2 – 16  Mid-winter Semester
January 11, Saturday  Weekend Format Classes begin
January 13, Monday  Opening of Residence Halls, noon
                        Lobo Days for new and transfer students
January 14, Tuesday  Faculty meeting, 9:00 a.m.
                        School and Departmental Meetings, 10:30 a.m.
                        Lobo Days for new and transfer students
January 15, Wednesday  Last day for regular registration
                         Lobo Days for new and transfer students
                         Last day for students to register in Education block courses
January 16, Thursday  First day of classes
                         Late registration and schedule changes begin
January 20, Monday  Martin Luther King, Jr. Holiday
January 22, Wednesday  Last day for late registration and schedule changes
January 31, Friday  Last day for students enrolled in Education block courses
                        to drop a course and receive a “W”
February 3, Monday  Twelfth class day
February 14, Friday  Deadline for applying to student teach during the
                        Fall Semester, 2014
                        Deadline to apply for May graduation without a late fee
March 6, Thursday  Mid-semester
March 8, Saturday  Residence Halls close, 9:00 a.m.
March 10 – 14  Spring Break. No Classes
Monday-Friday
March 16, Sunday  Residence Halls open, noon
March 31, Monday  University as a Community Meal on the Mall
April 4, Friday  Last day to withdraw from the University or to drop courses
                with grade of “W.” Drops must be processed with
                Enrollment Services by 4:00 p.m.
April 21, Monday  Honors Convocation, Marshall Auditorium, 7:30 p.m.
April 30, Wednesday  Last class day before finals
May 1 and 2  Dead Days
Thursday and Friday
May 5 - 8  Final Examinations, End of Term
Monday-Thursday
May 9, Friday  Graduation rehearsal, Pete P. Gallego Center, 2 p.m.
May 10, Saturday  Spring Commencement, Pete P. Gallego Center, 10:00 a.m.
                         Closing of Residence Halls, 9 a.m.
First Summer Term: June 2 - July 8, 2014

June 2, Monday  Opening of Residence Halls, noon
                Last day to register without a late fee

June 3, Tuesday  First day of classes
                Late registration and schedule changes begin

June 6, Friday  Last day for late registration and schedule changes
                Fourth Class Day

June 7, Saturday  Weekend Format classes begin

June 13, Friday  Last day to register for Shortened Format courses

June 16, Monday  Shortened Format classes begin

June 17, Tuesday  Mid-term

June 26, Thursday  Last day to drop a course with a “W.” Drops must be
                  processed with Enrollment Services by 4:00 p.m.

July 4, Friday  Fourth of July Holiday

July 8, Tuesday  Final Examinations, End of Term

July 9, Wednesday  Summer I students check out of residential halls

Second Summer Term: July 10 – August 16, 2014

July 9, Wednesday  Summer II students check into residential halls
                   Last day to register without a late fee

July 10, Thursday  First day of classes
                   Late registration and schedule changes begin

July 15, Tuesday  Fourth class day
                   Last day for late registration and schedule changes

July 18, Friday  Last day to register for Shortened Format courses

July 21, Monday  Shortened Format classes begin

July 24, Thursday  Mid-term

August 4, Monday  Last day to drop a course with a “W.” Drops must be
                 processed with Enrollment Services by 4:00 p.m.

August 14, Thursday  Final Examinations, End of Term
                      Closing of Residence Halls

August 15, Friday  Last day to check out of residential halls, by noon

August 15 – 23rd  Residential halls closed. Only students who are
                  preapproved with an academic group (Rodeo, nursing,
                  volleyball, football, Pack Leaders and Resident Advisors)
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Chief Information Officer
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Dean, Library and Information Technologies

Larry Guerrero, Ed.D.
Dean, College of Professional Studies

Robert J. Kinucan, Ph.D.
Dean, College of Agricultural and Natural Resource Sciences

ADMINISTRATIVE STAFF

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Melleta Bell, B.F.A, Archivist
Mary Bennett, M.Ed., Director of McNair Grant
Jeffery Blake, B.B.A., Director of UC/Campus Activities
Karen Brown, B.A., Director of Alumni Relations
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William Cloud, M.A., Director of Center for Big Bend Studies
Patrick Clingman, M.E.M., Director of Gear Up Grant
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Helen Crane, M.S.W., Director of CSI Grant
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John Jones, Ph.D., Director of Institutional Research and Effectiveness
Stephen W. Lang, M.A., Director of News and Publications
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Judy A. Perry, M.Ed., Director of Human Resources
Pamela Pipes, M.S., Director of Records and Registration
Yvonne Realivasquez, M.P.A., Executive Assistant to the President
Lori Schreiber, M.L.S., Director of Library Technical Services
Barbara Vega, M.A., Director of Upward Bound Grant
Antuan Washington, M.Ed., Director of Recreational Programs
David C. Wilson, M.B.A., Director, Big Bend Regional Minority and Small Business Development Center
Barbara M. Williams, M.L.S., Inter Library Loan Librarian

THE FACULTY

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

Angela Brown
Assistant Professor of Mathematics, A.A.S., 2000, Lee College; B.S., 2003, Sam Houston State University; M.S., 2006, Sam Houston State University; Ph.D., 2012, University of Texas at Arlington

Rosemary Briseño
Visiting Assistant Professor of English, B.A., 1997, University of Texas at Austin; M.A., 2000, Sul Ross State University; Ph.D., 2008, Washington State University

Laura Payne Butler

Jimmy D. Case
Professor of Political Science and Dean of the College of Arts and Sciences, A.A., 1968, Amarillo College; B.A., 1970, Baylor University; M.A., 1973, Ph.D., 1984, Texas Tech University

Sandra S. Chambers
Lecturer in Physical Education and Head Softball Coach
B.S., 1986, M.Ed., 1997; Sul Ross State University

Scarlet Clouse
Assistant Professor of Education and Director of Teacher Education, B.S., 1997, M.Ed., 1999, Sul Ross State University; Ed.D., 2013, Texas A&M Commerce

Christian Cruz,
Lecturer in Physical Education and Assistant Football Coach, B.S., 2011, M.Ed., 2013

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
Avram C. Dumitrescu  
Assistant Professor of Arts Gaming and Communication, B.A., 1999, University of Ulster at Belfast; M.A., 2004, University of Ulster at Belfast

Virginia Elliott  
Assistant Professor of Animal Science, B.S., 1978, Texas State University; Ph.D., 1983, Texas A&M College of Veterinary Medicine

Mark C. Emerson  
Associate 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

Christopher M. Estepp  
Assistant Professor of Animal Science, B.S., 1997, Texas A&M University; M.Ed., 2006, Texas A&M University; Ph.D., 2012, University of Florida

Usef Faghihi  
Assistant Professor of Computer Science, M.S., 2007, Ph.D., 2010, University of Quebec in Montreal

Carol H. Fairlie  
Professor of Art, B.F.A., 1990, Texas Woman's University; M.F.A., 1993, University of North Texas

Theron Francis  
Visiting Assistant Professor of English, B.A., 1987, Northern Michigan University; M.A., 1994, Northern Michigan University; Ph.D., 2007, Purdue University

Donald C. Freed  
Professor of Music, B.M., 1974, Nebraska Wesleyan University; M.M., 1978, Ph.D., 1991, University of Nebraska

Eric Takeo Funaksi  
Visiting Professor of Mathematics, B.S., 1990, Harvey Mudd College; M.S., 1992, University of Washington; Ph.D., 1997, University of Tennessee, Knoxville

Christopher Garcia  

Ilda N. Gonzalez  
Roger H. Grant
Professor of Physical Education, B.S., 1968, Wayland Baptist College; M.S., 1973, University of North Texas; Ed.D., 1980, East Texas State University

William C. Green
Professor of Marketing and Interim Chair of the Department of Business Administration, B.S., 1973, M.B.A., 1975, California State University (Bakersfield); Ph.D., 1985, University of Houston

Larry M. Guerrero

Alex M. Hardison
Lecturer of Developmental Mathematics, B.S., Sul Ross State University

Louis A. Harveson
Professor of Natural Resource Management and Director of Borderlands Research Institute for Natural Resource Management B.S., 1991, Texas Tech University; M.S., 1995, Ph.D., 1997, Texas A&M University - Kingsville

Patricia M. Harveson
Associate Professor of Natural Resource Management B.S., 1992, Tarleton State University; M.S., 1996, Texas A&M Kingsville; Ph.D., 2006, Texas A&M

James N. Hector
Associate Professor of Education and Chair of the Department of 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

Byron C. Housewright
Assistant Professor of Animal Science, B.S., 1988, Texas Tech University; M.S., 1990, Ph. D., 1994, University of Tennessee

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

Kristofer D. Jorgenson
Associate Professor of Mathematics, B.M., 1985, M.Ed., 1991, Southwest Texas State University-San Marcos; Ph.D., 1999, New Mexico State University
Md. Abul Kalam
Associate Professor of Chemistry, B.Sc., 1994, M.Sc., 1996, Dhaka University; M.S., 2004, Ph.D., 2005, University of Connecticut

Robert J. Kinucan
Professor of Natural Resource Management and Dean, College 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

Demond Littles

Ryan Luna
Assistant Professor of Natural Resource Management, B.S., 2001, Texas Tech University; M.S., 2008, University of Texas at San Antonio; Ph.D., 2013, Texas State University

Pamela C. Marett
Professor of Business Administration, B.A., 1972, Michigan State University; M.A., 1977, Clemson University; Ph.D., 1982, University of Tennessee

Linda S. McAnally

Elizabeth A. Measures
Associate Professor of Mathematics, B.S., 1982, M.S., 1984, Sul Ross State University; Ph.D., 1992, University of Idaho

Bobby S. Mesker
Lecturer in Physical Education, Head Baseball Coach, and Associate Athletic Director, B.S., 2004, M.Ed., 2008, Sul Ross State University

Amy Moreland
Assistant Professor of Political Science and Assistant Director of Institutional Research, B.A., 2004, University of the Permian Basin; M.A., 2006, Ph.D., 2010, Texas Tech University

Marilyn McReavy Nolen
Lecturer in Physical Education, A.A., 1965, Howard Junior College; B.S., 1966, Southwest Texas State University; M.Ed., 1972, Sul Ross State University

Tamara Olive
Assistant Professor of Education, B.A., 1978, Angelo State University; M.Ed., 2002, Sul Ross State University

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
**Krista L. Powell**  
Director of Vocational Nursing, B.S.N., 2002, Hardin-Simmons University; M.S.N.-F.N.P., 2008, Texas Tech University

**Andrea L. Powers**  
Associate Professor of Psychology, B.A., 1985, Western State College; MA, 1988, Ph.D., 1990, University of Vermont

**Galen Privitt**  
Associate Professor of Education, B.S., 1977, Lubbock Christian University; M.Ed., 1992, University of Texas Pan American; Ed.D., 2006, University of Texas at Austin

**Charles D. Prude**  
Lecturer in Physical Education and Head Athletic Trainer  
B.S., 1983, Southwest Texas State University;  
M.Ed., 1998, Sul Ross State University

**Jeanne Qvarnstrom**  
Assistant Professor of Education, B.S., 1970, Iowa State University;  
M.A., 1975, California State University, Hayward;  
Ed.D., 1986, University of the Pacific

**Francine R. Richter**  
Associate Professor of English, B.A., 1986, M.A., 1987, Tarleton State University; Ph.D., 1993, Texas Christian University

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

**Dewayne L. Roberts**  
Lecturer in Physical Education, Head Volleyball Coach, B.S., 2008;  
M.S., 2011, Eastern New Mexico University

**David M. Rohr**  
Professor of Geology, B.S., 1969, College of William and Mary;  
M.S., 1972, Ph.D., 1977, Oregon State University

**Dona W. Roman**  
Associate Professor of Theatre  
B.F.A., 1987, University of Oklahoma;  
M.F.A., 1989, University of California at Los Angeles

**Lorie L. Rubenser**  
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**  
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
Mark S. Saka  
Professor of History  

Chester E. Sample  
Professor of Physical Education  

Rebecca A. Schlosser  
Ed.D., Associate 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

Gregory M. Schwab  
Professor of Theatre  
B.A., 1979, Carroll College; M.F.A., 1981, Trinity University

Bret Scott  
Assistant Professor of Communication, B.F.A., 1993, University of Arizona; M.F.A., 2008, University of Southern California

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

Kathy K. Stein  
Director of the Academic Center for Excellence and Assistant Professor of English, B.S., 1990, M.A., 1993, Ed.D., 2006, University of Texas at El Paso

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

Quint C. Thurman  
Interim President and Professor of Criminal Justice; B.A., 1981, M.A., 1983, University of Oklahoma; Ph.D., 1987, University at Massachusetts (Amherst)

Neil Trammell  

Barbara Tucker  
Assistant Professor of Education, B.S.W., 1993, Moorhead State University; M.Ed., Sul Ross State University; Ph.D., 2012, Capella University

Kevin M. Urbanczyk  
Professor of Geology, B.S., 1984, M.S., 1987, Sul Ross State University; Ph.D., 1994, Washington State University
Julie M. Vega
Lecturer in English

Joseph G. Velasco
Assistant Professor
B.A., 2001, University of New Mexico; M.A., 2005, Texas A&M - Corpus Christi; Ph.D., 2011, University of Denver

Liza P. Ware

Bonnie J. Warnock

John Scott Wassermann
Instructor of Industrial Technology and Interim Chair of the Department of Industrial Technology, B.S., Sul Ross State University

David T. Watson
Assistant Professor of Political Science

Mazie E. Will
Associate Professor 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, 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

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 and Chair of the Department of Business Administration, B.B.A., 1971, Texas State University-San Marcos; M.B.A., 1989, Sul Ross State University; D.B.A., 1998, University of Sarasota

Tiffany F. 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

Dorman W. Moore
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

Miriam Muniz-Quiz
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  
Professor of Mathematics and Chair of the Department of Natural and Behavioral Sciences, B.S.E., 1980, M.S.E., 1982, University of Central Arkansas; Ph.D., 1990, University of Texas at Austin

Michael L. Ortiz  
Assistant Professor of Mathematics, B.S., 2002, University of North Texas; Ph.D., 2009 University of Texas at Austin

Fernando Z. Quiz  
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, B.A., 1986, M.A., 1987, Tarleton State University; Ph.D., 1993, Texas Christian University

Sarah Roche  
Professor of English and Chair of the Department of Humanities  
BA, 1985, University of the South; MA, 1989, Middle Tennessee State University; Ph.D., 1998, Texas A & M University

Todd T. Russell  
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  
B.B.A, 1974, M.P.A., 1986, University of Texas at Austin; Ph.D., 1990, Texas Tech University

Gina L. Stocks  
Assistant Professor of Education  

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

Martin G. Urbina  
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

Donald W. Walden  
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  

Wesley D. Wynne  
Associate 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

ADMINISTRATIVE STAFF

Joseph Langford, B.S., Director of OIT Operations  
Laura Nelson, B.A., Director of Media/Public Relations/Outreach  
Elizabeth Peña, M.B.A., Director of Small Business Development  
Delia Ramirez, B.B.A., Director of Business Services  
Monica Sandoval, B.A., Assistant Director of Financial Assistance  
Claudia Wright, Ed.D., Director of Admissions, Records, and Student Services
ADJUNCT FACULTY

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 at 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

Selma N. Glasscock
Adjunct Professor of Natural Resource Management, B.S. 1975, Sul Ross State University; M.S. 1989, Angelo State University; Ph.D. 2001, Texas A&M University.

Janet Greathouse
Adjunct Professor of Animal Science

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

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

Alyson McDonald
Adjunct Professor of Natural Resource Management
B.S. 1994, Angelo State University; M.S. 2001, Sul Ross State University; Ph.D. 2010, 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

Nancy M. Antrim, Ph.D.  
Professor of English and Linguistics

Elbert F. Bassham, M.A.T.  
Director of Institutional Research

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

Robert L. Bowden, M.Ed.  
Associate Professor Emeritus of Industrial Technology

Ellen M. Boyd, M.A.  
Associate Professor Emeritus of Music

George L. Bradley, Ph.D.  
Professor Emeritus of Communication and Theatre

C. Ross Burns, M.L.S.  
Director of Technical Services

Peter P. Chase, M.S.  
Lecturer in Computer Science

Dale B. Christophersen  
Professor Emeritus of Political Science

David L. Cockrum  
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

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

Robert C. Cullins, M.A.  
Registrar

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, College 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

Ann K. Johnson
Lecturer in History and Women's Studies

Raymond G. Kessler, J.D.
Professor of Criminal Justice

Dorothy M. Leavitt, M.A.
Dean of Admissions and Records

Paul A. Lister, Ph.D.
Professor 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

Robert C. Matthews, M.B.A., C.P.A.
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

Barbara J. Nelson, Ph.D.
Associate Professor of English

Felipe de Ortego y Gasca, Ph.D.
Professor of English

Robert C. Overfelt, Jr., Ph.D.
Distinguished Professor Emeritus of History at Rio Grande College

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

Avinash K. Rangra, Ph.D.
Professor of Chemistry

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

Nelson C. Sager, Ph.D.
Professor of English

Wayne J. Sheehan, Ph.D.
Distinguished Professor Emeritus of History

Beverly G. Six, Ph.D.
Professor of Languages and Literature

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

Kip Sullivan
Professor of Education

Benny P. Tanksley, Ph.D.
Professor of Business Administration

William A. Tindol
Professor of Education and Mathematics

Barbara J. Tyler
Professor of Education and Director of Teacher Education at Rio Grande College

Joel E. Vela, Ed.D.
Professor of History

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

James L. Whitford-Stark
Professor of Geology

Kay E. Whitley, M.S.
Assistant Professor of Physical Education, Athletic Director and Head Tennis Coach

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

James A. Wood, Ed.D.
Professor of Education

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**

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

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

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

We are privileged to operate in the distinctive environment of the Big Bend and Middle Rio Grande areas of Texas. Here we will serve to enrich the cultural, intellectual, social, and economic life of the region and its people.
To ensure the success of this mission, we will continually communicate and uphold the following goals.

**Sul Ross State University Institutional Goals**

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

**INTERCOLLEGIATE ATHLETICS**

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

**PHILOSOPHY OF ATHLETICS**

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

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

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

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

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

ELIGIBILITY FOR ATHLETICS

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

1. **Good Standing with the University.** In order to compete in intercollegiate athletics, the student-athlete shall not currently be on any type of University probation, either academic or disciplinary. Student athlete must be making satisfactory progress toward a baccalaureate degree.

2. **Satisfactory Progress.** Satisfactory progress means that a student-athlete must maintain at least a **2.00 cumulative grade point average** and have accumulated the following semester credit hours:

   **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 Acquisitions, Cataloging, and Serials), and the Archives of the Big Bend. The mission of the Division is to provide the learning resources, facilities, services, and technologies necessary to support the research and informational needs of the University, the Alpine community, and the Big Bend area. The Library's website is: http://www.sulross.edu/library
The primary purpose of the Bryan Wildenthal Memorial Library is to contribute to the instructional and research programs of the University by collecting, organizing, making readily available, and assisting in the use of books, periodicals, electronic services, and other information resources needed by the students, faculty, and staff of the University (including those at Rio Grande College or taking Distance Education courses). The Library also participates in the cooperative sharing of information resources.

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

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

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

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

- A 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. Convenient bibliographic and, where feasible, full-text access to materials for campus and distance users (including Rio Grande College students, faculty, and staff) through effective utilization of the campus network, adequate library hours and document delivery.
- Professional assistance in locating and using library materials and other information resources all hours the library is open.
- An active program of bibliographic instruction
- Services for locating and obtaining materials from other libraries through a strong Interlibrary Loan department.
- Facilities to allow the appropriate duplication of materials.
• A professionally trained staff to develop and administer the resources and services of the library.

THE ARCHIVES OF THE BIG BEND

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

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

MUSEUM OF THE BIG BEND

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

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

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

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

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

In addition to working with academic departments and programs on campus to provide research opportunities for faculty and students, the Center works with Big Bend National Park, Guadalupe Mountains National Park, Big Bend Natural History Association, Texas Parks and Wildlife Department, Texas Historical Commission, county historical commissions, and the general public in cooperative educational, research, and public service projects. The Center sponsors an Annual Conference for the presentation of research papers and maintains an extensive library on the archaeology and history of the Southwestern United States and north-central Mexico. For information, visit our website at [www.sulross.edu/cbbs](http://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 College of Agricultural and Natural Resource Sciences at Sul Ross State University in Alpine, Texas. For more information visit our web site [http://www.sulross.edu/brinrm/](http://www.sulross.edu/brinrm/) or call us at 432-837-8615. The College of Agricultural and Natural Resource Sciences and the Borderlands Research Institute are housed in the Turner Range Animal Science Center which is located 1 mile east of the main campus on U.S. Highway 90.

OFFICE OF INFORMATION TECHNOLOGY

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

OIT consists of 4 departments, which are Customer Service and Instructional Technology, Infrastructure Services, Enterprise Application Services and RGC-OIT operations. Our staff is located on all 4 campuses: Alpine, Del Rio, Uvalde and Eagle Pass. In Alpine we have offices in the Academic Computer
Resource Center (ACR), Briscoe Administration Building, and the Bryan Wildenthal Memorial Library.

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

You can contact us via:

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

### CUSTOMER SERVICE AND INSTRUCTIONAL TECHNOLOGY

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

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

Contact us via:

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

There are two open access computer labs on the Alpine campus that are open to all faculty, staff and students. One lab is in ACR 106 and the other is on the 2nd floor of the Bryan Wildenthal Memorial Library. Please check out website www.sulross.edu/oit for updated information on timings and other information about the labs.

**Infrastructure Services**

The Infrastructure Services department in OIT maintains and administers the University’s computing infrastructure including but not limited to the Data Center, Network, Wireless, Internet, Firewalls, Server-farm, Telecommunications, and other infrastructure related technologies. Other services that we offer include VPN, E-mail, online storage, and server management. Staff in Infrastructure Services is trained and certified to support the voice, data and video infrastructure for the University.

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

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

**Enterprise Application Services**

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

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

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

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

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

**Information Security Office**

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

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

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

**Rio Grande College (RGC) OIT Operations**

The Rio Grande College (RGC) OIT operations is the department in OIT that manages and oversees the technology infrastructure and support for the RGC campuses. All services delivered for all sites at SRSU are centralized, however, trained and certified staff at RGC provide hands-on support for technology issues that may be computer, network, telecomm or software related. RGC OIT operations manages 3 computer labs and 12 distance learning/ITV classrooms spread throughout the Del Rio, Uvalde and Eagle Pass campuses.

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

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

**RIO GRANDE COLLEGE**

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

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

Sul Ross State University Rio Grande College
205 Wildcat Dr.
Del Rio, Texas 78840
Telephone (830) 703-4808
Sul Ross State University Rio Grande College
3107 Bob Rogers Drive
Eagle Pass, Texas 78852
Telephone (830) 758-5005

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

ADMISSIONS

Sul Ross State University accepts applications for admission from students of accredited secondary schools and students transferring from accredited colleges without regard to race, color, sex, age, religious commitment, or national origin. Any person who desires to apply for admission should contact the Center for Enrollment Services, Box C-2, Sul Ross State University, Alpine, Texas 79832 or go to 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) indicating the completion of all transferable academic hours (excluding developmental, remedial, vocational/technical, continuing education, or lifelong learning courses).

Probationary Admission for Beginning Freshman
Applicants, NOT meeting the above standards may be considered for probationary admission on an individual basis. Because of changing demographic trends, diversity, and population increases in the state, Sul Ross State University will consider the following factors in making first-time freshman admissions decisions:

• Specific class rank (on a seven-semester transcript)
• Size of the graduating class
• Quality 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

Graduates of a Non Accredited High School Including Home School
Sul Ross State University admits qualified students graduating from non-accredited high schools of home schooled graduates who meet the following criteria:

• 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 non-accredited high school, including home school, submit the following documentation:

• The Apply Texas application with non-refundable $25.00 application fee.
• Official copy of ACT Composite of SAT I Total (Critical Reading + Math) score.
• Official copy of high school transcript showing class rank. If home school, provide notarized copy of transcript. Upon graduation, applicant must provide a final official transcript showing final class rank and date of graduation.
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:

Total College Hours Minimum Grade Point Average

<table>
<thead>
<tr>
<th>Undertaken:</th>
<th>Required for Admission:</th>
</tr>
</thead>
<tbody>
<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.

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

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

Upper division credit is defined as those courses offered only in the third or fourth years of a baccalaureate program which

- 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,
- involve theoretical or analytical specialization beyond the introductory level, or
- 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 Services. If, after research by admissions personnel, the problem resolution results in a change to the evaluation, the evaluation will be adjusted and the student 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 Services. Assistance in completing the form will be available in either of those two offices.

If the dispute involves the transfer of credits to Sul Ross, the form must be completed by the appropriate official at the institution where the credit was earned and by the Director of Records and Registration 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 Director of Records and Registration at Sul Ross for initiation of the transfer dispute resolution process.

**Former Students**

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

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

**Admission of Undergraduate International Students**

All undergraduate international students must file the Texas Common Application and pay the non-refundable $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:

- TOEFL score of 550 or 213 (computer version) if English is not their first language
- Official high school transcript
- Evaluation or high school transcript from an accredited evaluation company
Support documents (see Requirements for Registration by Undergraduate International Students listed below)

International students who are beginning freshmen graduating from a high school in the U.S. must provide the following:

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 are:

**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 or 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
requirements for registration by undergraduate international students

to ensure that all undergraduate admission and immigration papers are in order, international students are required to visit the center for enrollment services immediately upon arrival on campus.

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

a. evidence of financial responsibility. this may be satisfied by an affidavit or support (immigration service form i-134) or a signed statement from a u.s. citizen or foreign national committing the necessary resources in u.s. dollars for student's entire educational expenses.

b. evidence of english language proficiency as demonstrated by any one of the following:
   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 adequate to successfully complete the program. the interview panel will file the results of the assessment in the center for enrollment services. the director of records and registration will notify the student of the decision in writing.

   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 Apply Texas application
- 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 Services 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 Services, Box C-102, Alpine, Texas 79832.

**PROGRAMA DE ASISTENCIA ESTUDIANTIL (PASE)**

Mexican citizens are eligible for the Programa de Asistencia Estudiantil (PASE) under which they qualify for in-state tuition and fees. Only Mexican citizens are eligible for PASE. U.S. citizens holding dual U.S./Mexican status are not eligible for PASE.

For more information on PASE or for a PASE application form, contact the Center for Enrollment Services, Box C-2, Alpine, Texas 79832.

**REGISTRATION**

Procedures for registration may be found at [http://www.sulross.edu](http://www.sulross.edu).
An individual seeking information or advice for determining residence status should contact the Center for Enrollment Services 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.

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 Director of Records and Registration.

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 Center for Enrollment Services.
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 Center for Enrollment Services.

GRAMM-LEACH-BLILEY ACT

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

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

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

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 2012 - SPRING 2013

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 2012-2013 academic year and the 2013 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 2012 Semester Credit Hrs</th>
<th>Texas Resident</th>
<th>Non-Resident</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$305.00</td>
<td>$656.00</td>
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<td>Credit Hrs</td>
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<td>Non-Resident</td>
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<td>21</td>
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</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 2012-13 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 2012-13, this amount is $401 per semester credit hour. See Residence Status in this catalog.

**Board Authorized Tuition**

Section 54.008 of the Education Code provides authority for the governing board to set state tuition for graduate programs at higher rates than the minimum tuition required by the chapter. Board authorized tuition is set at $12 per school for graduate courses.
Designated Tuition
A mandatory Designated Tuition Fee of $94 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). Designated tuition is $106 for the spring/summer 2013.

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 $58 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 $8 per semester credit hour is required from all students. This fee is used to help cover the costs of acquisitions for the Wildenthal Library.

Medical Service Fee
A mandatory Medical Service Fee of $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 2013 - SPRING 2014

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 2013-2014 academic year and the 2014 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 2013 and Spring 2014 Semester</th>
<th>Texas Resident</th>
<th>Non-Resident</th>
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<td>21</td>
<td>4,548.00</td>
<td>11,919.00</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 2013-2014 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 $401 per semester credit hour. See Residence Status in this catalog.

Designated Tuition
A mandatory Designated Tuition Fee of $116 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).

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

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 $58 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 $8 per semester credit hour is required from all students. This fee is used to help cover the costs of acquisitions for the Wildenthal Library.

Medical Service Fee
A mandatory Medical Service Fee of $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 2012 through Summer 2014
Biology Lab Fee .............................................................. 8.00
Chemistry Lab Fee ............................................................ 8.00
Distance Learning per SCH .............................................. 48.00
  (Includes waiver of certain fees)
Education (Student Teaching/Internship Fee) ...................... 125.00-150.00
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
Housing Application Fee ................................................... 50.00

Permission must be obtained from the instructor of the course to be audited and from the Center for Enrollment Services prior to paying this fee. 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 which time the service is rendered or contracted.):

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

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

THESIS BINDING FEE (Additional copies at student's discretion) 100.00

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) ................................................ 125.00

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

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

REFUNDS

Refund of Fees. Any student who has paid the registration fees and officially withdraws by submitting a withdrawal 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.

**STUDENT LIFE PROGRAMS AND SERVICES**

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

**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
3. To design programs and services that complement classroom activities.
4. To assist students toward realization of their personal, academic, and career goals.
5. To help students achieve their potential as human beings and become self-directed individuals.
6. To provide a safe and healthy environment, in and out of the classroom, in which students can grow and learn.

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

**DINING ON CAMPUS**

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

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

**COUNSELING AND ACCESSIBILITY SERVICES**

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

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

**Counseling**

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

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

The services provided include but are not limited to the following:
*Brief, short-term individual and group counseling to address such issues as:
  Adjusting to college
  Homesickness
  Anxiety and Stress
  Test anxiety
  Depression
  Suicidal thoughts and feelings
  Relationship issues
  Substance and alcohol abuse
  Self esteem
  Eating disorders
  Personal Growth and Development
  Other related issues

*Workshops, presentations, and screenings promoting mental health.
*A comprehensive referral network to off-campus providers.
*Crisis intervention.

Services may be obtained by calling 432-837-8203 or coming by Ferguson Hall Rm. 112, Monday-Friday 8:00am-5:00pm.

ACCESSIBILITY SERVICES

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

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

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

CAMPUS ACTIVITIES OFFICE

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

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

CAMPUS ORGANIZATIONS

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

STUDENT GOVERNMENT ASSOCIATION

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

RECREATIONAL PROGRAMS

The Recreational Sports Program at Sul Ross State University is housed at the Graves-Pierce Recreational Complex. As part of recreational programs, we offer a comprehensive Intramural Program. Intramural activities are both team and individual oriented which include offerings such as flag football, volleyball, basketball, indoor soccer, water polo, softball, kickball, 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 backcountry 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 within a 100 mile radius with their parent(s), legal guardian, or grandparents; (2) are married; (3) are a single parent with children living with them; (4) are veterans and have spent at least twelve months on active duty; or (5) are 21 years of age or older by the first class day of the fall semester. Permission to live outside a residence hall must be
obtained from the Director of Residential Living prior to the start of class in any semester or summer term for which the exemption is sought. Proper documentation must be presented. The University reserves the right to terminate any permission to live off campus. Failure to comply with housing requirements may result in disciplinary action which may include forfeiture of deposits and/or the cancellation of registration for the student.

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

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

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 $50 non-refundable application fee. A $200 housing deposit is due before the first day of occupancy. Suite mate requests are granted when space is available and when both applications indicate the same preference. Theme community requests are assigned by order of preference as space permits. All students who apply for accommodations in the residence halls and are accepted sign an agreement for the full academic year (August-May).

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

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 by $50 non-refundable application fee. A $200 housing deposit is due before the first day of occupancy. A spouse or children (full custody of children) must be living with the student in order to obtain family housing and only immediate /dependent members of the same family may reside in a unit. The official (not common law) marriage certificate must be presented. Rent continues during the entire time of occupancy. The student renting the unit must be enrolled full time each term. Students who apply for a family housing apartment are placed on a first come first served waiting list based on the date the application fee is received by Residential Living.
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. We don’t have themed housing anymore until we implement it.

**REFUND OF ROOM AND BOARD FEES**

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

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

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

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

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

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. A background check is required for eligibility for apartments and family housing.

**STUDENT HEALTH SERVICE**

Student Health Service is located in the University Center, Suite 211. 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](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](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 SERVICES AND TESTING CENTER

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

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

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

TESTING SERVICES

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

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

- ACT (American College Test)
- GRE (Graduate Record Examination), General paper based and subject tests
- LSAT (Law School Admission Test)
- SAT (Scholastic Assessment Test)
- TExES (Texas Examinations of Educator Standards)

Other tests administered by arrangement/appointment include:

- ACT-Residual (scores reported only to SRSU admissions and used for consideration for admission to SRSU only. Test is offered prior to summer
registrations only)

• TSIA
• CLEP (College Level Examination Program)
• COMPASS AND Accuplacer
• DANTES (Defense Activity for Nontraditional Education Support)
• GED (General Educational Development); high school equivalency.
• TEAS (Test of Essential Academic Skills)
• TCLEOSE Peace Officer and Jailer Exams
• Online and Correspondence course exams proctoring services
• Aptitude/Interest assessments

Students are encouraged to register for testing by calling the Career Services Center. Upon arrangement, the Career Services Center will administer exams to groups and classes.

**VEHICLE REGISTRATION**

All faculty, staff, and students, full or part-time, and visitors, who operate a vehicle on university property, regularly or occasionally, are required to register the vehicle with the University Department of Public Safety and obtain a parking permit. Parking and Traffic Regulations governing the operation of motor vehicles on university property are published in the Student Handbook and on the UDPS website (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, 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. (Opened 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-Friday 8:00 a.m. to 5:00 p.m. Students must provide their own telephone sets. A single line telephone is the best type of telephone to use with our Northern Telecom Meridian 1 telephone system.

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

FINANCIAL 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. Financial Assistance Specialists also serve as liaisons between parents and other University offices. The Center staff coordinates all scholarships offered at Sul Ross State University.

It is the philosophy of the administration at Sul Ross State University that any deserving and capable student who wishes to attend the University should not be deprived of that opportunity due to financial need. Underlying this philosophy is the belief that the primary responsibility of financing a student's education rests with the student. However, because of the variety of financial backgrounds from which students come, it is sometimes necessary to seek outside help to cover normal education costs which cannot be met by the family. It is the purpose of the Center for Enrollment Services at Sul Ross State University to assist students in obtaining financial 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 contact the Center for Enrollment Services at (432) 837-8055 or by mail at Box C-2, Alpine, Texas 79832 or visit Lawrence Hall Room 100 on the SRSU campus.
ORIENTATION PROGRAMS

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

Lobo Days Registration Days
In the summer, one day registration days are offered to all new incoming students. Students are able to come to campus for one day and meet with their academic advisors, get advised and registered in classes as well as take care of any university business such as residential living, cashiers, and financial aid. There is no fee for registration days.

Lobo Days Orientation
All new students are required to attend Lobo Days Orientation which takes place the 4 days before school starts in August.

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

Parent sessions will be provided for parents regarding services and student life.

For additional information about Orientation, contact the Lobo Den First Year Experience Center at (432) 837-8982 or Box C-61, Alpine, Texas 79832.

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 Center for Enrollment Services at (432) 837-8055, by mail at Box C-2, Alpine, Texas 79832, or visit Lawrence Hall Room 100 on the SRSU Campus.
GENERAL ACADEMIC REGULATIONS
GENERAL INFORMATION AND STUDENT RESPONSIBILITY

All students are responsible for 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 Services. Students are responsible for any communications from any university official sent to them at the address last given to the Center for Enrollment Services.

All students are required to maintain an ©sulross.edu computer account. This account provides both an online identification key and a University Official E-mail Address. The University sends much of its correspondence solely through e-mail. 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 E-mail 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

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

In addition, proper advisement can be of benefit to the University by providing better communication between faculty and students and providing an avenue for student input relative to academic programming and University life in general. Also, proper advisement can be of substantial aid in retaining students who are thinking about dropping out of school or transferring elsewhere and who are eligible to remain in school. A higher retention percentage is a University goal that can be achieved, in part, by more careful attention to student needs and a willingness to listen to their problems and to help find solutions.

Undergraduate Advising

A. Lobo Den—Entering Students

The Lobo Den at Sul Ross State University is located on the first floor of Lawrence Hall. This freshman center has been established
to help meet the needs of first- and second-year students at the University. The Lobo Den works closely with faculty from across campus to facilitate initial, first-year advising.

The Lobo Den houses advising for all new students. In initial Lobo Den advising, a student's advising status will be determined as incoming freshman, TSI compliant or non-compliant, on probation or fully admitted, and/or declared or un-declared major. New students can have secondary, academic advisors once they have declared a major, but the Lobo Den will have primary authority for advising until these new students change their status from freshman to sophomore and from TSI/Developmental Education non-compliant to TSI/Developmental Education compliant or from probation to off-probation.

Lobo Den advisors will act on behalf of students as the primary advisors, but a student may seek advice from a secondary advisor in his or her major field for courses that pertain directly to the major. However, secondary advisors in a major field cannot supplant courses recommended by primary advisors, override them, or reduce in number the courses that the primary advisor has determined to be optimal for student progress within a given semester.

B. Students non-compliant with minimum TSI requirements

At the time of a student's initial enrollment his or her Lobo Den advisor will use the student's Texas Success Initiative (TSI) scores (explained in Section B, below) to determine whether or not the student meets the minimum TSI requirements. Students with developmental-course needs will be identified according to the criteria established by the Texas Success Initiative (TSI) (Section B, below).

A student who does not meet TSI minimum standards (Section B) will continue to be advised by a Lobo Den advisor until the student is TSI clear and he or she moves from freshman status to sophomore status.

Students who are non-TSI compliant will have Lobo Den advisors as their primary source of advising, but they can also elect to have secondary advisors in academic units to help determine which courses they should take in the major that they have declared. Primary advisors will have greater authority to determine a student's class schedule, especially regarding courses not in a student's chosen major.

Students admitted on probation

A student who is admitted on probation will be assigned a Lobo Den advisor and will continue to be advised by the Lobo Den advisor until that student has completed Core Curriculum requirements and has moved from freshman status to sophomore status. If the entering student is also non-TSI compliant, the TSI requirements must also be met.

Until a student admitted on probation has moved to off-probation status, his or her Lobo Den advisor will remain the primary advisor, although a student on probation who has declared a major may also have a secondary advisor in his or her major field who will
advise the student about courses in the major. In such a case, the primary advisor will have greater authority to determine the student's class schedule, especially regarding courses not in a student's chosen major.

Once the core curriculum has been completed and the student has moved from freshman to sophomore status, the student will be assigned to a faculty advisor in his or her major department.

**Students without declared majors**
Students who are TSI-compliant and not on probation but who have not decided on a major are advised in the Lobo Den until such time as a major is declared and Core Curriculum requirements are met; at that time an advisor will be assigned from the major department. The Lobo Den advisor will remain the primary advisor until the student moves from freshman status to sophomore status.

**Entering freshmen with declared majors**
An entering student who meets TSI minimum standards, is not on probation, and has a declared major will be assigned an advisor in his or her major field, but that student's primary advisor will remain the Lobo Den advisor until he or she changes status from freshman to sophomore. An entering student who has declared a major may receive advice concerning courses in the major field from the advisor from the academic department, but that major-field advisor will be the secondary advisor until the student becomes a sophomore.

**All students**
In all cases, once a student is assigned a major advisor, that major advisor will remain the student's official academic advisor for the duration of his or her undergraduate work unless the student changes majors or requests a different advisor.

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**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, Chiropractic, Medical Technology, Optometry ............................ Dr. Chris Ritzi  
Associate Professor of Biology

Engineering ................................................................. Dr. David Martin  
Assistant Professor of Mathematics

Law ................................................................. 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. Byron Housewright  
Assistant Professor of Animal Science
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.

Vocational Nursing.......................... Ms. Donna Kuenstler
                                        Director of Vocational Nursing

TEXAS SUCCESS INITIATIVE

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

Sul Ross State University utilizes 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), the Texas Assessment of Knowledge and Skills (TAKS), or the STARR end-of-course exams may be exempt from these requirements.

The Texas Success Initiative does not apply to:

A. a student who has graduated with an associate or baccalaureate degree from an institution of higher education;

B. a student who transfers to an institution of higher education from a private or independent institution of higher education or an accredited out-of-state institution of higher education and who has satisfactorily completed college-level coursework;

C. a student who is enrolled in a certificate program of one year or less (Level-One certificates, 42 or fewer semester credit hours or the equivalent) at a public junior college, a public technical institute, or a public state college;

D. a student who is serving on active duty as a member of:
1. the armed forces of the United States; or
2. the Texas National Guard

E. a student who is currently serving as and, for at least the three-year period preceding enrollment, has served as a member of a reserve component of the armed forces of the United States; or
1. a student who on or after August 1, 1990, was honorably discharged, retired, or released from:
   a. active duty as a member of the armed forces of the United States or the Texas National Guard; or
   b. service as a member of a reserve component of the armed forces of the United States

F. a non-degree-seeking or non-certificate-seeking student.

For additional information on who must participate in the Texas Success Initiative, prospective students should contact The Lobo Den, the Academic Center for Excellence, or the Career Services and Testing Office at Sul Ross State University.

**CLASS ATTENDANCE**

Regular class attendance is important to the attainment of the educational objectives of the University. 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 Director of Records and Registration 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 e-mail, 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 Services.

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

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

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

c) the death of a person who is considered to be a member of the student's family who is otherwise considered to have a sufficiently close relationship to the student that the person's death is considered to be a showing of good cause;

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

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

f) the loss of transportation causing the student a hardship with the commute to the campus;

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

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

If an appeal for unusual circumstance is approved, the student will receive a grade of \( W \) for the course. The decision of the Director of Records and Registration 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 on 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:

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

RELIGIOUS HOLY DAYS ABSENCES

(HB 256 78th LEGISLATURE)

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

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

Course 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 Director of Records and Registration. 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 Services

<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>I</td>
<td>Incomplete</td>
<td>Not Computed</td>
</tr>
<tr>
<td>CR</td>
<td>Credit</td>
<td>Not Computed</td>
</tr>
<tr>
<td>NC</td>
<td>No Credit</td>
<td>Not Computed</td>
</tr>
<tr>
<td>NG</td>
<td>No Grade</td>
<td>Not Computed</td>
</tr>
<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 Director of Records and Registration. 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 Director of Records and Registration 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 Probation less than</th>
<th>Cumulative GPA for Scholastic Dismissal (Applied only to those on Scholastic Probation) less than</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freshman</td>
<td>2.0</td>
<td>1.25</td>
</tr>
<tr>
<td>(0-29 earned hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sophomore</td>
<td>2.0</td>
<td>1.50</td>
</tr>
<tr>
<td>(30-59 earned hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Junior</td>
<td>2.0</td>
<td>1.75</td>
</tr>
<tr>
<td>(60-89 earned hrs)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Senior</td>
<td>2.0</td>
<td>2.00</td>
</tr>
<tr>
<td>(90 or more earned hrs)</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.
NATIONAL HONOR SOCIETIES

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

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

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

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

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

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

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

**KAPPA DELTA PI** - An international honor society in education. Dedicated to promoting excellence in 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 courses in which he/she has not earned academic credit accepted by Sul Ross State University. Students may not attempt credit by examination for a course in which they have received failing grades or for a basic course in those areas in which they have acceptable college credit for more advanced courses.

Students who desire to earn credits by examination should confer with their major advisors or high School counselors if they have not entered college, for permission before applying to take an examination for credit and paying the required fees.
Students must make arrangements in contact Career Services and Testing at 432-837-8178 or 432-837-8357.

**COLLEGE LEVEL EXAMINATION PROGRAM (CLEP)**
Credit is awarded for the examinations listed below:

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

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

Credit is awarded for the examinations listed below:

<table>
<thead>
<tr>
<th>DANTES Examination</th>
<th>Sul Ross State University</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</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>Biology</td>
<td>BIOL 1401</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
<td>CHEM 1401</td>
<td>4</td>
<td>3</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 -</td>
<td>ECO 2300</td>
<td>3</td>
<td>3</td>
</tr>
</tbody>
</table>
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>
</tbody>
</table>
### Grades accepted: 7 or 6 = A, 5 = B for the following:

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>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>3</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 Exam</th>
<th>Credit Hours</th>
<th>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>CS 1301</td>
<td>COSC 1301</td>
</tr>
<tr>
<td>Mathematical Studies</td>
<td>6</td>
<td>MATH 1315, 1316</td>
<td>MATH 1314, 1316</td>
</tr>
<tr>
<td>Musical Studies</td>
<td>7</td>
<td>MATH 1316, 2413</td>
<td>MATH 1316, 2413</td>
</tr>
<tr>
<td>Physics</td>
<td>8</td>
<td>PHYS 1401, 1402</td>
<td>PHYS 1401, 1402</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philosophy</td>
<td>3</td>
<td>PHIL 1301</td>
<td>PHIL 1301</td>
</tr>
<tr>
<td>Psychology</td>
<td>3</td>
<td>PSY 1302</td>
<td>PSYC 2301</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<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>Spanish</td>
<td>8</td>
<td>SPAN 1401, 1402</td>
<td>SPAN 1411, 1412</td>
</tr>
</tbody>
</table>

### Grades accepted: 7 or 6 = credit for the following:

<table>
<thead>
<tr>
<th>Standard Exam</th>
<th>Credit Hours</th>
<th>SRSU Course</th>
<th>Texas Common Course Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>French</td>
<td>14</td>
<td>FREN 1401, 1402, 2301, 2302</td>
<td>FREN 1411, 1412, 2311, 2312</td>
</tr>
<tr>
<td>German</td>
<td>14</td>
<td>Language Requirement</td>
<td>GERM 1411, 1412, 2311, 2312</td>
</tr>
<tr>
<td>Spanish</td>
<td>14</td>
<td>SPAN 1401, 1402, 2301, 2302</td>
<td>SPAN 1411, 1412, 2311, 2312</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

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

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

1. **English**
   - Enhanced ACT English Score       SAT Verbal Score       Credit
     - 30                               588                  English 1301

2. **Mathematics**
   - Enhanced ACT Mathematics Score   SAT Mathematics Score  Credit
     - 30                               603                  Math 1315

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 (USAFL), The College Level Examination Program (CLEP), and Defense Activity for Traditional Educational Support (DANTES), which are equivalent to CLEP credit awarded. SOC has been developed jointly by educational representatives of each of the Armed Services, the Office of the Secretary of Defense, and a
consortium of thirteen leading national higher education associations. It is sponsored by the American Association of State Colleges and Universities (AASCU) and the American Association of Community and Junior Colleges (AACJC).

CREDIT FOR MILITARY SERVICE AND SERVICE SCHOOL COURSES

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

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

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

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

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

CREDIT FOR NONCOLLEGIATE ORGANIZATION COURSES

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

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

2. The student must enroll in Sul Ross State University and successfully complete one long semester or one summer session of at least twelve semester hours work before credit for the non-collegiate organization's courses will be awarded.
3. Where possible, credit will be given for Sul Ross State University courses which are equivalent to those completed. The Center for Enrollment Services will determine the equivalencies. In all cases, credit will be awarded on the basis of one semester hour for each fifteen hours of classroom lecture contact, or one semester hour for each thirty hours of laboratory work, or one semester hour for not less than forty-five hours of vocational shop instruction.

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

**VETERAN EDUCATION BENEFITS RECIPIENTS**

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

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

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

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

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

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

**GRADUATION UNDER A PARTICULAR CATALOG**

To receive a degree from Sul Ross State University, a student must complete all requirements for the degree as stated in a particular University catalog. The student has the choice of (1) graduating under the current catalog, (2) graduating under the catalog in force at the time of first registering at Sul Ross State University, (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.
3. 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 and at the end of the fall semester on the dates listed in the University Calendar. Students graduating in August may participate in either of the commencement exercises.

Graduates are expected to participate in commencement. Information and instructions concerning commencement will be e-mailed to each candidate for a degree.

**GRADUATION WITH HONORS**

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

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.
Requests for transcripts may be made online, in person, or by submitting an official request form to the Center for Enrollment Services at Lawrence Hall. Instructions and forms may be found online at http://www.sulross.edu/page/999/transcript-requests.

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 by anyone other than the student unless that person has written authorization from the student. We will verify the signature against signatures in the student's records.

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

Helpful Hints

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

2. 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 Services mails all transcripts to the Office of Admissions at other 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.
ACADEMIC ORGANIZATION
AND DEGREE PROGRAMS

COLLEGE OF AGRICULTURAL AND NATURAL
RESOURCE SCIENCES

Department of Animal Science
Animal Science
Concentrations in Animal Health
Management, Ag Education,
Equine, Meat Science,
Production, Reproductive
Physiology, Pre-Veterinary
Advising

B.S., M.Ag., M.S.

Department of Natural Resource Management
Natural Resource Management
Concentrations in Ag Business, Conservation Biology,
Range Management, Wildlife Management,
Range and Wildlife Management

B.S., M.Ag., M.S.

COLLEGE OF ARTS AND SCIENCES

Academic Center for Excellence

Department of Behavioral and Social Sciences
History
Public Administration
Psychology
Social Science

B.A., M.A.

Department of Biology and Earth Physical Sciences
Biology
Chemistry
Geology

B.S., M.S.

Department of Computer Science and Mathematics
Mathematics
Computer Science

B.S.

Department of Fine Arts and Communication
Art
Communication
Theatre

B.F.A.

Interdisciplinary Programs
Environmental Studies
General Studies
Liberal Arts

B.S., M.A.

Department of Languages and Literature
English
Spanish

B.A., M.A.

B.A.
COLLEGE OF PROFESSIONAL STUDIES

Department of Business Administration
Administrative Systems and Business Technology B.A.
Business Administration B.B.A., M.B.A.

Department of Criminal Justice
Criminal Justice B.S., M.S.

Department of Education
Education, General M.Ed.
Educational Diagnostician M.Ed.
Counselor Education M.Ed.
Educational Leadership M.Ed.
Reading Specialist M.Ed.
Interdisciplinary Studies B.A., B.S.
Kinesiology and Sports Science B.S
Physical Education M.Ed.

Department of Industrial Technology
Industrial Technology B.S.

Vocational Nursing Certificate

RIO GRANDE COLLEGE

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

Department of Education
Elementary Education M.Ed.
Secondary Education M.Ed.
Counseling M.Ed.
School Administration M.Ed.
Reading Specialist M.Ed.
Interdisciplinary Studies B.A., B.S.

Department of Humanities
Child Development B.A.S.
English B.A., M.A.
History B.A., M.A.
Organizational Leadership B.A.S.
Social Science B.A.
Spanish B.A.

Department of Natural and Behavioral Sciences
Biology B.S.
Criminal Justice B.S.
Mathematics B.S.
Psychology B.A.
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
- Physical Education 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
CATALOG

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 sch. 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 Criminal Justice 3311, Women and crime, Criminal Justice 4301, Multicultural Studies in CJ, 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:

   - Administrative Systems & Business Technology
   - Communication
   - English
   - General Studies
   - History
   - Interdisciplinary Studies
   - Mexican American Studies
   - Music
   - Political Science
   - Psychology
   - Social Science
   - Spanish
   - Theatre
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- Industrial Technology
   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: Three semester hours; 1315
3. COMMUNICATION: Communication 1303 or Theatre 2304

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: 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: Three semester hours: 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. MATHEMATICS: Six semester hours, MATH 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.** Students must complete at least thirty-nine semester hours of core courses in Business Administration and at least fifteen (15) semester hours advanced business electives.
2. Students must complete 14 semester hours of free elective courses.

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

**Additional Requirements**

1. In addition to the General Educational and Major requirements, students must complete at least 14 hours of electives to present a minimum total of 120 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-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. 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 at least two of the following: astronomy, biology, chemistry, geology, and physics.

3. **MATHEMATICS:** Three semester hours of Mathematics 1310 or higher.

**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 sch. 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:

   - Animal Science
   - Biology
   - Computer Science
   - Science Criminal Justice
   - Geology
   - Interdisciplinary Studies
   - Kinesiology and Sports
   - 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 & History
   - Business Technology Mexican American Studies
   - Anthropology Music
   - Art Political Science
   - Business Administration- Psychology
   - Computer Information Systems Photography
   - Communication Sociology
   - Economics Spanish
   - English Theatre
   - Environmental Studies Women’s Studies
   - Geography
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 Services, Box C-2, Sul Ross State University, Alpine, Texas 79832. If a student's performance on the examinations is unsatisfactory, the advisor may require remedial or leveling work, the advanced test of the Graduate Record Examinations in the major field, a comprehensive written examination, or such other steps as the advisor recommends. The advisor's recommendations are subject to approval by the Dean of the 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 Services, Box C-2, Sul Ross State University, Alpine, Texas 79832. Each applicant will be notified in writing of acceptance or rejection for admission. Students may seek admission to Graduate Studies by applying for admission to a master's degree program or by applying for admission as a non-degree student.

I. ADMISSION TO THE MASTER'S DEGREE PROGRAM

A student seeking admission for the purpose of pursuing a master's degree must hold a baccalaureate degree from an institution approved by a nationally recognized accrediting agency. Official transcripts reflecting all college work attempted and degree(s) conferred should be on file in the Center for Enrollment Services at least ten days prior to initial registration as a graduate student. Also, the student must demonstrate by prior academic records or scores on the verbal, 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 Services at the time of initial registration. If required, the test must be taken prior to the end of the second long semester (fall or spring) after initial enrollment and arrangements made for the scores to be sent to the Center for Enrollment Services. Otherwise, the student may be denied further registration in the graduate program. Information concerning registration and testing dates for the GRE and GMAT may be obtained from the Coordinator of Career Services and Testing, Sul Ross State University, Alpine, Texas 79832.

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

A. FULL ADMISSION

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

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

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

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

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

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

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

IV. TRANSFER STUDENTS

THERE IS NO AUTOMATIC TRANSFER FROM OTHER INSTITUTIONS OF CREDITS APPLICABLE TO A GRADUATE DEGREE. A request for transfer of hours must be made to the major advisor 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 Services
3. The time limit of six years must not have expired at the projected time of graduation,
4. The total number of hours taken at Sul Ross State University and any other institution may not exceed 15 semester credit hours in any one semester in the long term or six semester credit hours in either summer term, and
5. No more than twelve semester credit hours in any combination of transfer work, undergraduate courses taken for graduate
credit, and graduate-level independent study courses may be credited toward the master's degree.

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.
4. The maximum number of graduate semester hours that an undergraduate may accrue is twelve.

**MAXIMUM COURSE LOAD**

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

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

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

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

**UNDERGRADUATE COURSES FOR GRADUATE CREDIT**

Certain upper-level undergraduate courses which are taught by members of the Graduate Faculty may be taken for graduate credit upon (a) consent of the instructor of the course and (b) approval of the graduate major advisor. 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.

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 College 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.

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

COMPREHENSIVE EXAMINATION

All candidates for the master's degree must pass a comprehensive examination, either oral or written or both as 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 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 College of Agricultural and Natural Resource Sciences is located in the Everett E. Turner Range Animal Science Center, on East Highway 90, approximately one mile east of the main campus. We serve students interested in pursuing careers associated with the production, processing and distribution of food and fiber (animal science), the management of natural resources (range, wildlife, and conservation biology), the sound application of agricultural business practices, and agricultural education. Our faculty stresses a hands-on teaching approach, with emphasis given to building a solid background in the fundamental principles of your area of study. We pride ourselves in offering excellent facilities and learning opportunities in a student-oriented, learning-centered environment. You can earn Bachelor of Science, Master of Agriculture, and Master of Science degrees in two departments:

**Animal Science and Natural Resource Management**

**Degree Programs in Agricultural and Natural Resource Sciences:**

Bachelor of Science with majors in **Animal Science** (with concentrations in Agricultural Education, Animal Health Management, Animal Production, Equine Science, Meat Science, Pre-Veterinary Medicine, and Reproductive Physiology), and **Natural Resource Management** (with concentrations in Agricultural Business, 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**.

**The Borderlands Research Institute for Natural Resource Management**

The Borderlands Research Institute For Natural Resource Management (BRI) was formed in 2007 and serves as a “sister institution” to the Department of Natural Resource Management within the College of Agricultural and Natural Resource Sciences. Its mission 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, the institute plans and conducts research investigations on various aspects of our natural world. It
provides science-based management alternatives to land owners and managers to enhance their ability to serve as land stewards. The BRI provides research and outreach to area produces and interested parties, and while fulfilling that capacity, it significantly enhances the teaching and learning opportunities afforded by the school.

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
(Including Agricultural Education, Animal Health Management, Animal Production, Equine Science, Meat Science, Reproductive Physiology, and Pre-Veterinary Medicine)

Department of Animal Science
College 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 A. Will, Ph.D.
Professor: Scott A. Ericsson, Ph.D.
Assistant Professors: Christopher M. Estepp, Ph.D. and Byron C. Housewright, Ph.D.

Program Description
The Department of Animal Science offers Bachelor of Science, Master of Agriculture (non-thesis), Master of Science (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. Master of Science (thesis) students will specialize in one of the following concentrations: Agricultural Education, Animal Production, Equine Science, Meat Science, Nutrition, 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, and swine. The 14,700-acre university ranch is also available for animal science classes and research. A variety of student clubs and activities are available for you to participate in, and include Collegiate FFA (livestock showing and judging), Delta Tau Alpha (agricultural honorary society), Rodeo Club, Ranch Horse Team, 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 College of Agricultural and Natural Resource Sciences. Scholarships include San Antonio Livestock Exposition, Houston Livestock Show and Rodeo, and many others. Scholarships vary from $100-$2,500 per academic year.

BACHELOR OF SCIENCE
(Animal Science-120-127 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.

**General Education** .................................................................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 Activity Course .................................2
- Laboratory Science, Chem 1401, Biol 1401, 1402, NRM 3405........16
- Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1302 or 2302, Phil 1301, Psy 1302, or Soc 2303 or 3301.....3

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

- American History, select 1301 and 1302 ...............................6
- Federal Government, PS 2305..............................................3
- State Government, PS 2306..................................................3

**Major** ...........................................................................66-67

- Animal Science 1101, 1401, 3201, 3304, 3310 or 4311, 4317........16
- Select 8-9 from ANSC 3302, 3303, 3305, 3309, 3310,3313, 3402, 3406, 3411, 4300 ,4307, 4310 or 4311.........................8-9
- Natural Resource Sciences 2301, 3305....................................6
- Industrial Technology, select 1306, 2305, 2307, 2309...............12

**Education** ........................................................................24

- **Block I** 3302, 4314 **Block II** 3301, 3303 **Block III** 3300, 4312, 4605

**Total 126-127**

**Animal Health Management Concentration** – is 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.

**General Education** .................................................................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 Activity Course ..................................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 or 3301 .......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 or 3301 .................................3

Major ..................................................................................55
Animal Science, 1101, 1401, 3308, 3313, 3317, 3406
4304, 4305, 4306 and 4317 ..................................................31
Natural Resource Management, select from 1402, 2301,
2302, or 3405 .........................................................................3-4

Concentration
Animal Science, select from 3301, 3306, 3307, 3311, 3405,
3412 ....................................................................................21

Electives ..................................................................................6

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.

General Education .................................................................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 Activity Course .................................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 or 3301 ...........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 .................................................................55
Animal Science, 1101, 1401, 3308, 3313, 3317, 3406
4304, 4305, and 4306, 4317 ..................................................31
Natural Resource Sciences, select from 1402, 2301, 2302,
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.

General Education ................................................................. 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 Activity Course .............................. 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 or 3301..................... 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 ................................................................. 56-57

- Animal Science, 1101, 1401, 3308, 3315, 3317, 3406,
  4304, 4305, 4306 and 4317 ....................................... 30
- Natural Resource Sciences, select from 1402, 2301, 2302,
  or 3405........................................................................ 3-4

Concentration
- Animal Science, 2303, 2308, 3305, 3313
  3316, 3401 and 4307.................................................. 21

Electives ................................................................. 6

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.

General Education ................................................................. 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 Activity Course ..........................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 or 3301 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 or 3301 3

Major ............................................................................55

- Animal Science, 1101, 1401, 3308, 3315, 3317, 3406, 4304, 4305, 4306, and 4317 30
- Natural Resource Sciences, select from 1402, 2301, 2302, or 3405 3-4

Concentration

- Animal Science, 2305, 3302, 3402, 3407, 3411, 4300, 4302 ........21

Electives ..............................................................................6

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.

General Education ..............................................................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 Activity Course ..........................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 or 3301 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 or 3301 ........3

Major ............................................................................55
Animal Science, 1101, 1401, 3308, 3315, 3317, 3406, 4304, 4305, 4306 and 4317 .............................................. 30
Natural Resource Sciences, select from 1402, 2301, 2302, or 3405 ................................................................. 3-4

Concentration
Animal Science, 3302, 3309, 3402, 4307, 4311, 4314 and 4315 ................................................................. 21

Electives ......................................................................................... 6

**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 General Requirement ....................................................... 4
Math General 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 General Requirement .................................................... 3
Science General Requirement ....................................................... 8
Social Science General Requirement (includes 3 hrs Multicultural) 3

**Total 28**

**Junior Year** ................................................................................ Hours
Animal Science core 3317, 3308, 4306, and 6 hrs from concentration 16
Communication General Requirement ........................................ 3
Electives ......................................................................................... 4
Political Science General Requirement ...................................... 6
Science General Requirement ....................................................... 4

**Total 33**

**Senior Year** ................................................................................ Hours
Animal Science 4304, 4305, and 10 additional hrs from concentration 16
Electives ......................................................................................... 8
Physical Education General Requirement ................................. 2
Social Science General Requirement (includes 3 hrs Multicultural) 3

**Total 29**

**Grand Total 120**
PRE-VETERINARY MEDICINE

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.

1304 Pharmacology (3-0). A study of pharmaceuticals and biologicals and their application to the field of veterinary medicine. Classification of drug types, safety and ethics involved in common dispensing. Proper preparations of solutions will be stressed. Offered spring. 1303 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)

2303 Horsemanship I (1-4). Students will learn the inherited behaviors, learned behaviors and psychological aspects of behavior modifications used in training horses. Emphasis will be placed on equine handling, grooming, basic training techniques, riding equipment, and safety. Students will learn how to perform basic ground work and basic riding maneuvers on an assigned School or personal project horse. Fall odd years.

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.
2308 *Horsemanship II* (1-4). Emphasis will be placed on application of actual training young horses and teaching advanced maneuvers to older horses. Students will learn how to utilize advanced training practices and applications to enhance the training and performance of horses.

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.

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.

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, 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.

3306 *Radiology (3-0)*. 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

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.

3311 *Clinical Assistance (3-0)* 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 inhalation anesthesia. Small animal kennel and cage management. Offered fall only.

3312 *Current Issues in Agriculture (3-0)*. This course is designed to educate students about major issues in agriculture, life sciences, and natural resource sciences and to expose students to a variety of methods used to effectively communicate, inform, and influence decisions about these issues.

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 *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.

3316 *Farrier Training (3-0)*. A course designed to introduce students to equine footcare including: contemporary and evolving technologies in shoe
and tool making.

3317 Livestock and Wildlife Nutrition (3-0). This course is designed to introduce students to the practical application of nutrition for the production of high-producing livestock and wildlife. The course will cover nutrition and digestive physiology, livestock feeds, management and feeding practices of domestic animals and wildlife. Students will be exposed to the effects of feeding and management of livestock has on livestock production systems, food safety and the environment.

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.

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.

3412 Laboratory Animal Management (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 they used of common knots, halters and other restraint items. Introduction into injection and inhalation anesthesia. Small animal kennel and case management. Offered fall.

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.
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.

4314 Andrology (3-0). Study of male reproductive biology, diseases of the male genital organs, and male infertility. Special emphasis is on endocrinology, spermatogenesis, semen analysis, fertilization, contraception, and cryopreservation.

4315 Endocrinology (3-0). A study of the Physiology and regulation of endocrine secretions. Course emphasizes neuroendocrine, reproductive, growth and metabolic aspects of endocrinology. Examples are selected from livestock and humans.

4316 Embryology (3-0). Study of the development of embryos from conception to birth in livestock species.

4317 Senior Capstone (3-0). The Senior Capstone is intended to demonstrate the student’s ability to think critically and to engage in a project of active learning within the student’s major field of studies. The experience will integrate acquired knowledge and skills in a senior project designed to produce upon its successful completion a sense of mastery and intellectual accomplishment that goes significantly beyond classroom learning.
GRADUATE PROGRAMS IN ANIMAL SCIENCE

The Department of Animal Science offers programs of study leading to the Master of Science (thesis), Master of Science (non-thesis) and Master of Agriculture (non-thesis) degrees, depending on an individual's educational objectives. Programs in Animal Science emphasize, through the mastery of advanced technology, methods of improving and/or better utilizing agricultural resources. The graduate program is designed to prepare students for advanced education (Ph.D.) and for careers in teaching, extension service, research, management, and other occupations requiring the higher-level capabilities of a resource manager/scientists. 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.

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

The Master of Science (non-thesis) 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 5318 Advanced Agricultural Genetics

Plus 12 additional semester hours of ANSC graduate work. These may include upper-level undergraduate courses in ANSC for graduate credit or graduate-level courses from other departments.

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

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

- ANSC 5320 Animal Industries
- ANSC 5321 Animal Science Business Planning
- ANSC 5322 Statistics for the Animal Sciences
- ANSC 5323 Animal Science Research Literature
- ANSC 5324 Animal Biochemistry
- ANSC 5325 Genetics of Domestic Animals
- ANSC 5326 Animal Reproduction
- ANSC 5327 Animal Nutrition
ANSC 5328 Domestic Meat Production
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 Livestock and Wildlife Nutrition (3-0). A study of nutritive requirements for all classes of livestock and/or wildlife and feed suitability for each type. Emphasis is on nutrient classes and their digestion and absorption as well as an overview of digestive anatomy and physiology.

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, 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. Prerequisite: ANSC 5312 or permission of instructor.

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

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.

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.

5320 Animal Industries (3-0). An in-depth study of business management practices conducted in the Animal Industry. This course will focus on specialized business aspects of business in the animal industry.

5321 Animal Science Business Planning (3-0). This course lays out the basic theory of microeconomics with numerous examples from the food and agricultural industries, while the coverage of macroeconomics emphasizes real world applications rather than pure theory.

5322 Statistics for the Animal Sciences (3-0). This course emphasizes statistical literacy, use of real data and technology, statistical conceptual understanding and active learning.

5323 Animal Science Research Literature (3-0). This course guides the student, step-by-step, from the selection of a problem, through the process of conducting authentic research, to the preparation of completed report, with practical suggestions based on a solid theoretical framework.

5324 Animal Anatomy Biochemistry and Physiology (3-0). Emphasizes animal anatomy, biochemical and biochemistry in the transformation of muscle to meat.

5325 Genetics of Domestic Animals (3-0). This course provides a student with solid grounding in core genetics and biotechnology concepts, as well as information on cutting-edge science and technology and their applications in real-world agriculture, medicine, and health care.

5326 Animal Reproduction (3-0). Study of the anatomical, cellular and
physiological mechanisms that control the endocrine and reproductive systems of domestic animals and wildlife.

5327 Animal Nutrition (3-0). A study of animal nutritive requirements for all classes of livestock; special emphasis on balanced rations from available feed stuffs.

5328 Domestic Meat Production (3-0). The course will investigate live animal, meat products, and formulation of recipes for processed meats and sausage products of domestic meat production.

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, Conservation Biology, Range Management and Wildlife Management)

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

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

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

The Department of Natural Resource Management educates 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."

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

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

The Borderlands Research Institute For Natural Resource Management
(BRI) was formed in 2007 and serves as a “sister institution” to the department. Its mission 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. We provide science-based management alternatives to land owners and managers to enhance their ability to serve as land stewards. The BRI is the “research and outreach arm” of the department, and while fulfilling that capacity, it significantly enhances the teaching and learning opportunities afforded by the department.

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 College of Agricultural and Natural Resource Sciences. Scholarships include San Antonio Livestock Exposition, Houston Livestock Show and Rodeo, and many others. Scholarships vary from $100-$2,500 per academic year.

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 electives to choose from. Some of the more popular electives for our students majoring in Natural Resource Management include Biology (wildlife biologist, range scientist), Chemistry (environmental consulting), Criminal Justice (game warden), and Business, Animal Science 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. The Agricultural Business concentration emphasizes the economic and managerial aspects of farms, ranches, and natural resources. A degree in Agricultural Business provides employment opportunities in farm and ranch management, banking, farm credit, sales and marketing, and many other areas.
Career Opportunities in Natural Resource Management

- Accounting and Financial Marketing
- Agricultural Credit Associations
- Agricultural Extension Service
- Agricultural Product Distribution and Sales
- Agricultural Stabilization and Conservation Service
- Banks
- Bureau of Land Management
- Conservation Organizations
- Consulting Firms
- Environmental Consulting Firms
- Insurance Companies
- National Park Service
- Natural Resource Conservation Service
- Personnel Management
- Production and Processing Management
- Ranches
- Ranches and Ranch Consulting
- State Parks & Wildlife Department
- Stock and Commodities Brokerage
- U. S. Fish and Wildlife Service
- U. S. Forest Service
- U.S. Department of Agriculture
- Wildlife Services

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, and the agribusiness applications of ranch management. Students may select a concentration in agricultural business, conservation biology, range management, or wildlife management, which allows you to meet professional requirements as a wildlife biologist, resource conservationist, or agribusiness professional. Students receive a broad education in agribusiness principles, natural resources, plant and animal ecology and management, and obtain specific expertise in their chosen concentration. 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.

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.

General Education .............................................................60
Basic Skills Component
   English, select 1301, 1302, 2304 and one additional soph or Adv lit. .................................................................12
### 2012–2014 CATALOG

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<th>Mathematics, select two from 1310, 1315, 1316, or 1342</th>
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#### Basic General Knowledge
- Fine Arts, select from any Fine Art, Art, or Music | 3
- Kinesiology, PE 1150 and PE 1153 | 2
- Laboratory Science, select from Astr 1401, 1402, Biol 1401, 1402 | 16
- Chem 1401, 1402, Geol 1401, 1402, 2404, Physics 1401, 1402, 2401, 2402 | 36
- 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 ................................................................. 54

- Animal Science, select 1401, 3317, 3302 or 3309 or 3402 | 10-11
- Natural Resource Sciences, select 1101, 2301 or 2302 or 2303, 3201, 3202, 3304, 3305, 3308, 4303 | 23

#### Concentration
- Agricultural Business, select 2302, 3310 or 3370, 4303, 4308 | 12
- ACC 2330, GBA 3351, MGT 4362 | 9

#### Electives ............................................................................ 6

**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.

#### General Education ................................................................. 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 ................................................................. 54

- Animal Science 3317 or 4305, or Biol 3306 | 3
- Natural Resource Sciences, select 1101, 2301, 2302, 2303, 3201, 3202, 3304, 3305, 3308, 4303, 4304, 4305 | 32
Concentration
Select NRM 4301, 4302, 4309.................................................9
Select 10 sch from (* are preferred for concentration): NRM 3301,
3302, 3303*, 4306, 4307, 4308, 4314, 4409*, 4410*........................10
Electives ..............................................................................6
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.

General Education................................................................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 23063Multicultural, select from CJ
3311 or 4301, Hist 2301 or 2302, MAS 2301, PS 2307 or WS 23013
Major .................................................................................54
Animal Science, 3317 or 4305, or Biol 3306 .........................3
Natural Resource Management, select 1101, 2301, 2302, 2303,
3201, 3202, 3304, 3305, 3308, 4303, 4304, 4305 ....................32
Concentration
Range Management, select 3301, 4307, 4314 .........................9
Select 10 sch from (* are preferred for concentration): NRM 3302*,
3303*, 4301, 4302, 4306, 4308*, 4309, 4409, 4410 ..................10
Electives ..............................................................................6
Additional courses needed for Rangeland Specialist
Biol 2408, 3405, 3602
Total 120

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.

General Education .................................................................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
Basic General Knowledge

Communication, select from Comm 1303 or Thea 2304 ..................3

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 .............................................................................54

Animal Science, 3317 or 4305, or Biol 3306 ..........................3

Natural Resource Management, select 1101, 2301, 2302, 2303, 3201, 3202, 3304, 3305, 3308, 4303, 4304, 4305 ..................32

Concentration

Wildlife Management, select 4307, 4308, 4309 ..................9

Select 10 sch from (* are preferred for concentration): NRM 3301, 3302, 3303, 4301, 4302*, 4306, 4314, 4409*, 4410* ............10

Electives .......................................................................6

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

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.

Freshman Year

Hours

Natural Resource Management 1101, 2301, 2302 ..........................7

English 1301, 1302 ..........................................................6

History 1301 ..................................................................3

Science Core Requirement .............................................8

Math Core Requirement ................................................6

Total 30

Sophomore Year

Hours

Natural Resource Management 2404, 3304 ............................7

English 2304 and Core Requirement ..................................6

Science Core Requirement .............................................8

Social Science Core Requirement (including 3 hrs Multicultural) ..6

Animal Science 1402, .....................................................4

Total 31

Junior Year

Hours

Natural Resource Management 3308, 3401, 4406 and 3 additional hrs ....14

History 1302 ..................................................................3

Communication Core Requirement ..................................3
Political Science Core Requirement .................................................................6
Animal Science 4305, ..................................................................................3
Total 29

Senior Year

<table>
<thead>
<tr>
<th>Courses</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>
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<tr>
<td>Physical Education Core Requirement</td>
<td>2</td>
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<tr>
<td>Electives</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>30</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.

UNDERGRADUATE COURSES IN NATURAL RESOURCE MANAGEMENT (NRM)

(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 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.

2203 Introduction to Field Studies (1-2). This course is an introduction to science in the field and will cover topics including field safety, first aid, basics of camping and hiking, keeping a field journal, and use of field equipment such as a compass and GPS. The course will also introduce students to basic field science topics e.g. wildlife identification, plant identification, geology etc.

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.

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.
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.

3201 Wildland Plants (1-2). A study of wildland plants and plant communities, including identification, growth and phenology, forage and browse values, restoration value, and habitat. Offered fall.

3202 Wildlife Identification and Natural History (1-2). A course that provides fundamental identification skills and an understanding on the life history and habitat requirements of various game and nongame animals. Offered spring.

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.

3305 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 summer odd years.

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.

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.
**4101 Range and Wildlife Activities (1-0).** An elective course for students involved in activities supportive of natural resource science. Activities include, but are not limited to: range plant identification, wildlife quiz bowl, and range and wildlife conclave.

**4301 Human Dimensions in Natural Resource Management (3-0).** Theory and applications for considering human dimensions in an integrated approach to wildlife conservation and management. Course emphases will include human values, the role of constituency groups, natural resource policy development, conflict resolution, group decision-making, research methods, and case studies. Prerequisite: NRM 2302 and NRM 2303.

**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.

**4304 Range Inventory and Analysis (2-2).** An overview of methods for measuring and analyzing rangeland plant communities and populations; statistical analysis of sampling; techniques to inventory rangeland resources; determining range health; determining forage production and utilization; determining proper stocking rates. Offered spring. Prerequisite: NRM 2301, NRM 3201, and NRM 3308.

**4303 Rangeland Ecology (3-0).** A study of rangeland communities, including principal forage species characteristics, growth, and phenology; resource planning and management; the effects of range livestock and wildlife on range vegetation; the study of plant succession and climax in relation to grazing and ecological condition. Offered fall. Prerequisite: NRM 2301

**4305 Wildlife Management Techniques (2-2).** An overview of habitat inventory and evaluation techniques, census methods; age and sex criteria; banding, data analysis, telemetry analysis, and research methods in wildlife management. Offered spring. Prerequisite: NRM 2302 and NRM 3202.

**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.

**4307 Range and Wildlife Habitat Management (2-2).** Principles and practices of range and wildlife habitat management, including range improvement through mechanical, chemical, prescribed burning and biological manipulation of vegetation, grazing systems, revegetation and other habitat management practices. Offered fall, odd years. Prerequisite: NRM 2301.

**4308 Big Game Management (2-2).** 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.

**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.

4409 Mammalogy (3-2). The systematics, pylogeny, 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, pylogeny, 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 290 (verbal and quantitative) are required for full admission to the M.S. thesis program. GRE scores of 280 (verbal and quantitative) are required for full admission to the M.S. non-thesis program. Additional requirements for all graduate options include a letter of intent, a resume, and two letters of recommendation from outside the department. Departmental GPA requirements are the same as general admission requirements outlined for the university.

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

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

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

NRM 5302 - Seminar in Range and Wildlife Management (must take
two sections with unique course titles)
NRM 5305 - Range and Wildlife Research Methods
NRM 5306 - GIS, GPS and Remote Sensing for Resource Managers
NRM 5312 – Bio-statistical Analysis I
NRM 5313 – Bio-statistical Analysis II
NRM 6301 - Thesis Proposal
NRM 6302 - Thesis Defense
GEOL 5402 - Interdisciplinary GIS
Plus 2 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 (must take two sections with unique course titles)
NRM 5304 - Research
NRM 5305 - Range and Wildlife Research Methods
NRM 5306 - GIS, GPS and Remote Sensing for Resource Managers or
GEOL 5402 - Interdisciplinary GIS
NRM 5312 – Bio-statistical Analysis I
NRM 5313 – Bio-statistical Analysis II
Plus 15 additional graduate credit hours selected with the help of your advisory committee. In addition, each M.S. (Non-thesis) candidate must complete a Record of Study based upon their experiences in NRM 5304

Students will enroll each semester or summer term in which assistance is provided by graduate committee members or when use of the library or other research facilities 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 5311 - Scientific Writing
NRM 5312 - Biostatistical Analysis I
GEOL 5402 - Interdisciplinary GIS
Plus 20 semester hours of additional graduate work selected with the help of your advisory committee.

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.
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 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, 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 (1-0-9). 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 College 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 College of Arts and Sciences consists of the following seven departments:

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

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

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

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

1. Bachelor of Arts with majors in Communication, English, General Studies, History, 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 English, History, Liberal Arts, Political Science-Public Administration;
5. Master of Science with majors in Biology and Geology.
Academic Center for Excellence
College of Arts and Sciences
Office: Ferguson Hall 214
Phone: (432) 837-8408
FAX: (432) 837-8317
E-mail: ace@sulross.edu

Director and Assistant Professor of English: Kathy K. Stein, Ed.D.

Lecturers: Chris Garcia, M.A., Alex Hardison, B.S., and Julie Vega, M.A.

Academic Enhancement Seminars: Chris Garcia
SRSU Honors Program: Kathy K. Stein

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. ACE also provides facilities, organization, and coordination for the SRSU Honors Program. The SRSU Honors Program challenges students to conceptualize, analyze, and learn subject material in a different way. By incorporating and bringing together these disparate student bodies, an environment of understanding, camaraderie, and cooperation is created. ACE works closely to help students adjust and adapt to college life and to succeed in their life-long learning experience.

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

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

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

College Readiness Exemptions

**ACT**
- 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; identifying author's purpose and tone; determining points and support of a critical argument. This course will emphasize correction of reading problems identified through diagnosis. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to any intensive reading course. (ED 0300)

**English**

*0300 Writing Skills (3-0).* This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the writing 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)

*0310 Integrated Reading and Writing Skills (3-0).* This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the writing and/or reading portion of the assessment. The focus of the course will be on applying critical reading skills for organizing, analyzing, and retaining material and developing written work appropriate to the audience, purpose, situation, and length of the assignment. The course integrates preparation in basic academic reading skills in writing a variety of academic essays. Credit in this course cannot be used to satisfy requirements for any degree.

Prerequisite: C or better in ENG 0300 or ED 0300 OR satisfactory score on placement exam.
Mathematics

0300 Introductory Algebra (3-0). This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the mathematics portion of the assessment. Topics included in this course are algebraic operations on real numbers, the solving of equations and inequalities, basic operations with polynomials, simple graphing techniques, critical thinking skills, and college readiness skills. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to the next level math course. (MATH 0300)

0301 Intermediate Algebra (3-0). This course is designed for students whose score on an approved assessment instrument does not meet minimum requirements on the mathematics portion of the assessment. Topics included in this course are real numbers, exponential, rational, and radical expressions, factoring, complex numbers, and critical thinking skills. Credit in this course cannot be used to satisfy requirements for any degree. Students must earn a grade of C or better to progress to the next level math course. (MATH 0301)

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

SRSU Honors Program

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

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

Honor 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
College 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., Mark S. Saka, Ph.D. and Paul A. Wright, Ph.D.

Associate Professors: Judith A. Parsons, M.A., Andrea Powers, Ph.D., and Mark C. Emerson, Ph.D.

Assistant Professors: Amy Moreland, Ph.D., 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, Psychology, and Social Science. Anthropology, Geography, Mexican American Studies, Political Science, 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, and Public Administration. The department has a limited number of graduate Teaching Assistantships for graduate students in History and Public Administration. For additional information about the assistantships, contact the department chair.

The Behavioral and Social Sciences faculty is engaged in a wide-range of research with international, national, and regional 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 international psychology honor society, the Pre-Law Association, a group
which furthers the interests of those students preparing for law School and the Psychology Association, a student organization for psychology majors.

As with all Sul Ross students, students majoring in an academic area within the Department of Behavioral and Social Sciences are required to take a major field assessment examination during the semester in which they graduate. Students should contact their major field advisors concerning specifics of the examinations.

Career Opportunities:
Each program in the department is designed to provide an educational experience which will lead to career and graduate opportunities for the students.

History
Education
Government/Public Administration
Journalism
Museum and Archival careers
Writing and Editing
Businesses which seek employees with liberal arts backgrounds
Preparatory for:
Law School
Paralegal careers
Graduate Museum and Archive Programs
Graduate History Programs

Political Science
Education
Government/Public Administration
Business which seeks employees with liberal arts backgrounds Public Relations Minority Affairs
Political Science Education Research
Government Related Business
Federal, State, and Local Agencies/Public Administration
Private Non-Profit Agencies Journalism
Businesses which seek employees with liberal arts backgrounds
Preparatory for:
Law School
Paralegal careers
Graduate Political Science Programs

Psychology
Education
Research
Residential treatment center counselors
Social workers and child protective service workers
Personnel Analyst
Interviewer
Management positions
Mental Health/Mental Retardation Case Managers
Law Enforcement, Correction, and Probation Officers
Other government and private industry positions requiring a liberal arts background
Preparatory for:
Law School
Paralegal careers
Social Work Programs
Graduate Psychology Programs

Social Science Education
Businesses which seek employees with liberal arts backgrounds Preparatory for:
Law School
Paralegal careers

Features
The department is located in Lawrence Hall and works in cooperation with, the Museum of the Big Bend. Two psychology labs are maintained to provide undergraduate and graduate psychology students with modern facilities to conduct on-site research. In addition to faculty offices, office space for history and political science graduate teaching assistants is available.

Scholarships
Clifford B. Casey History Scholarships. The applicant must be a graduate history major or an undergraduate history major or minor. Social Sciences majors are eligible. Students must have an overall GPA of 3.0 or better, as well as a history GPA of 3.0 or better. Graduate students must have a satisfactory score on the GRE, a GPA of 3.0 in the last 60 hours of course work in their undergraduate degree program, and a GPA of 3.0 in prior history course work.

Ernest C. Shearer Memorial Scholarships. The recipient must be a history major with at least one semester of course work remaining at Sul Ross State University, be in good standing with the university, have a strong academic record in history, and show promise as a history student.

George J. Merriman III Memorial Scholarship. Applicants must be majors in the 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.

**GEOGRAPHY**

**Geography as a Minor**

A minor in Geography may be obtained by taking a minimum of nineteen semester credit hours. Students are required to take Geography 1302, Geography 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 lithological 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>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History Major</td>
<td>30</td>
</tr>
<tr>
<td>History 2301, 2302, and 3311</td>
<td>9</td>
</tr>
<tr>
<td>21 SCH (15 SCH advanced)</td>
<td>21</td>
</tr>
<tr>
<td>Electives</td>
<td>12</td>
</tr>
<tr>
<td>English 1301, 1302, 2301 or other literature, and 3 SCH sophomore or Advanced Communication 1303 or Theatre 2304</td>
<td>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</td>
<td>6</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>6-8</td>
</tr>
<tr>
<td>Multicultural</td>
<td>3</td>
</tr>
<tr>
<td>History 1301 &amp; 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics: select from 1310, 1315, 1316, or 1342</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Political Science 2305 and 2306</td>
<td>6</td>
</tr>
<tr>
<td>Laboratory Science: select from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404</td>
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</tr>
</tbody>
</table>
Physics 1401, 1402, 2401, 2402 ........................................... 8
Social Science: select from Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303, Anthropology 1301 ................................................................. 3
Minor .................................................................................. 18

TOTAL 120

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>
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<tbody>
<tr>
<td><strong>Freshman Year</strong></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>
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TOTAL 31

<table>
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<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sophomore Year</strong></td>
</tr>
<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>
<tr>
<td>Foreign Language Requirement ......................................... 8</td>
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</table>

TOTAL 32

<table>
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<tr>
<th>Hours</th>
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<tbody>
<tr>
<td><strong>Junior Year</strong></td>
</tr>
<tr>
<td>History 3311 + 3 other History courses ............................ 15</td>
</tr>
<tr>
<td>Minor .............................................................................. 9</td>
</tr>
<tr>
<td>Multicultural .................................................................. 3</td>
</tr>
<tr>
<td>Electives ........................................................................ 3</td>
</tr>
</tbody>
</table>

TOTAL 30

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Senior Year</strong></td>
</tr>
<tr>
<td>History ................................................................. 9</td>
</tr>
<tr>
<td>Minor ......................................................................... 9</td>
</tr>
<tr>
<td>Electives ................................................................. 9</td>
</tr>
</tbody>
</table>

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

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.

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 absolution, 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 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.

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.

4306 Ancient Greece (3-0). Ancient Greece examines the history of Greece from Minoan and Mycenae origins to the rise of Alexander the Great. The course emphasizes the rise of the unique political, social, and cultural institutions and their importance in the formation of the modern world.

4307 Ancient Rome (3-0). Ancient Rome is an in-depth survey of the social, cultural, political and economic history of ancient Rome from its earliest beginnings until the reign of Justinian.

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.

*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 varieties, and code-switching.
- **3310 Special Topics (3-0).** Selected topics in the area of Mexican American Studies. May be repeated for credit when the topic varies.
- **3311 Folklore 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

Political Science Curriculum

Students interested in a political science curriculum should follow the plan outlined for the Bachelor of Arts degree with a major in Social Sciences—Political Science Option.

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 PUBLIC ADMINISTRATION

The Master of Arts degree in Public Administration is designed to serve the needs of students who are preparing for political or administrative careers in public or governmental service, or continued graduate studies. Students can also choose a Public-Administration General Political Science option, which is designed to meet the needs of individuals currently employed in, or desiring careers in, political science education.

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 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 Public Administration

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

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

Master of Arts with a Major in Public Administration—General Political Science Option

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

B. Nine semester credit hours of course work in a related discipline as advised by major advisor.

C. Twelve semester credit hours of additional Political Science course work to bring the total to 36 semester credit hours.

Dual Masters in Public Administration and Criminal Justice

Master of Arts with a Major in Public Administration and
Master of Science in Criminal Justice

A. Required Political Science and Criminal Justice:
   - 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: intra-organizational 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, metro-systems, 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. Catalogs from most American Bar Association accredited law Schools are available in the Behavioral Sciences office. 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. For pre-law advising, contact Professor David Watson in the Behavioral and Social Sciences Department.

**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)*

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology 1302, 2307, 3308</td>
</tr>
<tr>
<td>3 SCH from Group 1 - 3309, 4306</td>
</tr>
<tr>
<td>3 SCH from Group 2 - 3302, 3304, 4308</td>
</tr>
<tr>
<td>3 SCH from Group 3-3313, 3314, 4315</td>
</tr>
<tr>
<td>12 SCH, at least 9 advanced; advanced hours may be any advanced hours in Psychology, including Group courses remaining after completing the above requirements</td>
</tr>
<tr>
<td>Electives</td>
</tr>
<tr>
<td>English 1301, 1302, 2301 or other literature, and</td>
</tr>
<tr>
<td>3 SCH sophomore or advanced</td>
</tr>
<tr>
<td>Communication 1303 or Theatre 2304</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</td>
</tr>
<tr>
<td>United States History</td>
</tr>
<tr>
<td>Foreign Language</td>
</tr>
<tr>
<td>Mathematics: select from 1310, 1315, 1316, or 1342</td>
</tr>
<tr>
<td>Multicultural Social Science: select from History 2301, 2302; Mexican American Studies 2301; Political Science 2307; Women's Studies 2301</td>
</tr>
<tr>
<td>Physical Education 1150 and one activity course</td>
</tr>
<tr>
<td>Political Science 2305 and 2306</td>
</tr>
<tr>
<td>Laboratory Science: Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; Physics 1401, 1402, 2401, 2402</td>
</tr>
<tr>
<td>Minor</td>
</tr>
<tr>
<td><strong>TOTAL 120</strong></td>
</tr>
</tbody>
</table>

**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>
</tr>
</thead>
<tbody>
<tr>
<td>Psychology 1302 and any one from 2304, 2309, or 2310</td>
</tr>
<tr>
<td>United States History</td>
</tr>
<tr>
<td>English 1301, 1302</td>
</tr>
<tr>
<td>Math Requirement</td>
</tr>
</tbody>
</table>
Oral Communication Requirement ................................................................. 3
Fine Arts Requirement ................................................................................... 6
Physical Education Requirement .................................................................. 2

TOTAL 32

Sophomore Year
Psychology 2307 (only after completing math requirement),
and any two additional Psychology courses, one at the
3000 level or higher ....................................................................................... 9
Political Science 2305, 2306 ........................................................................... 6
English Literature course and one English 2000 or higher ......................... 6
Science Requirement ..................................................................................... 4
Foreign Language Requirement ..................................................................... 8
Computer Requirement .................................................................................. 3

TOTAL 36

Junior Year
Psychology. Complete Psychology 3308 and two additional Psychology
courses numbered 3000 or higher, preferably completing your group
requirements (Groups 1, 2, and 3) ................................................................. 9
Multicultural Social Science Core Requirement ......................................... 3
Science Requirement ..................................................................................... 4
Minor ............................................................................................................. 9
Electives ......................................................................................................... 3

TOTAL 28

Senior Year
Psychology, 3000 level or higher ................................................................. 6
Minor (6 SCH 3000 level or higher) .............................................................. 9
Elective (up to 15 SCH of course work at 3000 level or higher may be
needed to meet the 39 SCH advanced requirement) ................................ 9

TOTAL 24

GRAND TOTAL 120

Psychology as a Minor
A minor in Psychology requires eighteen (18) semester credit hours in
Psychology including six semester credit hours advanced.

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 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 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 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 COURSES IN PSYCHOLOGY

Psychology is available to support such majors as Public Administration, Education, Business Administration, or History.

5304 Readings and Research in Psychology (3-0). A reading and research course for graduate students. May be repeated for credit with the approval of the department.

5305 Special Topics in Psychology (3-0). Selected topics in the area of Psychology. May be repeated when topic varies.
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 student’s 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.

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**GRADUATE COURSES IN SOCIOLOGY**

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

**5303 Multicultural Society (3-0).** Analysis of the concepts of "culture" and "social system" as treated in sociological literature combined with the study of social behaviors of distinct culture groups in the United States.

**5306 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.

**5307 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>
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<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</td>
<td></td>
</tr>
<tr>
<td>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</td>
<td></td>
</tr>
<tr>
<td>Theatre 1302 plus an additional 3 SCH from art, journalism,</td>
<td></td>
</tr>
<tr>
<td>Music, theatre, or IT 2304</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language</td>
<td>6-8</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</td>
<td></td>
</tr>
<tr>
<td>American Studies 2301; Political Science 2307; Women's</td>
<td></td>
</tr>
<tr>
<td>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

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science Requirement</td>
<td>3</td>
</tr>
<tr>
<td>United States History Requirement</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Oral Communication Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Science Requirement</td>
<td>8</td>
</tr>
<tr>
<td>Physical Education Requirement</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>31</strong></td>
</tr>
</tbody>
</table>

#### Sophomore Year

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
</tr>
<tr>
<td>Multicultural Requirement</td>
<td>3</td>
</tr>
<tr>
<td>History 2301, 2302</td>
<td>6</td>
</tr>
<tr>
<td>English Literature 2000 or higher</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language Requirement</td>
<td>3-8</td>
</tr>
<tr>
<td>Mathematics Requirement</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30-32</strong></td>
</tr>
</tbody>
</table>

#### Junior Year

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English Advanced</td>
<td>3</td>
</tr>
<tr>
<td>Political Science</td>
<td>6</td>
</tr>
<tr>
<td>Economics 2300, 2305</td>
<td>6</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>6</td>
</tr>
<tr>
<td>Electives</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>27</strong></td>
</tr>
</tbody>
</table>

#### Senior Year

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>History</td>
<td>12</td>
</tr>
<tr>
<td>Political Science</td>
<td>9</td>
</tr>
<tr>
<td>Electives</td>
<td>9-11</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30-32</strong></td>
</tr>
</tbody>
</table>

**Grand Total 120**

Bachelor of Arts in Social Sciences—Political Science Option

Students interested in a political science curriculum should follow the plan outlined for the Bachelor of Arts degree with a major in Social Sciences—Political Science Option. This plan allows for specialization in political science within the general Social Sciences degree.

<table>
<thead>
<tr>
<th>Course Description</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Political Science 2305, 2306</td>
<td>6</td>
</tr>
<tr>
<td>Political Science 24 SCH at least 18 SCH advanced</td>
<td>24</td>
</tr>
<tr>
<td>Psychology 2307</td>
<td>3</td>
</tr>
<tr>
<td>Geography</td>
<td>3</td>
</tr>
<tr>
<td>History 2301, 2302</td>
<td>6</td>
</tr>
<tr>
<td>History advanced</td>
<td>12</td>
</tr>
</tbody>
</table>
Economics 2300, 2305 ................................................................. 6
Electives ................................................................................. 6
English 1301, 1302, 2301 or other literature, and
  6 SCH sophomore or advanced ............................................ 12
Communication 1303 or Theatre 2304 .................................. 3
Computer Science: select from OFS 1384, CS 1301, or equivalent .......... 3
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 ....................................................... 6
Foreign Language .................................................................... 6-8
History 1301, 1302 .................................................................. 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; or Physics
  1401, 1402, 2401, 2402 .............................................................. 8

TOTAL 120
DEPARTMENT OF BIOLOGICAL AND EARTH AND PHYSICAL SCIENCES

Department of Biological and Earth Physical Sciences
College 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: Martin K. Terry, Ph.D., D.V.M

Lecturer: Jackie Denison, M.S.

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. Additionally, the composite science education track is designed to provide future teachers and educators abroad background in science, with a concentration in the biological sciences. The 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.

**Career Opportunities in Biology**

**Health/Medical**
- Anesthesiologist
- Athletic Trainers
- Audiology
- Bacteriologist
- Biomediation Technician
- Biomedical Engineering
- Chiropractic
- City Recycling Manager
- Dentistry
- Dermatology
- Epidemiology
- Food and Drug Inspector
- Gerontology, Geriatrics
- Hunger Policy Analyst
- Industrial Hygiene
- Kinesiology
- Medical Illustration
- Medical Technologist
- Nursing
- Occupational Safety and Health
- Occupational Therapy
- Osteopathic Medicine
- Parasitologist
- Pathology
- Pharmaceutical Sales
- Pharmacology
- Physical Therapy
- Physician
- Physician’s Assistant
- Podiatry
- Public Health
- Public Health Officer
- Water Quality Inspector
- Sales: Health Care
- Speech Pathology
- Sports Medicine
- Toxicologist
- Veterinary Medicine
- Vision Science

**Business/Industry**
- Aquarist
- Biochemist
- Bioengineer
- Bioethicist
- Botanical or Zoological Gardens Curator
- Botanist
- Conservationist
- Ecologist
- Editor
- Entomologist
- Environmental Protection Specialist
- Food Technician/Technologist
- Fundraiser, Environmental Organization
- Herpetologist
- Horticulturalist
- Ichthyologist
- Industrial Hygienist
- Journalist: Science Magazine
- Journalist: Wildlife Photographer
- Landscape Architect
- Landscape Architect
- Landscape Ecology
- Limnologist
- Mammalogist
- Molecular Biologist
- Ornithologist
- Park Naturalist
- Park Ranger
- Pest Control Consultant
- Teacher/Professor
- Technical Writer
- Zoologist
Bachelor of Science  
(Biology Major: Professional Degree 120 hours)

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

Biology 1401, 1402 ................................................................. 8  
Select 8 SCH from any Biology 2000 level courses except  
Biology 2403 ........................................................................ 8  
Biology 3306, 4101, 4301 plus 19 SCH advanced ...................... 26  
Electives .................................................................................. 8  
English 1301, 1302, 2301 or other literature, and English 2304 .... 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 or Texas History .................................................. 6  
Mathematics: 1342, and 3 SCH from 1315, 1316, or higher ......... 6  
Multicultural Social Science: select from History 2301, 2302; Mexican  
American Studies 2301; Political Science 2307; or  
Women's Studies 2301, or other approved course .................... 3  
Physical Education 1150 and one activity course ..................... 2  
Political Science 2305, 2306 ....................................................... 6  
Laboratory Science: Chemistry 1401, 1402 ............................. 8  
Social Science: select from Anthropology 1301; Economics 2300, 2305;  
Geography 1302, 2302; Philosophy 1301; Psychology 1302;  
Sociology 2303 ....................................................................... 3  
Minor ....................................................................................... 18  

TOTAL 120

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>
</tr>
</thead>
</table>

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

TOTAL 36

Sophomore Year  
Choose 8 hours from any 2000 level Biology course except 2403 .... 8  
English 2301 or other literature ............................................. 3  
Multicultural Social Science .................................................... 3  
Social Science ......................................................................... 3  
Political Science 2305, 2306 ................................................... 6  
Fine Arts.................................................................................. 3  
Communication 1303 or equivalent ....................................... 3  

TOTAL 29

Junior Year  
Biology 3306 ............................................................................ 3  
Choose 8 hours from any 3000 or 4000 level Biology course ..... 8  

183
Math 1342 ................................................................. 3
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
Math 1342 ........................................................................................................................................3
Natural Resource Management 2404 and 3304................................................................. 7
Choose 8 hours from Natural Resource Management 4309, 4405, or 4407 .................................................. 8
Electives ...........................................................................................................................................1
TOTAL 52
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 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; ......................................................................................................................... 8
Upper level 3306, 4301, plus 4 SCH advanced................................................................. 10

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

Minor in Wildlife Biology

A minor for Criminal Justice majors only is offered for those C.J. majors seeking employment or certification as game wardens or park rangers. This program is aimed at preparing the individual to be able to identify plants and animals in the field with emphasis placed on species protected by federal or state laws.

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.

**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.

**Bachelor of Science**  
**(Biology Major in association with the DEAP-Dental Early Admission Program)**

This modified degree track is designed for a student to complete their first three years at Sul Ross, and enter UTHSA-SA Dental School for their last year of the MS degree and first year of the DDS degree. Other requirements, including application, admission, and DAT scores, are independent of this degree track.

Required Courses while attending Sul Ross:  Eng 1301, 1302, 2304, 2301 or other literature, Comm 1303, Hist 1301, 1302, Math 1342 & 1315, 1316 or higher, Fine Arts requirement, Multicultural requirement, PE 1150 and an activity course, PS 2305, 2306, Social Science requirement, Biol 1401, 1402, 2404, 2405, 3306, 4301, Chem. 1401, 1402, 3407, 3408, Phys 1401, 1402.

**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 or 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, and digestive, urinary, immune,
endocrine, and reproductive systems. This course will involve the dissection of mammalian material. Course is intended for pre-nursing, pre-medical, pre-optometry, pre-veterinary, other pre-health professionals, and biology majors. Prerequisite: General Zoology and Human Anatomy and Physiology I or by permission of instructor.

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 micro-organisms. 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 Standards Method 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 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 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 systematic, 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 systematic, phylogeny, natural history and field study of birds with emphasis on those found in the Trans-Pecos region of Texas. Prerequisite: General Zoology or equivalent.

4405 Plant Physiology (3-2). The study of the life processes of plants and the physical and chemical phenomena of plant cells, and their relationship to the environment. Studies of photosynthesis, transportation, translocation, nitrogen fixation, and hormones will be included with emphasis on vascular plants. Prerequisite: General Botany.

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.
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 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 committee, accept toward the master’s degree 6 semester credit hours of coursework in
a department other than the major.

**GRADUATE COURSES IN BIOLOGY**


5101 *Graduate Seminar* (1-0). Discussion of pertinent topics in biology, with emphasis changing depending upon instructor.


5301 *Cacti and Succulents of the Southwest* (2-2). A study of the life cycles, life histories, and environment with special attention to survival and adaption of the cacti and succulents of the Southwest and in particular those in the Trans-Pecos region.

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.

5318 Toxic and Medicinal Plants (3-0). A graduate-level survey of toxic and medicinal plants, including their identification & classification, clinical signs of intoxication, toxic principle, mechanism of action, and treatment (if any). Emphasis is on toxic plants of West Texas and major medicinal plants of historical significance.

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
College of Arts and Sciences
Office: Academic and Computer Resource Center 107
Phone: (432)837-8106
Fax: (432) 837-8397

Chair and Associate Professor: David R. Martin, Ph.D.
Professor: R. Vic Morgan, Ph.D.
Associate Professors: Kristofer D. Jorgenson, Ph.D.,
Elizabeth A. Measures, Ph.D., Lloyd E. Moyo, Ph.D.,
and Rafael Azuaje, 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 undergraduate core curriculum requirements before transferring to other universities to complete their engineering degrees (a suggested course sequence is included in the Mathematics section).

The Computer Science program offers several concentrations: Communication Design, Gaming Technology, and Traditional Computer Science. The program provides professional training in Computer Science for students interested in becoming software engineers, in becoming high school computer science teachers, or simply in augmenting other skills with the requisite knowledge of computers and programming necessary to be successful in the modern workplace.

The Mathematics program has as its primary goal the preparation of teachers of mathematics at the elementary and secondary levels. A broad variety of coursework at the undergraduate level has been designed to support this goal, as well as to adequately prepare students for careers in industry or for further study in graduate School.

Career Opportunities

Computer Science
Computer Network Support Specialist
Computer Operations Manager
Database Applications Program Analyst or Designer
Game Designer
Game Programmer
Programmer or Administrator
Programming Team Member, Specializing in Design, Testing, or Documentation
Secondary School Educator
Computer Science Teacher Software
Features
The department is located in the Academic and Computer Resource Center. Most of our classes utilize computer software for a deeper understanding of the material. Many opportunities to work closely with professors provide ample opportunity for undergraduate research.

Scholarships
Gary Measures Memorial Computer Science Scholarship
One award for an outstanding junior or senior Computer Science student. To be eligible, the student must have a GPA of at least 3.0 overall and a 3.0 GPA in Computer Science.

Mathematics Excellence Scholarship
Two Scholarships are awarded for full-time undergraduate Mathematics students exhibiting excellence in their coursework.

Robert P. Amacker Memorial Scholarship
One award to a junior or senior mathematics, Chemistry, or Geology major with a GPA of 3.0 or more.

Vic and Mary Jane Morgan Mathematics Scholarship
Junior or senior mathematics majors having an overall GPA of at least 3.0. Preference will be given to majors who are entering the teaching profession.
Bachelor of Science  
(Computer Science Major-120 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</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>12</td>
</tr>
<tr>
<td>Sophomore or advanced</td>
<td></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>
<tr>
<td>TOTAL 120</td>
<td></td>
</tr>
</tbody>
</table>

**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.

Bachelor of Science  
(Computer Science Major)

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

Freshman Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1320, 1321</td>
<td>6</td>
</tr>
<tr>
<td>English 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics 1315, 1316, 2340</td>
<td>9</td>
</tr>
<tr>
<td>Oral Communication Core Requirement</td>
<td>3</td>
</tr>
<tr>
<td>Physical Education 1150 and one other activity course</td>
<td>2</td>
</tr>
<tr>
<td>History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>TOTAL 32</td>
<td></td>
</tr>
</tbody>
</table>

Sophomore Year

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 2305, 2320, 2360</td>
<td>9</td>
</tr>
<tr>
<td>Minor</td>
<td>6</td>
</tr>
<tr>
<td>English 2301 and one other course numbered 2000 or higher</td>
<td>6</td>
</tr>
<tr>
<td>Two courses selected from Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2402</td>
<td>8</td>
</tr>
<tr>
<td>TOTAL 29</td>
<td></td>
</tr>
</tbody>
</table>
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

Hours
Computer Science 1320*, 1321, 2320 and either 2305 or 2360 ..........12
6 additional advanced hours in CS, CSAT, or CIS .........................6

TOTAL 18

TEACHER CERTIFICATION IN COMPUTER SCIENCE

Teacher Certification in Computer Science (Grades 8-12) Required Education Courses: ED3300, 3302, 3305, 4312, 4314, 4605. Required Computer Science Courses: CS 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.

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 classes. 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.

2303 Individual Studies (3-0). Investigation of special topics in Computer Science, conducted on an individual basis. The course may be repeated with different topics.

2305 Web Scripting Language (2-2). This course introduces the concepts of object-oriented design using a modern scripting programming language. The student will learn the syntax of the programming language and how to construct object classes. Programming applications will be drawn from a wide variety of commercial, technical, and scientific problem areas.
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 LINUX (3-0). This introduction to the LINUX operating system covers UNIX shell commands, shell programming, AWK programming, VI test editor, the SED editor, UNIX platforms, and X-Windows. Offered spring odd years.
Prerequisite: 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 Parallel Programming (2-2). This course will cover the fundamental concepts of parallel programming, including GPUs to maximize performance of modern computer systems. It will include parallel programming models, GPU programming with CUDA, and cluster computer with MPI and other parallel environments
Prerequisite: Permission of the instructor.

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 Architecture (2-2). Topics include combinational logic circuits and design sequential circuits, registers and counters, memory and programmable logic devices, register transfers and data paths, and sequencing and control. Offered spring odd years. Prerequisites: CS 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.

Bachelor of Science
(Computer Science – Communication Design Concentration - Major-120 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1320, 1321, 2360, 6 SCH advanced</td>
<td>15</td>
</tr>
<tr>
<td>Computer Science Applied Technology: 2108, 2110, 2306, 2310</td>
<td></td>
</tr>
<tr>
<td>2308, 2317, 2323, 3311, 4310, 16 SCH advanced</td>
<td>39</td>
</tr>
<tr>
<td>Mathematics 1315** or higher and 2340</td>
<td>6</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: ART 1302 or 1303, FA 2301</td>
<td>6</td>
</tr>
<tr>
<td>United States History 1301, 1302</td>
<td>6</td>
</tr>
<tr>
<td>Multicultural Social Science: CSAT 1307</td>
<td>3</td>
</tr>
</tbody>
</table>

200
**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.**

**Bachelor of Science**  
*(Computer Science – Gaming Technology concentration - Major-120 hours)*

<table>
<thead>
<tr>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computer Science 1320, 1321, 2320, 3101, 3320, 4320</td>
</tr>
</tbody>
</table>
| Computer Science Applied Technology: 2110, 2306, 2309  
  2310, 2312, 2315, 3120, 3130, 3160, 3345  
  4310, 9 SCH advanced | 34 |
| Mathematics 1315**, 1316** | 6 |
| English 1301, 1302, 2301 or other literature, CSAT 3320 | 12 |
| Communication 1303 or Theatre 2304 | 3 |
| Fine Arts: ART 1302, 1303 | 6 |
| United States History 1301, 1302 | 6 |
| Multicultural Social Science: CSAT 1307 | 3 |
| Physical Education 1150 and one activity course | 2 |
| Political Science 2305, 2306 | 12 |
| Science: BIOL 1402, BIOL 2404 and select two from  
  Astronomy 1401, 1402; Biology 1401,  
  Chemistry 1401, 1402; Geology 1401, 1402, 2404;  
  Physics 1401, 1402, 2401, 2402 | 14-16 |
| Social Science: select from Anthropology 1301, Economics 2300,  
  2305; Geography 1302, 2302; Philosophy 1301; Psychology  
  1302; Sociology 2303 | 3 |
| Electives: THEA 2307 is recommended | 7-10 |

**TOTAL 120**

**UNDERGRADUATE COURSES IN COMPUTER SCIENCE APPLIED TECHNOLOGY**

1307 *Art History for the Designer (3-0).* This course is a survey of the visual arts of the world tailored specifically to the needs of designers. It will cover all regions and periods of the visual arts and focus on how students can utilize historical styles for their own design work. Emphasis will be placed on how to replicate authentic and historical styles for a variety of design
purposes, including gaming, print, costume, theater, and communication design applications. This course meets the multicultural requirement.

2108 Web Development Programming (1-0). A class covering client/server programming in various operating systems, including JAVA script, ASP, PHP, and others.


2306 Basic Television Technology (3-0). Introductory course dedicated to basic television principles as related to game technology and communication design. Including, but not limited to camera, sound, lights, story board, and basic production elements to be used with green screen technology.

2308 Web Page Development (3-0). Layout and design of web pages, including structuring the page with proper alignment, consistency and site navigation; visual appeal of color and concepts for choosing color schemes that best represent the purpose of the website; and consideration of copyright law as applied to web page technology.

2309 Introduction to Game Design (3-0) Students will study a range of game genres in order to understand the fundamentals of game design and what makes a game interesting, addictive, and fun. Game ideas will be developed using paper prototyping and, later in the course, digitally prototyped using game-creation software. Prerequisite: CS 1321

2310 Introduction to Digital Imaging (3-0). This course covers digital imaging techniques including Photoshop and Illustrator. The course will focus on digital image editing, digital painting and illustration.

2312 3-D Design (3-0). This course provides an introduction to creating 3-dimensional graphics using Maya. Student will learn how to build, light, and animate 3-dimensional objects for use in gaming and animation.

2315 Introduction to Game Programming (3-0). A course designed to introduce students to programming languages and techniques used in the computer gaming industry. This course serves as the foundation for all other courses in the Gaming Technology concentration. Prerequisite: CS 1321

2317 Layout Design Programming (3-0). This course will support the technical/programming needed for CS 2316. Various programs such as PhotoShop, Illustrator, and InDesign will be explored and applied for use in web pages, human-computer interfaces, and e-publishing.

2323 Writing for Digital Media (3-0). The main focus of the course is the transition of invention and composition to digitally communicated formats emphasizing best practices for design, composition, and usability in the creation and implementation of digital content. Prerequisite: ENG 1302

2360 Mobile Programming (3-0). This class will address programming principles to be applied in Android and MAC iOS operating systems. Prerequisite: CS 1321

202
3120 Gaming and Script Programming (1-0). This course will address gaming script languages to develop games and applications for mobile devices such as iPhone, iPad, Android, and others. Prerequisite: CS 1321

3130 Animation Programming (1-0). A laboratory course in which students apply techniques learned in CSAT 3330 using software available in the Technology Learning Center. Concurrent enrollment: CSAT 3330

3160 User Interface Programming (3-0). This course will focus on the theory and implementation of creating effective interactive displays, interfaces and environments for controlling a variety of computer applications including games and communication, and other programs, including HCI (Human Computer Interface) applications.

3311 History of Communication Design (3-0). This course introduces the history of visual communication, including text and image. Lectures, slides, and discussions focus on the work of important practitioners in the field and on the historical and cultural significance of design, technology, and innovation.

3320 Gaming and Screenwriting (3-0) A class exploring hot to simulate movement and life using 2-dimensional and 3-dimensional means. Students will study selected examples from history of animation and create their own short pieces in a variety of software. Prerequisites: CSAT 2315

3321 Branding and Identity Design (3-0). This course explores methods for designing effective logos, creating marketing materials, and establishing advertising programs using computer technology.

3341 Video Editing for Gaming (3-0). Computer driven course focused on non-linear digital editing processes utilizing green screen technology.

3345 Techniques of Video Production (3-0). Production course reviewing use of camera and lighting techniques and incorporating studio sound and motion capture technology. Students learn studio production planning, lighting, and audio along with basic video engineering. Students will practice all crew positions, including floor director, camera operator, lighting technician, audio technician, technical director, and program director. Prerequisite: CSAT 2306

4310 Senior Capstone (3-0). The Senior Capstone is the culminating course in the CSAT concentrations sequence. Each capstone is implemented by students with the help and encouragement of an academic advisor. Capstone experiences allow each student to demonstrate the capacity to bring information, skills, and ideas acquired from the major to bear on one significant project. It is aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired as Computer Science majors as well as provide experiences for students to exhibit competent Computer Science skills within their concentration learned during their program of study in order to prepare for a career in Computer Science Applied Technology.

UNDERGRADUATE COURSES IN COMPUTER
INFORMATION SYSTEMS

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

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

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.

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.

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

Basic Skills Component ................................................................. 46
English 1301 and 1302.................................................................... 6
Mathematics 1315*........................................................................ 3
Communications, select from Comm 1303 Thea 2304.................. 3

Basic General Knowledge

Fine Arts, select from FA 1301, Art 1301,
Music 1312 or 1313, or Thea 1302.................................................. 3
Kinesiology, PE 1150 and one activity course............................... 2
English 2301 or other Literature course in English........................ 3
Laboratory Science, Physics 2401, 2402 ......................................... 8
Social Sciences, select from Anth 1301, Eco 2300, Eco 2305
Geog 1301 or 2302, 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........................................................................... 3
Federal Government....................................................................... 3
Multicultural, select from Hist 2301 or 2302, MAS 2301,
PS 2307, or WS 2301.................................................................. 3

General Education......................................................................... 12-14
English, select one 2000 or higher course ........................................3
Physical and Life Sciences, select two from astronomy,
  Biology, or Chemistry.................................................................6-8
Mathematics 1316*........................................................................3

Major..............................................................................................37
Mathematics 2413, 2414, 2415, 2330, 3101, 3320, 3340,
  4320, 4330, and 4360..................................................................31
Additional 3 advanced SCH in Mathematics ..................................3
Computer Science 1320.................................................................3
Minor (at least 6 SCH advanced)....................................................18
Electives.........................................................................................5-7

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.

Freshman Year
Mathematics 2413, 2414....................................................................8
English 1301, 1302..........................................................................6
Chemistry 1401, 1402......................................................................8
Oral Communications Core Requirement ......................................3
Physical Education and one activity course.................................2
History 1301, 1302.........................................................................3

Total          30

Sophomore Year
Mathematics 2330, 2415..................................................................7
Computer Science 1320, 1321..........................................................6
English 2301 and one other course numbered 2000 or higher ......6
Fine Arts Core Requirement ..........................................................3
Social Science Core Requirement..................................................3
Political Science 2305 and 2306....................................................6
Multicultural Core Requirement....................................................3

Total          31

Junior Year
Mathematics 3320, 3340, one 4320, 4330, or 4360.........................9
One other advanced Mathematics course....................................3
Computer Science 2305 and 2320...................................................6
Physics 2401 and 2402.................................................................8
Elective.........................................................................................3

Total          29

Senior Year
Two of Mathematics 4320, 4340, 4360............................................6
Mathematics 3101 and one other SCH advanced course..............4
Computer Science, 6 SCH numbered 3000 or higher ........................................ 6
Electives (36 SCH total of advanced coursework are required for graduation, including major and minor) ......................... 14

Total 30

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.

Hours

Freshman Year
Mathematics 1315, 1316 (If needed) ............................................................... 6
Mathematics 2413, 2414 .................................................................................. 8
English 1301, 1302 ......................................................................................... 6
Chemistry 1401, 1402 ..................................................................................... 8
Physical Education 1150 and one other activity course .............................. 2
### Sophomore Year

<table>
<thead>
<tr>
<th>Subject</th>
<th>Description</th>
<th>Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mathematics 2330, 2415 and 3320</td>
<td></td>
<td>10</td>
</tr>
<tr>
<td>Computer Science 1320, 1321</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Physics 2401, 2402</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>History 1302</td>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Political Science 2305, 2306</td>
<td></td>
<td>6</td>
</tr>
</tbody>
</table>

**TOTAL 33**

### 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. Offered fall, spring, and summer. 
Prerequisite: Completion of or 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.

2301 Individual Studies (3-0). Independent study of selected topics in mathematics. This course may be repeated during different semesters.  
Prerequisite: Permission of instructor.

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 1316.
2340 Discrete Mathematics (3-0). Sets, Boolean algebra and Venn diagrams, function, elementary propositional and predicate logic, proof techniques, graph theory, combinatorics and elementary probability, and modular arithmetic. Offered spring. Prerequisite: Math 1315.

2413 Calculus I (3-2). Topics include limits and continuity, the derivative, techniques for differentiation of algebraic, logarithmic, exponential and trigonometric functions applications of the derivative and anti-differentiation. Offered fall. Prerequisite: Math 1315 and Math 1316 or equivalent scores or courses.

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.

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.

3101 Departmental Seminar (1-0). A forum for the presentation and discussion of results from various disciplines relating to Computer Science and Mathematics. Presentations will be made by visitors, faculty, and students. Students enrolled for credit in the departmental seminar will be expected to make at least one oral presentation during the semester. The course may be repeated during different semesters. (This course is a cross-listing of CS 3101). Offered fall and spring. Prerequisite: Consent of Instructor.

3301 Geometry (3-0). This course consists of a modern formal development of Euclidean geometry and a limited introduction to non-Euclidean geometry, with an integration of topics, methods, and use of technology appropriate for prospective middle grade and secondary mathematics teachers. Offered fall or spring as needed. Prerequisite: Math 2311 or Math 2330; or consent of instructor.

3303 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. 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 2414.
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. Prerequisite: Math 2414.

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. Prerequisite: Permission of instructor.

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 any 4000-level course 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.
Prerequisite: Permission of instructor.
EARTH AND PHYSICAL SCIENCES
(including Astronomy, Chemistry, Geology and Physics)

Department of Biological and Earth Physical Sciences
College of Arts and Sciences
Office: Warnock Science Building, 314
Phone: (432) 837-8259
E-mail: geology@sulross.edu

Professor and Chair: Christopher Ritzi, Ph.D.

Professors: David Rohr, Ph.D., and Kevin Urbanczyk, Ph.D.

Associate Professor: Md. Abul Kalam, Ph.D.

The Department of Biological and Earth 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 Geology 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.

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 Minor
Students in Chemistry 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 and (2) Earth Science for Teachers.

The first program embodies a concentrated training to prepare majors for graduate study or employment as a professional geologist.

The second program trains students to pursue elementary and high School teaching careers.

The department also offers graduate courses leading to a master of science in Geology.

Features
The department has the following: scanning electron microscope (SEM), 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 word processing/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 an 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).

Joseph B. Dishron Geology Scholarship
$250 per year to a Sophomore, Junior or Senior, Geology major or minor who has completed 11 hours or more of geology coursework and has an overall 3.0 GPA or better and a GPA of 3.0 or better in geology. $250 per year to a geology graduate student who has completed at least 9 hours and has chosen thesis option. Cumulative GPA of 3.0 or higher as an undergraduate and GPA of 3.5 or higher as a graduate student.

W. N. McAnulty Geology Academic Scholarship
About $400 to $900 per year to undergraduate and graduate students who have completed 8 hours of geology and have a 3.0 average.

David M. Rohr Scholarship
$300 to geology undergraduate and graduate students who have completed 12 hours of geology.

Petro Amigos Scholarship
About $500 to an undergraduate majoring in academic discipline which supports the petroleum industry.

Bill and Elizabeth Winter Geology Scholarship
$500 to $1000 to a geology undergraduate or graduate student 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
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.

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)
Prerequisite: 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 finger prints, 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.

4311 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.

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.

Freshman Year
Geology 1401, 1402.......................................................................... 8
English 1301, 1302 ...................................................................... 6
Math 1310, 1315, 1316, 1342, 2413 or higher ......................... 6-7
United States History 1301, 1302 ................................................. 6
Physical Education 1150 and one activity course ...................... 2

TOTAL 28-29
Sophomore Year
Geology 3408 or Adv. Geology 3-4 hrs ......................................................... 3 or 4
Geology 2401 or Geology 3402 ................................................................. 4
Chemistry 1401, Physics 1401 or higher ......................................................... 8
COMM 1303 or THEA 2304 ................................................................. 3
English 2301 or other literature ................................................................. 3
English, sophomore or advanced ................................................................. 3
Social Science ......................................................................................... 3
TOTAL 27 or 28

Junior Year
Geology 3408 or Adv. Geology 3-4 hrs ......................................................... 3 or 4
Geology 2401 or Geology 3402 ................................................................. 4
Geology 4401 or Geology 4403 ................................................................. 4
Political Science 2305 ........................................................................... 3
Geology 3 hours advanced ....................................................................... 3
Electives ................................................................................................. 3
Minor ...................................................................................................... 9
TOTAL 29 or 30

Junior or Senior Summer
Geology 3601 .......................................................................................... 6

TOTAL 6

Senior Year
Geology 4401 or Geology 4403 ................................................................. 4
Geology, 3 hours advanced ....................................................................... 3
Multicultural requirement ......................................................................... 3
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 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). Designed to introduce the non-major to recent developments and theories dealing with the changing face of the Earth and some of the animals that lived on it. New views on dinosaurs, their lives and their ultimate extinction. The distribution, causes, effects, and prediction of earthquakes and volcanoes. This course does not count toward advanced hours for Geology majors.

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 included the creation and manipulation of digital elevation models, classification on aerial and satellite imagery, and vector to raster conversion and analysis. The projects and assignments will utilize an extensive Trans-Pecos spatial database housed in the Sul Ross GIS lab. Software used will include the Spatial and 3D Analyst extension for ArcGIS and ERDAS Image. Prerequisite: Geology 3401 or approval of instructor.

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 geographical distribution of invertebrate fossils. Laboratory work consists of systematic study of index fossils as well as representative fossils of various phyla. Prerequisite: Geology 1402 or permission of the instructor.

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 Research (1-0). Research by the student into a carefully outlined problem in the earth or geologic sciences. May be repeated for credit when topics vary.

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
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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 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 2401 Crystal and Optical Mineralogy
   g. Geology 3402 Structural Geology
   h. Geology 3408 Stratigraphy and Sedimentation
   i. Geology 3601 Field Geology
   j. Geology 4401 Sedimentary Petrology
   k. 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
   d. 5101

Plan 1. Thesis Option: Thirty semester credit hours of coursework in Geology, including 6 SCH of thesis (6301 and 6302), and a minimum of 24 SCH of 5000-level courses. A maximum of 6 SCH of approved graduate credit may be transferred from another accredited institution. Any transfer requires the approval of both the departmental advisor and the Dean of the College of Arts and Sciences prior to finalizing the degree plan.

Plan 2. Non-thesis Option: Completion of 36 SCH of coursework in Geology and pass an oral and a written exam. Six to eight SCH of coursework in a department other than Geology may be applied toward the degree with the approval of the graduate committee.

A maximum of 8 SCH qualifying transfer courses may be counted. Any transfer requires the approval of both the departmental advisor and the Dean of the College of Arts and Sciences prior to finalizing the degree plan. Courses not counted toward the graduate degree, such as leveling courses, are noted on the transcript with an asterisk and are not calculated in the graduate grade point average.
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 paleoenvironmental 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 diagenesis 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 Image. The graduate requirements will include a term research project related to the individual student's research interest. Prerequisite: Geology 3401, Geology 5402, or approval of instructor.

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 Proposal (0-6). Satisfactory completion of this course requires an acceptable prospectus presented to the Graduate Committee. The student will normally register for this course no earlier than the second semester of graduate study. The student will enroll each semester or summer term in which assistance is provided by Committee members or
when use of the library or other research facilities of Sul Ross State
University is made.

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 requires the
completed thesis to be presented to the Graduate Committee, accepted by
the Dean of the College of Arts and Sciences, and filed in the Office of the
Provost and Vice President for Academic and Student Affairs.

**PHYSICAL SCIENCE**

**PSYS 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

College of Arts and Sciences
College of Agricultural and Natural Resource Sciences
E-mail: arts-sciences@sulross.edu
E-mail: anrs@sulross.edu

Minor Description
Environmental Studies is an interdisciplinary minor that encourages students to delve into the problems and prospects of the environment. The environmental studies minor allows students to gain fundamental knowledge of science as well as literature and the law. This basic competency establishes a comprehensive context for understanding the methodologies and problems of studying environmental issues. The areas to be selected from include Biology, Chemistry, Geology, Humanities and Social Sciences, and Natural Resource Management. This concentration provides depth of knowledge with advanced analytical skills and serves as preparation for graduate study or varied forms of employment in environmental work.

Environmental Studies as a Minor:
A minor in Environmental Studies may be obtained by taking a minimum of eighteen semester credit hours. Students are required to take three courses from the following list of core classes: Biology 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.
DEPARTMENT OF FINE ARTS AND COMMUNICATION
(including Art, Communication, Journalism, Music and Theatre)

Department of Fine Arts and Communication
College of Arts and Sciences
Office: Fine Arts Building 106
Phone: (432) 837-8218
E-mail: erumsey@sulross.edu

Professor and Chair: Esther L. Rumsey, Ph.D.

Professors: Carol H. Fairlie, M. F. A., Donald C. Freed, Ph.D.,

Assistant Professors: Avram Dumitrescu, M.A.A., Bret Scott, M.F.A.,
and Joseph G. Velasco, Ph.D.

Instructor: Christopher Dobbins, M.M.

Program Description
The Department of Fine Arts and Communication, comprising the academic disciplines of art, communication, journalism, music and theatre, offers the following degrees and teacher certifications:

- Bachelor of Arts: Communication
- Bachelor of Fine Arts: Visual and Performing Arts
- 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), and the Video Club (for students interested in producing independent video/film projects).

Career Opportunities

Art
Artist Educator
Art Critic
Gallery Owner/Operator
Photographer
Printmaker
Jeweler
Production Potter
Craftsperson
Therapist
Digital Art Librarian
Movie Set Designer
Movie Set Production Artist
Museum Curator
Layout Artist
Corporation Artist

Music
Educator
Private Instructor
Performer
Music Publishing
Music Retailing Management
Administrator in Music and Arts
Music Technology
Music Therapy
Church Music
Military Service Music

Theatre
Educator
Actor
Entertainer
Director
Designe
Theatre Technician
Broadcaster
Community Theatre Director
Stage Manager
Playwright
Screen writer
Game Design Writer
Theatre Administrator
Public Information Officer
Training Specialist
Grant Writer
Customer Service
Human Relations Director
Customer Service Specialist

Communication
Advertising
Educator
Electronic Media
Web Page Designer
Radio Broadcasting
Television Broadcasting
Non-Broadcast Video Production
Print Journalism
Electronic Journalism
Public Relations
Front of House Manager
Promoter
Marketing Communication-Mng.
Public Relations
Sales Representative

Features
The Department of Fine Arts is located in the Francois Fine Arts Building, with the main office and the chair’s office in FAB 106. Departmental facilities located in the Fine Arts Building include the band hall (FAB 100), the art gallery (FAB 102), the costume shop (FAB104), the Studio Theatre (FAB105), the choir room (FAB 200), the television production studio (FAB 205), the radio station and production room (FAB 206), as well as several classrooms, music practice rooms, and faculty offices. Additionally, the Department has a scene shop, located at the Kokernot Outdoor Theatre, and a ceramics and sculpture annex, located to the east of the Industrial Technology Building. Sul Ross State University has four performing spaces: Marshall Auditorium (a 700 seat proscenium facility), the Studio Theatre (a 120 seat proscenium facility), the Kokernot Outdoor Theatre (a 200 seat modified, outdoor proscenium theatre) and the Kokernot Amphitheatre (a 100+ seat natural amphitheatre). State-of-the-art lighting, sound and rigging
have recently been installed in Marshall Auditorium and the Studio Theatre. The Kokernot Outdoor Theatre and Amphitheatre have been designated by the Texas Commission on the Arts as part of Alpine’s State Cultural District.

Scholarships

Alpine Gallery Night Scholarship
One $500 Scholarship for a full-time undergraduate majoring in Art; Deadline is March 1 of each year. Contact Art Program for further details.

Henry Bertrand Jr. Memorial Scholarship
Two $2,000 Scholarships; one Scholarship to be awarded to a sophomore, junior or senior in each of the following majors: Communication and Theatre. Recipients must have a cumulative grade point average of 3.0. Preference is to be given to students seeking self-improvement through communication, public speaking, vocabulary development, development of extemporaneous speaking abilities and toastmaster skills, and development of the ability to express oneself completely, confidently and with a sense of humor.

Wade "Bubba" Carroll Scholarship
One $500-750 scholarship for a full-time theatre student who is in good academic and disciplinary standing, and is active in SRSU theatre productions. Contact the Theatre Program for further details.

Dan Blocker/Freda Powell Scholarships in Theatre
Six to 20 $1,000 scholarships for students who are in good academic and disciplinary standing and are active in SRSU theatre productions. Preference is given to students who major or minor in theatre. Deadline is prior to each semester. Contact the Theatre Program for further details.

Elizabeth Keefer Boatright Scholarship
One or two $200-400 Scholarship(s) for art majors, who have a minimum of a 2.75 college cumulative grade point average and a 3.0 cumulative grade point average in art. Applicants must submit a portfolio of their work for consideration. Contact the Art Program for further details.

Richard D. Bryan Memorial Scholarship
One to four $200-500 need-based Scholarship(s) for music majors who are in good academic and disciplinary standing. Preference is given to students seeking all-level or secondary teacher certification with a music major or minor. Additional preference is given to students whose principal area of study is band. Contact the Music Program for further details.

Grace M. Davis Drama Fund Scholarship
One $1,000 – 2,000 scholarship for the outstanding theatre major who is in good academic and disciplinary standing.

Laura A. Eaves Scholarship
One $200 Scholarship for a full-time student majoring in Art. Contact Art Program for further details.

Paul and Teeby Forchheimer Communication Scholarship
One to three $200-400 Scholarships for undergraduate communication majors, who are in good academic and disciplinary standing. Deadline is prior to each semester. Contact the Communication Program for further details.
Sarah Miltia Hill Scholarship
One $200 Scholarship for art majors, who have a minimum of a 3.0 cumulative grade point average. Preference is given to art majors seeking teacher certification. Contact the Art Program for further details.

Music Activity Award
10 to 50 $50-200 awards for students, who are in good academic and disciplinary standing, demonstrate ability and participate in a music ensemble. Deadline is prior to fall and spring semesters. Contact the Music Program for further details.

Music Scholarship
Ten to twenty $1,000 Scholarships for undergraduate music major who are in good academic and disciplinary standing. Deadline is prior to each semester. Contact the Music Program for further detail.

Mary E. Thain Memorial Art Endowment
One $400 Scholarship for undergraduate or graduate Art major with a 2.5 cumulative grade point average and a 3.0 cumulative grade point average in Art. Contact Art Program for further details.

Mary Jane Micou Wade and Charles E. Wade Scholarship
One or two $200-500 Scholarship(s) for music majors, who have a minimum of a 3.0 cumulative grade point average and must participate in the SRSU Band Program. Preference is given to students seeking all-level teacher certification with music major or minor. Contact the Music Program for further details.

ART
Sul Ross State University is located in an area which has served as a source of inspiration for many famous artists as diverse as the minimalist/conceptual sculptor Donald Judd and painter Georgia O'Keeffe. The natural beauty of the land, its historic associations, and an incredible sense of open space found here are strong attractions for creative individuals. Studio art classes are small and friendly. Students work closely with their instructors. Continuous art exhibitions are held in both the Francois Gallery in the Fine Arts building and the Museum of the Big Bend located on campus. In addition, the Wildenthal Library, with a significant collection of art books and other visual aids, provides art students with excellent support resources.

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
FA2301 Computer Design ..........................................................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

Integrity, Tolerance, Ethical Values, and Citizenship
American History, select two from Hist 1301, 1302, or 3309
State Government, PS 2306
Federal Government, PS 2305
Multicultural select Art History (from 3307 Women in Art, 3313 European Art & arch., 3314 Latin American Art History, Visual Culture of the Middle East) ***

General Education
English, select one 2000 or higher course
Computer Science, Comm 2308, FA 2301, or journalism

Major
Art, 1302, 1303, 1304, 1306, 2301, 2302, 2303, 2305, 2306, 2309, 3302, 3306, 3310, and 3326
plus 12 SCH advanced in area of specialization (4301)

Electives

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,
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 .................................................. 6
- Art-Design 1 and 2: 1303, 1304 or 2303 ............................................ 6
- Art History 1307, 1308 ..................................................................... 6
- Communication 1303 or Theatre 2304 .............................................. 3
- English 1301, 1302 .......................................................................... 6
- Physical Education 1150 and one activity course ........................... 2
- Social Science ................................................................................... 3
- Math 1310 or above .......................................................................... 3

**TOTAL 35**

**Sophomore Year**
- Art-Ceramics 1: 2305 ...................................................................... 3
- Art-Painting: 2301, or 2302 ............................................................... 6
- Art Design 1303, 1304, or 2303 ......................................................... 3
- Art – Drawing II 1303 or 3311 ......................................................... 3
- Computer Requirement .................................................................... 3
- English 2301 or other literature ...................................................... 6
- Fine Arts Requirement ...................................................................... 3
- United States History ....................................................................... 6
- Fine Arts 2301 Computer design .................................................... 3
- Political Science 2305, 2306 ............................................................. 6

**TOTAL 39**

**Junior Year**
- Art-Ceramics 2: 2306 ...................................................................... 3
- Art-Painting: 2301 or 2302 ............................................................... 3
- Art-Sculpture 2309 .......................................................................... 3
- *Art-Printmaking 3302 ................................................................... 3
- Art-Advanced Studio 3301 ............................................................... 3
- Contemporary Art History 3308 ...................................................... 3
- Art-Jewelry 3326 ............................................................................. 3
- Art-Area of Specialization 4301 ...................................................... 3
- Laboratory Science .......................................................................... 8
- Electives ......................................................................................... 3

**TOTAL 32**

**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 Art History ............................................................... 3
- Electives 3000 level or above ....................................................... 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.

**No course with a grade less than the “C” can be used to fulfill art major course requirements.**

### 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.

2301 Art Studio Concentration I (2-4). First level of advanced investigation into a studio art subject area; i.e., drawing and painting, ceramics, sculpture, printmaking, and in exceptional cases, art education or design and advertising art. The course may be repeated for credit up to three times in an area of specialization. Student will need to discuss their artistic background with the instructor.

2302 Printmaking (2-4). An introduction to the basic printmaking processes including collagraphic, intaglio, stencil, and relief.

3303 Art Theory I 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 majors.

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 Advanced Studio Concentration I (2-4)*. Advanced studio art specialization in subject area; i.e., drawing and painting, ceramics, sculpture, printmaking, and in exceptional cases, art education or design and advertising art. These classes develop formal competence in the technical mastery of materials. Comprehensive compositional and formal skills, expressive characteristics in the visualization of ideas and innovative formal considerations. Prerequisite: Art 3301.

4302 Advanced Studio Concentration II (2-4). Advanced investigation into a studio art subject area; i.e., drawing and painting, ceramics, sculpture, printmaking, and in exceptional cases, art education or design and advertising art. These classes develop formal competence in the technical mastery of materials, comprehensive compositional and formal skills, expressive characteristics in the visualization of ideas and innovative formal considerations. A formal proposal for the development of a senior capstone exhibition is developed in this class before the student enters exhibition. The course may be repeated for credit two times in an area of specialization. Prerequisite: Art 4301 and written proposal.

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 College 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 LISN (the Lobo Information and Sports Network comprised of KSRU Radio and KSRU TV); and Lambda Pi Eta (National Communication Honor Society).

Facilities for KSRU Radio and KSRU TV include a live video studio, a radio control room, digital video editors, PC digital audio editors, and field video equipment 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, 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

**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, 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 or 1402,

- Biol 1401 or 1402, Chem 1401 or 1402,
- Geol 1401, 1402, or 2402, Phy 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

- MAS 2301, PS 2307 or WS 2301 .....................................................3

**General Education** ........................................................................12-14

English, Eng 2304 ...........................................................................3

Fine Arts, select one from Thea 2303 or 2304 ........................................3

Foreign Language, two courses in one language ..................................6-8

**Major** ..........................................................................................33

Communication Core: 2305; 2308; 3306; 4310 ......................................12

Human Communication Focus: 2303, 3304, 4301, 4302

- Either 3309 or 4305; either 3311 or 4307; plus
- 6 SCH advanced selected from: 3305, 3307, 4304 or 4306 ............24
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,
  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 or 1402
  Biol 1401 or 1402, Chem 1401 or 1402,
  Geol 1401, 1402, or 2402, Phy 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
  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
Either 3304 or 4301; either 3311 or 4307; plus
3 SCH advanced selected from: 3302, 3303,
3307, 3308, 4304, or 4306 .......................................................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 .................................................................................................. 6
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 ............................................................ 9
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
Communication 3305, 3311*** or 4307***, 4310 ................................................. 9
Communication, Advanced .................................................................................... 3
Minor, Advanced ..................................................................................................... 6
Electives ................................................................................................................... 9

TOTAL 27

GRAND TOTAL 120

*Meets Oral Communication requirement.
** Meets 3 SCH of Fine Arts requirement.
***Meets Multicultural Social Science requirement.
****Meets Computer Science competency requirement.

(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.

First Year

Hours
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 2303, 2305, 2308****, 3306............................... 9
English 2301 or other literature ...................................................... 3
Fine Art* ....................................................................................... 3
Foreign Language .......................................................................... 3
Mathematics .................................................................................. 8
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.
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.

1310 Fundamentals of Communication (3-0). Introductory communication course focusing on oral communication theory and skills needed by game and communication designers. Course emphasizes team work utilizing the SCRUM technique, interviewing, concept pitching and oral reports that would be found in the gaming and communication design industries. Meets university oral communication core curriculum requirement.

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 Communication (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.

4309 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 organizations 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.

5311 *Small Group Communication (3-0)*. The aim of this course is to study the nature and dynamics of small groups focusing on communication.
research and theory as applied to the process of small group decision-making.

5312 Oral Communication Course Development (3-0). A course designed to prepare students to teach the basic communication course in higher education and other professional environments. The course covers course design, course evaluation, methodologies for skill development, and related topics. Provides theoretical and experiential knowledge about communication goals/objectives, teacher/student communication needs & expectations, reinforcement & feedback, climate & influence, and teacher/student communicator style, characteristics, and behavior.

5313 Mass Communication Theory and Research (3-0). This course is designed to explore the research and theory that attempt to explain the effect of mass communication on individuals and society. The course will primarily concentrate on the mass media of the last two centuries, considering how they have been shaped by society and how they have affected society by reviewing relevant theory and research.

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.

1302 Intro to Applied Visual Arts (3-0). A hands on, how to class that explains the fundamental concepts of the principles and elements of design, history and basic techniques of two-dimensional art through easy art projects in various traditional mediums.

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.

2302 Intro to Digital Design (3-0). A course in digital-imaging techniques using Adobe Photoshop. The course will focus on digital image editing, digital painting and design.

2303 Special Topics in Multicultural Visual & Performing Arts (3-0). This course introduces the student to topics in theatre and art from a multicultural viewpoint or women’s studies perspective with particular emphasis given to the social, religious, political and historical relevance of these topics throughout the non-western world.

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.

3303 Field Studies (3-0). A discussion of subjects such as writing reviews, press releases, visiting professional venues both public, private and non-profit, interviews with artists and behind the scene looks at museum, theaters, foundations and studios. Class also includes resume and portfolio development, career choices, marketing and sales, and other areas which are of interest and importance to all Visual & Performing Arts students/ (Includes major field trip out of the area. Required for all majors - preferably taken in junior year.)

4101 Senior Capstone Project (0-3). The Senior Capstone is the culminating course for the Visual and Performing Arts Major. Each Capstone is a follow-through of a proposal for the project written by students with the help and encouragement of their academic advisor. It is aimed at providing students with the opportunity to integrate the knowledge and skills they have acquired within their area of specialization and share it in a public form. Prerequisite: Written proposal and permission of instructor.

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.

2302 Feature and Editorial Writing (3-0). To provide a basic but comprehensive exposure to the aspects of feature writing and to provide students with the opportunity to improve their writing and interviewing skills through active participation. Course will include interviews with guest speakers who will both lecture and be interviewed for feature stories. Student stories may be selected for publication in The Skyline and other media outlets. The course is intended to stimulate student interest in writing for Sul Ross student publications, including The Skyline student newspaper and The Brand yearbook.

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.
3302 Layout and Design (3-0). Various programs such as PhotoShop, Illustrator, and InDesign will be explored and applied for use in web pages, newspaper and magazine publication, and e-publishing.

MUSIC

The Music Program of the Department of Fine Arts and Communication offers opportunities for students of all backgrounds. Music study is available in both instrumental music and vocal music. Course offerings include music theory, music history and literature, as well as private instruction, in keyboard, voice, guitar, woodwinds and brass. Performing ensembles include university choir, wind ensemble, jazz ensemble, mariachi ensemble, and pep band. These ensembles are open to all students. Scholarship funds are readily available for those interested in participating in these ensembles. Further, substantial scholarships are available for students who declare music as a concentration.

For the student interested in music as a career, the department offers various concentrations in music. The concentration may serve as a foundation for careers in music business and music related activities. The Bachelor of Arts in General Studies degree coupled with the certification requirements of the Education Department qualifies a student to teach music in private and public Schools, grades K-12. For those students interested in a professional musical career, there are also many opportunities in the music field such as performance, teaching in the private studio, music business and merchandising, music composition and arranging, and music technology. The Sul Ross music program can help students explore these areas as well as prepare for graduate school.

Students may choose music as a minor. A music minor 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.

The Department of Fine Arts and Communication also offers select graduate courses in music that can be applied to the Master of Liberal Arts, Master of Education, or as a minor for other masters programs.

A student who enrolls in the program beginning Fall, 2012 will select the Bachelor of Arts in General Studies with Music as the area of concentration. Students should consult with an adviser in the Department of Fine Arts and Communication for specific classes associated with a music concentration in their desired area of specialization. This concentration approach to music allows flexibility in designing degrees to meet student needs while maintaining rigor in the course of study.

Music as a Concentration

The concentration in music includes Music 1111 (multiple enrollments), 1115, 1121, 1131, 1312, 1321, 1331, 2141, 2341, 3111 (multiple enrollments), 3141, 3311, 3313, 3316, 3341, 3411, 4215, 4216, 4311, 4131, and Piano Proficiency Examination.

The concentration for students seeking certification includes Music 1111 (multiple enrollments), 1115, 1121, 1131, 1312, 1321, 1331, 2141, 2341, 3111 (multiple enrollments), 3141, 3311, 3313, 3316, 3341, 3411, 4215, 4216, 4311, 4131, and Piano Proficiency Examination. In addition, the
following courses from the Department of Education: ED3300, 3302, 3305, 4312, 4314, 4605.

Specialty techniques courses for concentration in instrumental or vocal music may include Music 1114 (two-three enrollments), 1116, and 1314. See an adviser in Fine Arts and Communication for specific requirements.

A Piano Proficiency Examination must be passed before the last semester.

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 Tubas
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 woodwind 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 03 Brass
02 Percussion 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.

01 Piano 09 Trumpet
02 Voice 10 Trombone
03 Flute 11 Euphonium
04 Oboe 12 Tuba
05 Clarinet 13 Percussion
06 Saxophone 14 Guitar
07 Bassoon 15 Violin Family
08 French Horn 17 Organ
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.

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<thead>
<tr>
<th>01 Piano</th>
<th>02 Voice</th>
<th>03 Flute</th>
<th>04 Brass Ensemble</th>
<th>05 Clarinet</th>
<th>06 Saxophone</th>
<th>07 Bassoon</th>
<th>08 French Horn</th>
<th>09 Trumpet</th>
<th>10 Trombone</th>
<th>11 Euphonium</th>
<th>12 Tuba</th>
<th>13 Percussion</th>
<th>14 Guitar</th>
<th>15 Violin Family</th>
<th>17 Organ</th>
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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        06 Football Show band
   02 Symphonic Wind Ensemble  07 Guitar Ensemble
   03 Stage Band          08 Specialty
   04 Ensemble Brass Ensemble  09 Orchestra
   05 Woodwind Ensemble    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 lessons or one-hour lesson and not less than 10 hours practice per week. Designed for music majors and minors but other students may enroll with the permission of the instructor.
   01 Piano               09 Trumpet
   02 Voice               10 Trombone
   03 Flute               11 Euphonium
   04 Oboe                12 Tuba
   05 Clarinet            13 Percussion
   06 Saxophone           14 Guitar
   07 Bassoon             15 Violin Family
   08 French Horn         17 Organ

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 preformed.

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**

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 overview of educational theatre.

Sul Ross State University offers a Bachelor of Fine Arts in Visual and Performing Arts degree (BFA) with concentrations in Acting/Directing; Technical Design/Production, and Theatre Education. All-level teacher certification in theatre is also available offered for those who currently have an undergraduate degree.

Application to the Bachelor of Fine Arts program is open to all students; however, an audition or portfolio review, evidence of scholarly and creative
achievement, and potential for excellence in the field may be required for theatre scholarship consideration. Students pursuing the BFA in theatre from Sul Ross State University receive the best of both worlds: professional training and a college degree. With professionally-trained faculty, small-class sizes, and state-of-the-art theatre facilities, students are afforded the opportunity to develop into theatre artists with a well-rounded liberal arts education. After graduation Sul Ross theatre graduates have a strong history of pursuing professional careers and/or being successful in obtaining graduate theatre degrees from outstanding universities across the nation. Sul Ross theatre education graduates are widely recruited by K-12 institutions across the state.

Sul Ross State University offers a Masters of Education in Theatre and a Masters of Liberal Arts with a concentration in Theatre. Additional information on these degrees is found under the Department of Education and the Liberal Arts sections of the catalog.

The University and/or its theatre faculty are members of the following organizations in the theatre field: the Association for Theatre in Higher Education, Southwest Theatre and Film Association, United States Institute of Theatre Technology, and the Texas Educational Theatre Association.

Non-theatre majors may fulfill the University’s oral communication requirement by completing Theatre 2304 (Oral Interpretation).

Non-theatre majors may fulfill a Sul Ross Fine Arts requirement by completing Theatre 1302 (Introduction to Theatre).

A grade of "C" or better must be achieved in all required theatre courses in order to complete a B.F.A. in theatre.

Bachelor of Fine Arts
(Theatre Major, Acting/Directing – 120 hours)

Core Curriculum

Basic Skills Component ................................................................. 43
English 1301 and 1302 ................................................................. 6
Mathematics, select from 1310, 1315, 1316, 1342, or 2413 ................. 3
Communication, Thea 2303 ............................................................. 3

Basic General Knowledge
Kinesiology, PE 1150 and one activity course ..................................... 2
English 3304 .............................................................................. 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, Geog1301 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 ................................................................. 12
English, select one 2000 or higher course ......................................... 3
Fine Arts, Mus 1111-02 (two enrollments) and Mus 3112 and Thea 3306 ........................................................................ 6
Computer Science, Comm 2306, or FA 2301 .................................... 3
Major ........................................................................................................................................ 60
Theatre 1301, 2301, 2306, 2307, 2310, 2311, 3301, 3302, 3303, 3304, 3307, 3308, 3309, 3312, 3316, 4303, 4304, 4306, and 4307; plus three enrollments from Theatre 1101, 2101, 3101 or 4101
Electives (at least 3 hours advanced) ....................................................................................... 5

Total 120

Bachelor of Fine Arts
(Theatre Major, Technical Design/Production – 120 hours)

Core Curriculum
Basic Skills Component ........................................................................................................... 43
English 1301 and 1302 ........................................................................................................ 6
Mathematics, select from 1310, 1315, 1316, 1342, or 2413 ............................................. 3
Communication, Thea 2303 ............................................................................................... 3

Basic General Knowledge
Kinesiology, PE 1150 and one activity course .................................................................... 2
English 3304 ..................................................................................................................... 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 ....................................... 6
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 ............................................................................................................... 12
English, select one 2000 or higher course ......................................................................... 3
Fine Arts, select from Art 1301, 1302 or 1303 .................................................................. 6
Computer Science, IT 3323 ............................................................................................. 3

Major ........................................................................................................................................ 60
Theatre 1301, 2301, 2311, 3302, 3303, 3307, 3309, 3312, 3313, 3314, 3315, 3316, 3318, and 4307; plus six enrollments from Theatre 1101, 2101, 3101 or 4101 IT 1305, 2307 and 3303 ................................................................. 9
Electives (at least 3 hours advanced) ....................................................................................... 5

Total 120

Bachelor of Fine Arts
(Theatre Major, Theatre Education – 120 hours)

Core Curriculum
Basic Skills Component ........................................................................................................... 40
English 1301 and 1302 ........................................................................................................ 6
Mathematics, select from 1310, 1315, 1316, 1342, or 2413 ............................................. 3
Communication, Thea 2303 ............................................................................................... 3

Basic General Knowledge
Kinesiology, PE 1150 and one activity course .................................................................... 2
English 3304 ..................................................................................................................... 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** ........................................................................ 12
English, select one 2000 or higher course ............................................ 3
Fine Arts, Mus 1111-02 (two enrollments) and Mus 3112 and Thea 3306 ................................................................. 6
Computer Science, Comm 2308 or FA 2301 ......................................... 3

**Major** ......................................................................................... 54
Theatre 1301, 2301, 2306, 2307, 2310, 2311, 3301, 3302, 3303 or 3307, 3309, 3310, 3312, 3316, 3318, 4304, 4306, and 4307; plus three enrollments from Theatre 1111, 2101, 3101 or 4101

**Education** ..................................................................................... 21
Education 3300, 3302, 3305, 4312, 4314 and 4605

Total 127

**Bachelor of Fine Arts**

*(Theatre Major, Acting/Directing)*

The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in Theatre, Acting/Directing.

**Freshman Year**

Theatre 1101, 1301, 2101, 2301, 2306 and 2307 ..................................... 14
Communication: Theatre 2303 ............................................................. 3
English 1301, 1302 ........................................................................... 6
Mathematics 1310 or higher ................................................................. 3
Physical Education 1150 and one activity course ............................... 2
Music 1111 ....................................................................................... 1
Political Science 2305 or 2306 ............................................................. 3

**TOTAL 32**

**Sophomore Year**

Theatre: select 2311, 3101, 3301, 3302, 3303, 3306, 3307, 3308, 3309, 3312, 3314, 3316 or 3318 ................................................................. 19
English: 3304 or other literature .......................................................... 3
Multicultural: select from Hist 2301 or 2302, Mas 2301, PS 2307 or WS 2301 ................................................................. 3
Laboratory Science ........................................................................... 4
Music 1112 ....................................................................................... 1

**TOTAL 30**

**Junior Year**

Theatre: select from 2311, 3301, 3302, 3303, 3304, 3306, 3307, 3308, 3309, 3312, 3314, 3316, 3318, 4304 or 4306 .................................................. 18
English 3304 or other literature .......................................................... 3
United States History ......................................................................... 3
Social Science .................................................................................. 3
Laboratory Science ........................................................................... 4
Comm 2308 ....................................................................................... 3

256
Senior Year
Theatre 4307 plus select from 3304, 3308, 3314, 4304 or 4306 ..............12
Political Science 2305 or 2306 ....................................................... 3
United States History ................................................................. 3
Music 3112 .................................................................................. 1
Electives ...................................................................................... 5

TOTAL 24
GRAND TOTAL 120

Theatre as a Minor
18 SCH hours of coursework to include 6 SCH advanced; including Theatre 1301 and 1302; plus three enrollments from Theatre 1101, 2101, 3101 or 4101.

Bachelor of Fine Arts
(Theatre Major, Technical Design/Production)

The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in Theatre, Technical Design/Production.

Freshman Year
Theatre 1101, 1301, 2101, and ..................................................... 8
Communication: Theatre 2303 .................................................... 3
English 1301, 1302 .................................................................. 6
United States History ................................................................. 3
Mathematics 1310 or higher .......................................................... 3
Physical Education 1150 and one activity course ....................... 2
Art: Select two from Art 1301, 1302 or 1303 ............................ 6

TOTAL 31

Sophomore Year
Theatre: select from 1101, 2101, 2311, 3302, 3303, 3306, 3307, 3309, 3312, 3313, 3314, 3315, 3316 or 3318 ......................... 20
English 3304 or other literature .................................................. 3
Multicultural: select from Hist 2301 or 2302, Mas 2301, PS 2307 or WS 2301 ................................................................. 3
Laboratory Science .................................................................. 4
IT: Select from 1305, 2307, 3303 and 3323 ............................. 3

TOTAL 33

Junior Year
Theatre: select from 2311, 3101, 3302, 3303, 3306, 3307, 3309, 3312, 3313, 3314, 3315, 3316, 3318 or 4101 ......................... 20
English 3304 or other literature .................................................. 3
United States History ................................................................. 3
Social Science ......................................................................... 3
Laboratory Science .................................................................. 4
IT: Select from 1305, 2307, 3303 and 3323 ............................. 3

TOTAL 36
### Senior Year
- Theatre 4307 .......................................................... 3
- Political Science 2305 and 2306 ..................................... 6
- IT: Select from 1305, 2307, 3303 and 3323 ...................... 6
- Electives ......................................................................... 5

**TOTAL 20**

**GRAND TOTAL 120**

### Bachelor of Fine Arts
**Theatre Major, Theatre Education**

The following is a suggested sequence of courses for students seeking the Bachelor of Arts degree with a major in Theatre, Acting/Directing.

#### Freshman Year
- Theatre 1101, 1301, 2101, 2301, 2306 and 2307 ................. 14
- Communication: Theatre 2303 ...................................... 3
- English 1301, 1302 .......................................................... 6
- Mathematics 1310 or higher ........................................... 3
- Physical Education 1150 and one activity course ............... 2
- Music 111 ................................................................. 1
- Political Science 2305 or 2306 ......................................... 3

**TOTAL 32**

#### Sophomore Year
- Theatre: select 2310, 2311, 3101, 3301, 3302, 3303 or 3307, 3309, 3310, 3312, 3316 or 3318 ............................................ 19
- English: 3304 or other literature .................................. 3
- Multicultural: select from Hist 2301 or 2302, Mas 2301, PS 2307 or WS 2301 .......................................................... 3
- Political Science 2305 or 2306 ......................................... 3
- United States History ................................................... 3
- Laboratory Science ..................................................... 4
- Music 1112 ............................................................... 1

**TOTAL 36**

#### Junior Year
- Theatre: select 2310, 2311, 3301, 3302, 3303 or 3307, 3309, 3310, 3312, 3316, 3318, 4304 or 4306, ........................................ 18
- English 3304 or other literature .................................. 3
- United States History ................................................... 3
- Social Science ............................................................. 3
- Laboratory Science ..................................................... 4
- Comm 2308 .................................................................... 3

**TOTAL 34**

#### Senior Year
- Theatre 4307 .................................................................. 3
- Music 3112 .................................................................... 3
- Education 3300, 3302, 3305, 4312, 4314 and 605 .................. 21

**TOTAL 25**

**GRAND TOTAL 127**
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.

2310 Introduction to Theatrical Design (2-2). A fundamental course in the
basic aspects of all theatrical design: including scenic, costume, lighting,
sound and property design. Course projects may include fabrication,
modeling, computer-aided design, rendering, and construction.

2311 Stage Management (2-1). A course encompassing the basic theatrical
stage management skills and procedures, such as budgeting scheduling and
personnel management, for the pre-rehearsal, rehearsal and performance
periods of a production.

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.

3303 Repertory Theatre. (0-5) Practice and theory in the problems of
management, production, and acting in repertory theatre. May be repeated
for credit, but not more than once for theatre majors or minors.

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.

3307 Musical Comedy Workshop. (0-5) Practical training in the technique
and style of performing scenes and songs from musical theatre. May be
repeated for credit, but not more than once for theatre majors or minors.

3308 Acting III: Acting for the camera (2-2). A study of acting styles specific
to film and television. Emphasis on sense memory, scene work, audition
techniques and preparation to enter the industry.
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 IV: Advanced Acting for the Camera (0-5). Exploration of acting techniques affiliated with mixed media: film, video and game design development.

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.

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 V: Acting Styles (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. The semester the student graduates, the student must also enroll in and successfully complete General Studies (GS) 4100, Senior Assessment.

At the time of entrance into the program each student must complete a degree plan with a General Studies advisor.

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
General Studies 4100 ...............................................................1
Electives (must have total of 36 SCH advanced) ....................56

**Total 120**

General Studies (GS) 4100 Senior Assessment (1-0). Senior Assessment is a capstone course in which the students demonstrate proficiency in research and analysis through the engaging in original research.
DEPARTMENT OF LANGUAGES AND LITERATURE
(including English, Bilingual/English as a Second Language, French, Spanish, and Women's Studies)

Department of Languages and Literature
College of Arts and Sciences
Office: Morelock Academic Building, 114
Phone: (432) 837-8151
Fax: (432) 837-8714
E-mail: shileman@sulross.edu

Professor and Chair: Sharon Hileman, Ph.D.

Professors: Nancy Antrim, Ph.D., Nelson Sager, Ph.D., and Beverly Six, Ph.D.

Associate Professors: Ira Blanton, Ph.D., Laura Payne Butler, Ph.D., and Barbara Nelson, Ph.D.

Assistant Professors: Brad Butler, Ph.D., Kathy Stein, Ed.D., and Filemón Zamora, Ph.D.

Lecturers: Ilda Gonzalez, M.A. and Kathy Johnson, Ph.D.

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

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 1301 and 1302</td>
<td>6</td>
</tr>
<tr>
<td>Mathematics, select from 1310, 1315, 1316, 1320, or 1342</td>
<td>3</td>
</tr>
<tr>
<td>Communication, select from Comm 1303 or Thea 2304</td>
<td>3</td>
</tr>
<tr>
<td>Computer Science or English 2304 or OFS 1384</td>
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**Basic General Knowledge**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<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, PE1150 and one activity course</td>
<td>2</td>
</tr>
<tr>
<td>Laboratory Science, select two from Astr 1401 or 1402, Biol 1401 or...</td>
<td>8</td>
</tr>
<tr>
<td>1402, Chem 1401 or 1402, Geol 1401, 1402 or 2402, Phys 1401, 1402, 2401 or 2402</td>
<td></td>
</tr>
<tr>
<td>Social Science, select from Anth 1301, Eco 2300 or 2305, Geog 1301</td>
<td>3</td>
</tr>
<tr>
<td>or 1302, Phil 1301, Psy 1302, or Soc 2303</td>
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</tbody>
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**Integrity, Tolerance, Ethical Values, and Citizenship**

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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</thead>
<tbody>
<tr>
<td>American History, select two from History 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, MAS 2301, PS 2307</td>
<td>3</td>
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<tr>
<td>or WS 2301</td>
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**General Education** ..................................................................9-11

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>Fine Arts, select one course from art, journalism, music, theater, IT 2304 or linguistics</td>
<td>3</td>
</tr>
<tr>
<td>Foreign Language, two courses in one language</td>
<td>6-8</td>
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</table>

**Major** ..................................................................................36

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>English 2302; 2303; 2322;2323;3303; 3304;3312; 4306;4308; 4101 plus 8 SCH additional advanced hours in English</td>
<td></td>
</tr>
</tbody>
</table>

**Minor** (At least hours 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 2302; 2303; 2322; 2323 .........................................................12
- Laboratory Science ................................................................................8
- Multicultural Social Science ..................................................................3
- Political Science ......................................................................................6
- Social Science .........................................................................................3

**TOTAL 32**

### Junior Year
- English 3303; 3304; 3312; English elective ............................................12
- OFS 1384, CS 1301, English 2304 or equivalent ....................................3
- Minor .....................................................................................................9
- Electives ................................................................................................6

**TOTAL 30**

### Senior Year
- English 4101; 4306; 4308; English electives ............................................12
- Minor .....................................................................................................9
- Electives ..................................................................................................3

**TOTAL 24**

# Bachelor of Arts
## (English Major with Secondary Teaching Certification)

- Required Education Courses: ED3300, 3301, 3302, 3303, 3304, 4314, 4322, 4605
- Required English Courses: ENG 2301, 2302, 2303, 2322, 2323, 3303, 3304, 3312, 4101, 4306, 4308, 4316 plus 3 adv SCH
- Required Communication Courses: COMM 2305, 3305

**English major with a concentration in writing** (non-certification): English 2304: 2302 or 2303; 2322, 2323, or 3304; 3301; 3320; 3321; 3322; 4101; 4306 or 4308; and 9 additional SCH in English.

**English as a Minor**

- 2322, 2323, 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.

2322 English Literature from Beowulf to 1800 (3-0). English literature of the Anglo-Saxon Period, Middle Ages, Renaissance, and Age of Reason.

2323 English Literature from 1800 to the Present (3-0). English literature of the Romantic, Victorian, and Modern Periods.
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.”

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 Portfolio Capstone Course (1-0). A course required of English majors in which they compile the portfolio of materials which must be submitted to the department for its assessment of program learning outcomes. Students enroll in this class during their final semester in the English undergraduate program.

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.

4302 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.

4303 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. Preparation for the TExES certification exam in English Language Arts and Reading 8-12.

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 portfolios)

All graduate students, regardless of option, must complete 6 SCH in English literature, 6 SCH in American literature, and 6 SCH in language/writing/theory. In addition, all graduate students must pass a comprehensive M.A. exam near the end of their studies. Thesis students must provide an oral defense of the thesis.

The graduate faculty can guide students who wish to focus on American and English literature, creative writing, as well as literary and composition theory. The faculty includes those who specialize in linguistics, 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, and 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; Victorian Poets; Contemporary Fiction. 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: Thoreau; American Short Fiction; Southern Fiction; 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 the English language. May be repeated for credit when the topic varies.

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
- 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 .................................................. 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 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 WS 2301 ................................................................. 3

General Education ................................................................. 9-11

Fine Arts, select one course from art, journalism, music, theater, IT 2304, or linguistics ................................................................. 3

English 2301 or other literature-3 SCH sophomore or advanced ........ 6-8

Major ................................................................. 36

Spanish 2301; 2302; 2305; 3301; 3315 or 3316; 3310; 3311; 4310; 4311; BSL 3303; BSL 4330; plus 3 SCH advanced

Minor (At least 6 hours advanced) ................................................. 18

Electives ................................................................. 11

Total 120

The following is a recommended sequence of courses for students seeking a Bachelor of Arts in Spanish.

Bachelor of Arts  
(Spanish Major)

Freshman Year

Spanish 2301, 2302 ................................................................. 6

English 1301, 1302 ................................................................. 6

Oral Communication Core Requirement .................................... 3

Fine Arts Core Requirement ........................................................ 6

Mathematics Core Requirement .................................................. 3

United States History Core Requirement ..................................... 6

Physical Education 1150 and one activity course ............................ 2

TOTAL 32
Sophomore Year
Spanish 2305, 3301, BSL 3303 ................................................................. 9
English 2301 (or other literature) plus English
elective sophomore or advanced ......................................................... 6
Laboratory Science ............................................................................. 8
Political Science .................................................................................. 6
Social Science ....................................................................................... 3

TOTAL 32

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, BSL4330 ............................................................... 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, 3310, 3311, 3315 or 3316, 4310, 4311, 4312,
BSL 3303, BSL 4330.
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

(Student 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 4307 Readings and Research. Directed studies on specific topics of Spanish language, Spanish literature and Spanish American literature. May be repeated for credit when the topic varies. Prerequisite: Spanish 2302 or consent of instructor.

4310 Spanish American Literature I (3-0). A survey of major Spanish American authors and works from 1492 to 1830. Prerequisite: Spanish 2302 or consent of the instructor.

4311 Spanish American Literature II (3-0). A survey of major Spanish American authors and works from 1830 to the present. Prerequisite: Spanish 2302 or consent of the instructor.

4312 Teaching Spanish (3-0). A study of methods and materials used in teaching Spanish from Grades K - 12. The course presents ideas and techniques for teaching grammar, composition, literature, and culture. Prerequisite: Spanish 2302 or consent of the instructor.

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.

5309 Readings and Research (3-0). Individually guided research in Spanish or Spanish-American literature or in Spanish language and linguistics study. May be repeated for credit when the topic varies.

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. Prerequisite: French 1401 or consent of the instructor. (FREN 1412)

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.

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.

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 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 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.
Program Description
The Master of Arts in Liberal Arts is an individualized program designed for the graduate student who wishes to pursue interdisciplinary studies. Such a program encourages students to consider issues and problems in society, culture, literature, science, art, and/or communication. Students will develop comprehensive contexts for Scholarly work and appropriate methodologies for such studies.

Graduate students in Liberal Arts may earn a Master of Arts degree by selecting 33 hours of graduate courses from three disciplines (programs) with the approval of their major advisor and committee. Two of the three disciplines must be from the College of Arts and Sciences. The discipline with the greatest number of semester credit hours is required to be a discipline in the College of Arts and Sciences. In addition, students will complete LA 5101 and LA 5301, LA 5101 and LA 5301 may not be taken concurrently.

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.
COLLEGE OF PROFESSIONAL STUDIES

College of Professional Studies
Office: Morelock Academic Building, 203
Phone: (432)837-8134
FAX: (432)837-8133
E-mail: lguerrero2@sulross.edu
Website: http://www.sulross.edu/pages/3152.asp

Larry M. Guerrero, Ed.D., Dean

The College 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 College consists of the following departments:

Business Administration
Criminal Justice
Education
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
4. Master of Business Administration
5. Master of Education: Emphasis in Diagnostician, Counseling, Educational Leadership, Reading Specialist, and Physical Education.
6. Master of Science with a major in Criminal Justice
DEPARTMENT OF BUSINESS ADMINISTRATION

Department of Business Administration
College of Professional Studies
Dolph Briscoe Administration Building, 316
Box C-35, Alpine, TX 79832
(432) 837-8066
Fax: (432) 837-8003
E-mail: wcgreen@sulross.edu

Interim Chair and Professor: William C. Green, Ph.D.
Professors: Pamela C. Marett, Ph.D.
and Robert C. Matthews, M.B.A., C.P.A.
Associate Professor: Mazie E. Will, M.S., CPS/CAP
Lecturer: Linda McAnally, M.B.A.

The Department of Business Administration at Sul Ross State University offers three degrees and two minors: the Bachelor of Business Administration Degree (BBA), 120 semester credit hours; the Bachelor of Arts Degree in Administrative Systems & Business Technology (BA in ASBT), 120 semester credit hours; the Master of Business Administration Degree (MBA), 36 semester credit hours; a minor in Business Administration, 18 semester credit hours; and a minor in ASBT, 18 semester credit hours.

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. Areas of study include the fields of economics, accounting, marketing, finance, global business, human resources, information systems, and technology.

In this program one may take business courses in the first year! The required university and business courses can be synchronized to provide a career centered curriculum. This blending of business and general education courses enhances and reinforces the educational experience.

The advanced business electives allow students to focus in a specific functional area or broaden their education across several areas of business. Successful graduates obtaining the BBA degree are well prepared to pursue a wide variety of business careers.

The Bachelor of Business Administration degree program prepares the undergraduate for managerial and administrative positions across a vast array of organizations. These include regional, national, and international private sector enterprises across numerous industries; responsible positions for non-profit organizations; positions in the public sector including government organizations at the local, state, and federal level and many others. The business undergraduate is equipped to pursue employment as a business generalist or in a more specialized field such as such as accounting, economics, finance, human resources or marketing.

Bachelor of Arts Degree
Administrative Systems & Business Technology
120 semester credit hours
The Bachelor of Arts degree in Administrative Systems & Business Technology (ASBT) prepares you for careers as an administrative support specialist, project coordinator, training coordinator, supervisor, and office manager. The planned sequence of courses provides incremental skill development. Students study the impact of technology on business office procedures, and acquire the skills necessary to work with people and technology. Students who want to teach business education in middle school and high school may take additional prescribed courses in education to pursue teacher certification.

Degree Requirements

Bachelor of Business Administration
(120 hours)

Accounting 2330, 2331, 3333 ................................................................. 9
Administrative Systems and Business Technology 1384 ...................... 3
Communication 1303 or Theatre............................................................ 3
Economics 2300....................................................................................... 3
Finance 3340 .......................................................................................... 3
General Business Administration 1353, 3350, 3351, 3352 ................ 12
General Business Administration 4354, 4355 ....................................... 6
Management 3360................................................................................... 3
Marketing 3370, 4379 ............................................................................. 6
Advanced Business Electives ................................................................ 15
Free Electives ........................................................................................ 11
Economics 2305...................................................................................... 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......... 3
or Theatre 1302
History 1301, 1302 or 3309 ................................................................. 6
Kinesiology 1150 and one activity course (PE 1153 or 1155)................. 2
Laboratory Science: Select from Astronomy, Biology, Chemistry,
Geology or Physics................................................................................ 8
Math 1315, 1325 ..................................................................................... 6
Political Science 2305, 2306 ................................................................. 6

Total 120

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
Foreign Language ................................................................................. 8
Free Electives (at least 9 Advanced Electives) ...................... 21
History 1301, 1302, or 3309 .................................................. 6
Laboratory Science: Select from Astronomy, Biology,
   Chemistry, Geology or Physics ........................................ 8
Math 1310 or higher .......................................................... 3
Multicultural...GBA 4355 ..................................................... 3
Physical Education 1150, and one activity course (PE 1153, 1155) ....... 2
Political Science 2305, 2306 ................................................. 6
Social Science ........................................................................ 3

Total 120

Minor in Business Administration
18 semester credit hours
Students desiring a minor field in Business Administration must complete the following six prescribed 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 semester credit hours
Students desiring a minor field in ASBT must complete the following six prescribed courses.

Students desiring a minor field in ASBT must complete the following courses:
ASBT 1383, ASBT 2380 .......................................................... 6
Advanced ASBT ................................................................. 12

Total 18

Department of Business Administration Scholarships
The Department of Business Administration is grateful to its benefactors who make it possible for us to offer Scholarships to Business Administration majors. These are:

Jason Wesley Morgan Memorial Scholarship-$1,000 Scholarship for a full-time undergraduate student majoring in Business Administration. Applicant must be a junior or senior and be in good academic and disciplinary standing. Preference will be given to graduates of Alpine High School.

West Texas National Bank in Alpine Business Administration Scholarship-$1,000 Scholarship for full-time undergraduate students majoring in Business Administration. Qualifications include unconditional
admittance, a composite score of at least 20 on the ACT or the equivalent SAT score. Continuing students must maintain at least a 3.0 GPA.

**R.E. “Dick” Morrow and Bill Moss Memorial Scholarship**-$500-$2000 Scholarship for a full-time undergraduate student majoring in Business Administration. First priority is given to employees and children of employees of Valley Distributors and Permian Distributors. Recipient must be a graduate of a high School within a specified trade area. Must maintain at least a 2.5 GPA.

**Business Administration Excellence Fund**-This is a special Scholarship awarded on a case by case basis considering student need, program progress, and academic standing. Recipients must be full-time undergraduate students majoring in Business Administration.

**Business Administration International Fund**-Competitive Scholarship awarded to graduate and undergraduate business majors. Qualifications include unconditional admittance and good academic standing. Continuing undergraduate students must maintain at least a 2.75 GPA. Graduate students must maintain a 3.0 GPA.

**GRADUATE PROGRAMS IN BUSINESS ADMINISTRATION**

The Master of Business Administration degree is recognized by industry and government as one of the best credentials for success in management. It is offered for those students who are interested in preparing themselves for positions of responsibility in management or who have attained a management position and are seeking to enhance their understanding of the latest concepts, tools, and techniques of management and administration. The department offers three graduate degree options, one of which is available only to international students.

**Master of Business Administration**
**One Year Full-Time Program, Alpine Campus**

**Master of Business Administration**
**Two Year Online Program**

**Executive Master of Business Administration**
**Executive Program offered in cooperation with the Autonomous Universidad de Chihuahua**

The one year full time Master of Business Administration (MBA) degree program is designed to prepare individuals to deal with most aspects of the complex and competitive world of organizations. The one-year program is offered on the Alpine campus in a classroom setting.

The two-year Online MBA program is delivered using Blackboard and various synchronous tools as necessary. Both the Alpine-based and the online MBA programs impart the latest organizational knowledge and perspectives. Students learn to recognize and define changes critical to organizations regionally, nationally, and globally. The MBA professors combine their considerable industry experience, academic theory and concepts as well as insight gained from their own research to offer the graduate student insight from both the academic as well as the business practitioner’s perspective. The MBA curriculum includes primarily content
from economics, finance, marketing, management, accounting and global business.

The Department of Business Administration MBA program attracts people from diverse cultures and often 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.

**Executive MBA (Chihuahua, Mexico)**

The Department of Business Administration offers the Executive MBA graduate program in collaboration with La Universidad Autónoma de Chihuahua, Mexico, awarding a Master of Business Administration degree from Sul Ross.

The **SRSU EMBA** has provided experienced managers and working professionals with executive-level education fundamental to success since 1998.

The program is delivered in English using Blackboard and synchronous modes of delivery. 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. This program is not available to citizens of the United States.

**Master of Business Administration**

**One Year Full-Time, Alpine**

(36 hours)

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
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<tbody>
<tr>
<td>Accounting 5307</td>
<td>3</td>
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<tr>
<td>Economics 5301 and 5303</td>
<td>6</td>
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<tr>
<td>Economics 5302 or 5304</td>
<td>3</td>
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<tr>
<td>Finance 5306</td>
<td>3</td>
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<tr>
<td>General Business Administration 5301, 5304, 5309</td>
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<tr>
<td>Management 5304 and 5312</td>
<td>6</td>
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<tr>
<td>Marketing 5303 and 5305</td>
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**Total 36**

**Master of Business Administration**

**Two Year Online MBA**

(36 hours)

<table>
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<tr>
<td>Marketing 5303 and 5305</td>
<td>6</td>
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</table>

**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
With Chihuahua, Mexico
(36 hours)

Accounting 5307 ............................................................................................................. 3
Economics 5303 ............................................................................................................. 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

UNDERGRADUATE AND GRADUATE COURSES IN
THE DEPARTMENT OF BUSINESS ADMINISTRATION
FOR ALL DEGREE PROGRAMS

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.

ACC 3330 Intermediate Accounting I (3-0). Concepts, principles, and practices of accounting with emphasis on determination of income and financial position of business corporations. Prerequisites: ACC 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

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ACC 4332 Advanced Accounting (3-0). Complex financial accounting problems, including consolidated statements, not-for-profit accounting, partnerships and multinational accounting. (Various)
Prerequisite: ACC 3333

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 1101 Personal Financial Literacy (1-0). The topics to be covered will include, but are not limited to, budgeting, managing debt and credit, saving and investing, preventing identity theft, and retirement planning.

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 4303 Current Economic Problems (3-0). Examination and analysis of the more important and more pressing economic problems of the nation and world.

ECO 4305 Advanced Readings and Research in Economics and Finance. Selected topics in economics and/or finance to be offered as a seminar or individual study.

ECO 5301 Comparative Economic Thought-Free Enterprise (3-0). Survey of the four influential Schools of economic thought – Austrian, Keynesian, Monetarist, and Marxist. Emphasis on the development of capitalist theory and free markets as these influenced the economy of the United States. Original works will be reviewed and discussed in the context of recent events.

ECO 5303 Managerial Economics (3-0). Economic analysis applied to business problems including cost and revenue measurement, profit planning, and market structure. Special emphasis is placed on optimizing techniques, basic econometrics, and business forecasting. Prerequisite: ECO 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 1101 Personal Financial Literacy (1-0). The topics to be covered will include, but are not limited to, budgeting, managing debt and credit, saving and investing, preventing identity theft, and retirement planning.

FIN 3340 Corporation Finance (3-0). Money and Capital Markets, financial news and investor services; and gives a broad view of the entire financial field with special emphasis on discounted cash flow analysis, stock and bond valuation models, financial statement analysis, capital budgeting, cost of capital, and working capital management. 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 4371 Retailing Management (3-0). Principles and methods of modern retailing. Designed to aid students seeking a general knowledge of the retail field as well as those specializing in marketing.

MKT 4379 Business Capstone (3-0) Application of strategic business tools and techniques across all business functions to respond effectively to industry and marketplace needs. Recognition of both internal and external
variables in formulating business strategies will be considered. Course content may involve the use of a computerized business simulation, strategic cases, articles and/or text material. Business administration students are encouraged to take this course no sooner than the senior year. Prerequisites: Senior status

*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
College 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: 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.

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 may 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.

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)

Criminal Justice 1301, 2305, 4304, 4309 .................................................................12

42 hours of Criminal Justice electives including 30 hours of upper division (3000 or 4000 level) Criminal Justice courses .....................42

English 1301, 1302, 2304, and any other 2000 level or higher literature course ........................................................12

Communications 1303, 3306 or Theatre 2304 .......................................................3

Fine Arts: select from Fine Arts 1301; Art 1301, 3304, 3305,
Music 1312, or Theatre 1302 ........................................................................3

History 1301, 1302 or 3309 ................................................................................6

Mathematics: 1342 and one other course 1310 or higher ..............................6

Multicultural Studies: CJ 4301 ........................................................................3

Physical Education 1150 and one activity course ...........................................2

Political Science 2305, 2306 ...........................................................................6

Science: select Chemistry 3402 and 10-12 SCH from Astronomy;
  Biology; Chemistry; Geology; or Physics, total of 4 courses – 2 subjects, with at least 2 labs) .................................................................14-16

Social Science: select from Anthropology 1301; Economics 2300, 2305;
  Geography 1302, 2302; Philosophy 1301; Psychology 1302;
  Sociology 2303 ......................................................................................3

University Electives…students must take at least 8 hours of electives if non-lab courses are used for science requirements .........................6-8

TOTAL 120

MINOR IN CRIMINAL JUSTICE

Students wishing to minor in Criminal Justice must take CJ 1301, Introduction to Criminal Justice, CJ 4304, Criminology, and 12 additional hours of CJ courses including at least 6 hours of upper division (3000 or 4000 level) CJ courses. For these 12 hours, students should consult with a 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)

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; 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.

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.

3317 White Collar Crime (3-0). This course is designed to familiarize the student with the special crimes that qualify as white collar crime. By the end of the course the student will be able to distinguish white collar offenses from other types of crimes. Additionally, students will be familiar with the criminal justice system’s contemporary responses to white collar crimes.

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. May be repeated for credit when topics vary.

4303 Death Penalty (3-0). This class is designed to examine the moral, legal, social and political aspects surrounding the death penalty issues. We will focus on the history of capital punishment both domestic and abroad. Issues of deterrence as well as how problems of discrimination are actively addressed. This course will utilize past legal and criminological research to argue both for and against the death penalty in America. This course is not designed to reinforce a student's current belief-rather to challenge and broaden their understanding of a complicated and divisive criminal/political issue.
4304 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.

4310 Deviant Subcultures (3-0). This course examines the roots, structures, habits, and sociological implications of deviant subcultures. The most obvious example of a deviant subculture is criminal gangs, either street gangs or prison gangs.

4311 Sexual Predators (3-0). This course examines the roots, structures, habits and sociological implications of sexual predators. The most obvious example of sexual predators is the violent sexual serial killer.

4312 Punishment (3-0). In this course we will review the public policy concerning the death penalty and punishment. We will further look into issues that may or may not affect the use of the death penalty within the various states.

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.

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 of the Department of 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.

4319 School Violence (3-0). This class is designed to familiarize students with the sociological and legal issues concerning violence in schools. The subject is not limited to the United States.

4320 Forensic Ballistics: Handguns (3-0). This course is mainly a firearms examination course. Students will learn the historical evolution Handguns and their relationship to changes in the American society. The identification of and differences between all forms Handguns will be emphasized. This course will spend considerable time covering the usage and investigation of the criminal application of Handguns in crime, as well as, the tactical applications employed by law enforcement. The course includes considerable “hands-on” time with actual firearms.

4321 Forensic Ballistics: Long Guns (3-0). This course is mainly a firearms examination course. Students will learn the historical evolution of both Rifles and Shotguns and their relationship to changes in American society. The identification of and differences between all forms of “long guns” will be emphasized. This course will spend considerable time covering the usage and investigation of the criminal application of “long guns” in crime, as well as, the tactical applications employed by law enforcement. The course includes considerable “hands-on” time with actual firearms.

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:

Martin G. Urbina, Ph.D., Graduate Coordinator
Department of Criminal Justice – Alpine/RGC
3107 Bob Rogers Drive
Eagle Pass TX 78852
murbina@sulross.edu
830/758-5017 (office)
830/758-5003 (fax)

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 5322 Immigration Issues
CJ 5323 Homeland Security
CJ 5326 Victimology
CJ 5327 Seminar on the US Supreme Court (variable topic course)
CJ 5331 Topics in Criminal Justice (variable topic course)
CJ 5333 Internship
CJ 5338 Police and Fourth Amendment
CJ 5340 Seminar on Firearms and Violence
CJ 5342 Police Pursuits and Roadblocks

Students may select electives from other departments in order to fulfill the outside elective requirement.

With approval of the Graduate Coordinator. A maximum of 12 SCH credit hours from any other university or department at Sul Ross State University will be applied to the graduate degree plan. Undergraduate courses (4000 level) may be available for graduate credit with approval of the instructor and Graduate Coordinator. A maximum of 6 SCH undergraduate credits may be taken for graduate credit.

V. Admission to Candidacy

All graduate students must apply for Candidacy upon completion of 12 hours of graduate work at Sul Ross State University (transfer
credits do not count toward this total). At this time an assessment will be made of the student’s body of work and some suggestions may be made or extra requirements added to the student’s program in order to ensure successful completion of the program. Students who do not meet the requirements for Candidacy may be removed from the program. Requirements include maintaining a 3.0 GPA, being fully admitted to the program, and having an approved degree plan on file with the CJ department.

Failure to apply for candidacy at least one semester before graduation will result in a failure to graduate. Additionally, the Graduate Coordinator may place restrictions on registration if this form is not filed. The form is available from the CJ department website or from the Graduate Coordinator.

VI. 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 coursework – 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.

5322 Immigration Issues (3-0). This course will focus on the history and development of immigration patterns and policies in the United States. Emphasis will be placed on policy issues as related to the work of Criminal Justice practitioners, particularly in the post 9-11 world. Students will also be expected to analyze policy impact on various groups of immigrants.

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

5326 Victimology (3-0). This course is designed to give the student a basic knowledge of the issues surrounding criminal victimization. Topics covered will include types of victims, reactions to victims by society and the criminal justice system, and the victim rights movement.

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.

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 Methods of Social Research (3-0). An introduction to research methods within the social sciences and the major contemporary approaches to it.
5538 Police and Fourth Amendment (3-0). Study of the Fourth Amendment to the U. S. Constitution as it applies to, and its impact on law enforcement.

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.

5342 Police Pursuits, Roadblocks and Checkpoints (3-0). Study of police vehicle pursuits, use of roadblocks and checkpoints.

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 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.
Program Description
The Sul Ross State University Law Enforcement Academy serves law enforcement and corrections personnel in the SRSU 18-county service area. It is the mission of the law Enforcement Academy to provide the highest quality training to area agencies and police and corrections cadets at the lowest possible cost.

The purpose of the Sul Ross State University Law Enforcement Academy’s Basic Peace Officer course, a 700 clock-hour course of study, is to prepare prospective law enforcement officers for the TCLEOSE Certification Exam. The academy also offers TCLEOSE in-service courses at both intermediate and advanced levels for the purpose of enhancing the peace officers’ level of proficiency and meeting training requirements.

Admission Requirements- Basic Peace Officer Program
To be admitted, a prospective student must:

- Be a U.S. citizen.
- Be 20.5 years of age (18 w/60 college hours or 2 yrs. active duty).
- Must have High School Diploma or GED.
- Never had a class A misdemeanor or felony conviction.
- No conviction of Class B misdemeanor in the past 10 years.
- Not currently be under indictment for any violation.
- Have never been convicted of any level of family Violence.
- Not be prohibited by Federal or State law from possessing firearms or ammunition.
- Complete a SRSU Law Enforcement Academy Application for Admission.
- Submit a completed Criminal History check form (TCLEOSE C-1 Form).
- Be physically sound for the performance of duty appropriate to the type of license sought. Submit Physician, psychological and Drug Screening results (TCLEOSE L-2 and L-3 forms).
Program Description
Sul Ross State University was created in 1920 as a state normal college for the primary purpose of preparing teachers for the public schools of West Texas. Our continuing mission in the Department of Education is to develop life-long learners who are reflective practitioners of their craft. Our vision includes preparing high quality educators.

You can choose a degree program that leads to teacher certification in Early Childhood-Grade 6, Grade 4-8, Grade 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/Valley Johnson Scholarship. Awarded to elementary education seniors who meet all requirements for teacher certification.

Patsy H. Webb Educational Endowment. Awarded to elementary education seniors who have met all requirements for teacher education and have a 3.0 GPA.

McEachern Scholarship. Awarded to juniors or seniors who have been admitted to the teacher education program and have a 3.0 GPA. Based on financial need.

Mary Evelyn Highsmith Memorial Scholarship. Awarded to a graduate student in teacher education who is certified and teaching.

Graham/Aldridge Counselor Education Scholarship. Awarded to a graduate student majoring in 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 the 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 frequently being revised by the State Board of Education. As this transition occurs, changes might be made in course offerings, content, and sequence. It is important to check with an advisor in the Education Department each semester for updated information. Be aware TExES exams are a requirement for certification.

**INTERDISCIPLINARY STUDIES PROGRAMS**

Please see an advisor in the Education Department for specific requirements. TExES exams are required for certification.

**Areas of Specialization EC-Grade 6:** Generalist, Bilingual Generalist

**Areas of Specialization Grade 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.

- Ag Science & Tech Prod
- Business Education
- Computer Science
- English/Language Arts / Reading
- History
- Life Science
- Mathematics
- Physical Science
- Social Studies
- Science
- Spanish
- Speech
- Technology Education
- Theatre Arts

**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
### Bachelor of Science
(Interdisciplinary Studies: 125 hours)
(Early Childhood - Grade 6 Generalist)

| Hours | General Education | English: 1301, 1302, 2301, and 3312 | Mathematics: 1310, 1315, or 1342 | Communication: COMM 1303 or Theater 2304 | Fine Arts: Art 1301, FA 1301, Music 1312 or 1313 | Theater 1302 or 1303 | Geography: GEOG 2302 | American History: 1301 or 1302 | Political Science: 2305 and 2306 | Multicultural: ED 2311 | Kinesiology: PE 1150 and any PE 1153 Activity Class | Physical/Life Science: BIOL 1401 and 1402 |
|-------|------------------|-----------------------------------|-----------------------------------|------------------------------------------|-----------------------------------------------|----------------------|----------------------|-------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|---------------------------------|
| 46    |                  | 12                                | 3                                 | 3                                         | 3                                             | 3                    | 3                    | 3                             | 6                              | 3                              | 2                              | 8                              |

### Interdisciplinary Studies
(Grade 4 Generalist Specialization)

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Total 125
Consult with Advisor in Education (MAB 305).

### Bachelor of Arts
(Interdisciplinary Studies: 131 hours)
(Early Childhood - Grade 6 Bilingual Generalist)

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<th>American History: 1301 or 1302</th>
<th>Political Science: 2305 and 2306</th>
<th>Multicultural: ED 2311</th>
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### Interdisciplinary Studies

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Total 125
### Early Childhood - Grade 4 Bilingual Generalist Specialization:

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<td>ED 4306</td>
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<td>BSL 3328, 3329, 4328, and 4329</td>
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<td>ART 3303</td>
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### Professional Education

<table>
<thead>
<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ED 3300, ED 3301, ED 3302, ED 3303</td>
<td>24</td>
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<tr>
<td>ED 4314, ED 4322 and ED 4601</td>
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</tbody>
</table>

Consult with Advisor in Education (MAB 305).  

**Total 121**

### Bachelor of Arts  
(Interdisciplinary Studies: 128 hours)  
(Grades 4-8 Bilingual Generalist)

<table>
<thead>
<tr>
<th>Hours</th>
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#### General Education

<table>
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<tr>
<th>Course</th>
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<td>English: 1301, 1302, 2301, 3312</td>
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<td>Mathematics: 1310, 1315, or 1342</td>
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<tr>
<td>Communication: COMM 1303</td>
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<tr>
<td>Fine Arts: Art 3309</td>
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<tr>
<td>Geography: GEOG 2302</td>
<td>3</td>
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<tr>
<td>American History: 1301 or 1302</td>
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<tr>
<td>Political Science: 2305 and 2306</td>
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<tr>
<td>Multicultural: ED 2311</td>
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<tr>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class</td>
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<td>Foreign Language: SPAN 2301 and 2302</td>
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#### Interdisciplinary Studies

Grades 4-8 Bilingual Generalist Specialization: MATH 2310 AND 2311...... 6  
BIOL 2407...... 4  
GEOL 3302...... 3  
GEOG 3301...... 3  
HIST 3309...... 3  
ED 4313...... 3  
ED 4306...... 3  
ED 3314...... 3  
ENG 3311...... 3  
MUS 3311...... 3  
PE 2303...... 3  
BSL 3328, 3329, 4328, and 4329...... 12  
Computer Science: ED 3307...... 3  

### Professional Education

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<tr>
<th>Course</th>
<th>Hours</th>
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<tbody>
<tr>
<td>ED 3300, ED 3301, ED 3302, ED 3303</td>
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<td>ED 4314, ED 4322 and ED 4601</td>
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</table>

Consult with Advisor in Education (MAB 305).  

**Total 128**
### Bachelor of Arts

(Interdisciplinary Studies: 125 hours)

(Grades 4-8 English Language Arts & Reading)

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<tr>
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<tr>
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<td>Communication: COMM 1303 or Theater 2304</td>
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<tr>
<td>Fine Arts: FA 1301, Art 1301 or Music 1312 or 1313 or Theater 1302 or 1303</td>
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<tr>
<td>Geography: GEOG 2302</td>
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<td>American History: 1301 or 1302</td>
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<tr>
<td>Political Science: 2305 and 2306</td>
</tr>
<tr>
<td>Multicultural: ED 2311</td>
</tr>
<tr>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class</td>
</tr>
<tr>
<td>Physical/Life Science: BIOL 1401 and 1402</td>
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</tbody>
</table>

### Interdisciplinary Studies

Grades 4-8 English Language Arts & Reading Specialization:

- ENG 2302 or 2303 | 3
- ENG 3303 | 3
- ENG 3311 | 3
- ENG 3320 or 3321 or 3322 | 3
- ENG 4306 and 4308 | 3
- ED 3308, 3314, 4306, 4313, and 4314 | 15
- MATH 2310 AND 2311 | 6
- BIOL 2407 | 3
- GEOL 3302 | 3
- GEOG 3302 | 3
- Computer Science: ED 3307 | 3

### Professional Education

ED 3300, ED 3301, ED 3302, ED 3303

ED 4314, ED 4322 and ED 4601 | 24

Total 125

Consult with Advisor in Education (MAB 305).

### Bachelor of Arts

(Interdisciplinary Studies: 124 hours)

(Grades 4-8 Mathematics)

<table>
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<tr>
<th>Hours</th>
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<td>Geography: GEOG 2302</td>
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<td>Multicultural: ED 2311</td>
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<tr>
<td>Kinesiology: PE 1150 and any PE 1153 Activity Class</td>
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<tr>
<td>Physical/Life Science: BIOL 1401 and 1402</td>
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</table>

### Interdisciplinary Studies

Grades 4-8 Mathematics:

- MATH 1316, 1342, 2310, 2311, 2413, 2414, 3301, 3306, 3320, and
Bachelor of Science
(Interdisciplinary Studies: 120 hours)
(Grades 4-8 Science)

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<tr>
<td>Geography: GEOG 2302</td>
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<td>American History: 1301 or 1302</td>
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<td>Political Science: 2305 and 2306</td>
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<td>Multicultural: ED 2311</td>
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<td>Kinesiology: PE 1150 and any PE 1153 Activity Class</td>
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<td>Physical/Life Science: BIOL 1401 and 1402</td>
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<td>Interdisciplinary Studies</td>
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<td>Grades 4-8 Science Specialization:</td>
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<td>Computer Science: ED 3307</td>
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<td>HIST 3309</td>
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Consult with Advisor in Education (MAB 305).

Bachelor of Science
(Interdisciplinary Studies: 125 hours)
(Grades 4-8 Social Studies)

<table>
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Geography: GEOG 2302 .......................................................... 3
American History: 1301 or 1302 ............................................ 6
Political Science: 2305 and 2306 ............................................ 6
Multicultural: ED 2311 ......................................................... 3
Kinesiology: PE 1150 and any PE 1153 Activity Class ............... 2
Physical/Life Science: BIOL 1401 and 1402 ................................. 8

**Intersciplinary Studies**

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<th>Required Hours</th>
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<td>ECO 2300</td>
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<td>HIST 3300, 3309, 3311, and 4302</td>
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<td>PS 3303 and 4302</td>
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<td>GEOG 1302</td>
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<td>SOC 2303</td>
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<td>Computer Science: ED 3307</td>
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**Professional Education** .................................................. 24

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<tr>
<th>Course Code</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>ED 4314, ED 4322 and ED 4601</td>
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<td>24</td>
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</tbody>
</table>

Consult with Advisor in Education (MAB 305).

**Total 125**

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**TEACHER EDUCATION PROGRAM**

Sul Ross offers a variety of certification programs at the following teaching levels:

- Early Childhood through Grade 6
- Grades 4 through 8
- Grades 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
- Cumulative grade point average (GPA) of 2.75 or better
- Completion of 9 of the 12 hours of required English courses with an overall GPA of 2.5 or better
- No incomplete grades or grades lower than a C in teaching field(s) or areas of specialization. Overall GPA in teaching field(s) or areas of specialization must be 2.5 or better.
- No incomplete grades or grades lower than a C in education courses required for certification. Overall GPA in education courses must be 2.5 or better.

**Basic Skills:**

Test requirements (one of the following):

**THEA:** Reading 250+; Writing 220/6+; Math 230+

**ACT:** Reading 23+; Writing 17+; Math 18+; Composite 21+

**SAT:** Reading 450+; Math 450+; Composite 900+

*If SAT scores are used, the THEA or ACT writing score or a grade of B or better in English 1301 or 1302 may be used to satisfy the writing component.*
Grade requirements in lieu of testing (grade B or better in the following):

**Reading:** English 2301 or any sophomore or advanced literature course

**Writing:** English 1301 or 1302

**Math:** Math 1310, 1315, 1316, 1342 or 2413

**Oral Communications:** COMM 1303 or Theatre 2304

**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 4314 Reading Skills for Content Subjects
- ED 3302 Development and Learning Theories

**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 6 (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
- 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)
Art
Music
Physical Education

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 hours or more toward degree.
4. Must have an overall grade point average of at least 2.5 on a 4.0 scale.
5. TExES Content exam must be passed.
6. Must demonstrate sound physical health, sound mental health, and acceptable moral character. (The Teacher Education Council may request a student to take a physical examination and/or psychological tests or inventories). Shall be of good moral character and emotionally suited for working with children.
7. State requirements include a criminal background inquiry before placement in public schools.
8. Must have completed 12 semester hours of professional education with a minimum grade point average of 2.5 on a 4.0 scale, with no grade lower than a C. Must be approved to student teach by the Coordinator of Field Experience.

TEACHER CERTIFICATION THROUGH THE POST BACCALAUREATE INITIAL CERTIFICATION (PBICP)

This program is designed for individuals who have a degree and wish to become certified teachers in Texas. The SRSU Post Baccalaureate Initial Certification Program was approved as an alternative route to teacher certification by the State Board for Educator Certification in the spring of 2003 and meets the No Child Left Behind (NCLB) requirements of "highly qualified teacher". Candidates who possess a four-year baccalaureate degree from an accredited college/university with a major (or at least 24 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.
- Have passed the state certification examination (TExES) for requested teaching field.

Requirements for PBICP:

- Complete the SRSU Post Baccalaureate Initial Certification application form and meet all requirements indicated
- Pay PBICP application fee, which includes one deficiency plan; additional deficiency plans are $20 each. Sul Ross graduate: $25, non Sul Ross graduate: $50.
- 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
  - Have an overall/cumulative GPA of 2.75 or better on a 4.0 scale
  - 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 e-mail

UNDERGRADUATE COURSES IN EDUCATION

Educational certification programs are being revised. It is important to check with an advisor in the major field each semester for updated information.

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.
3309 Early Childhood: The Young Child (3-0). A study of the growth and development of infancy and early childhood with detailed case studies of a kindergarten age child.

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.

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

4322 Classroom Management (3-0). This course presents practical methods for creating a positive learning environment working with behavior problems, and dealing with a range of challenges in the K-12 classroom. An online format that provides discussion opportunities during student teaching. Prerequisite: Approval of Coordinator of Field Experiences; completion of Blocks I and II.

4601 Student Teaching in the Elementary School (0-6). The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

4602 Student Teaching in the Middle School (0-6). The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in the public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

4603 Student Teaching: All-level Certification. The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in a public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

4605 Student Teaching in the Secondary School (0-6)
The course serves as a capstone experience for teacher candidates enrolled in the teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a
teaching and leadership role in a public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor. Prerequisite: Approval of the Director of Teacher Education.

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.

3308 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. May be 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 field of specialization. Master’s programs lead to certification in counseling, diagnostician, reading specialist, principal and superintendent. You may also choose a general master’s degree with options available for areas of specialization and certification. A master’s degree with options available for areas of specialization and certification. A master’s degree requires completion of a minimum of 36 semester credit hours (SCH) of prescribed coursework. The master’s degree and certification programs require a grade point average of 3.0 or higher on a 4.0 scale with no grade lower than a “C.” For information pertaining to a specific certification, see a departmental advisor. For the Master of Education with specialization, 30 semester credit hours (SCH) are required; while 36 semester credit hours (SCH) are required for the Master of Education with certification. **The Master's Comprehensive Examination must be taken in the last semester of required coursework.**

MASTER OF EDUCATION WITH MAJOR IN EDUCATION LEADERSHIP

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 5330 Introduction to School Administration
  ED 5336 Leadership and Evaluation of Instruction (ILD)
  ED 5338 Professional Development Appraisal Systems (PDAS)
  ED 5316 Diversity in Public Education or ED 6309
  Administration of UIL Programs
  ED 5319 School Law
  ED 6304 Organization & Theory in Administration
  ED 6315 Design and Implementation of the Instructional Program
  ED 6320 School Support Services
  ED 7304 Leadership in Educational Administration
  ED 7309 State and Federal Programs in Public Schools
  ED 7313 Administrative Internship – (this course is required for certification)

* Must be taken within the first 12 semester credit hours

Additional Program Requirements

1. Hold a valid Texas teaching certificate or the equivalent
2. Have a minimum of two years teaching in a Texas Education Agency accredited school.
3. Complete all coursework in a six year period.
4. Purchase Certify Teacher Test Prep & Review software.
5. Participate in an approved TExES review.
6. Pass the TExES Principal Examination (68).
7. Apply for certification and pay appropriate fees
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 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 PRINCIPAL (CERTIFICATE ONLY)**

Students who possess a Master’s degree 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. Complete a prescribed thirty (30) sc 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
   ED 5338 Professional Development Appraisal System (PDAS)
   ED 6304 Organization & Theory in Administration
   or
   ED 6320 School Support Services
   ED 7315 Design and Implementation of the Instructional Program
   ED 7306 School Finance
   ED 7313(I) Administration Internship
   * **Must be taken in the first 12 semester credit hours**

**Additional Program Requirements**

1. Hold a master of education degree from an accredited institution.
2. Hold a valid Texas provisional teaching certificate or evidence of equivalent preparation.
3. Have a minimum of two years teaching in a TEA accredited school.
4. Complete all coursework in a ten (10) year period.
5. Purchase Certify Teacher Principal Test Preparation & Review software.
6. Participate in an approved TExES review.
7. Pass the Principal TExES (68) Examination.
8. Apply for certification and pay appropriate fees.

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 Master’s degree from and 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 Dr. Galen Privitt, Graduate Advisor.
4. Purchase Certify Teacher Superintendent Preparation and Review material software.
5. Participate in an approved TEES review.
6. Pass the Superintendent TEES Examination (64).
7. Apply for certification and pay appropriate state fees.
8. Complete the prescribed 16 hours of course work consisting of these courses:
   - ED 7404  Leadership in Education Administration
   - ED 7308  The Superintendency
   - ED 7421  Superintendent/School Board Relations
   - ED 7422  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, psychoeducational and diagnostic assessment, and resource areas. All coursework requires approval of the major advisor and must be completed within 6 years.

COURSE REQUIREMENTS

+  ED 5306  Assessment of Individual Intelligence
+# ED 5307  Graduate Research
*  ED 5312  Advanced Survey, Exceptional Children
      ED 5316  Diversity in Public Education
+  ED 5320  Advanced Methodology for Exceptional Children
+  ED 5321  Foundations of Special Education Law
*  ED 5319  School Law
      ED 5320  Advanced Methodology for Exceptional Children
+  ED 5323  Appraisal of Educational Disabilities
+  ED 5325  Advanced Educational Remediation
+  ED 7318  Practicum in Special Education

# 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:
1. complete the 36 SCH Diagnostician program;
2. hold a valid Texas teaching certificate
3. hold an earned master's degree;
4. complete a minimum of two years teaching in a T.E.A. accredited school;
5. pass TExES Educational Diagnostician (153) examination.

**REQUIREMENTS FOR EDUCATIONAL DIAGNOSTICIAN (CERTIFICATE ONLY)**

Students who possess a Master's degree in Education from an accredited institution who only seek certification as an educational diagnostician 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. Purchase and pass, with an acceptable score, a representative, practice test in preparation for the TExES Educational Diagnostician Examination (153).
5. Pass the TExES Educational Diagnostician Examination
6. Apply for certification and pay appropriate state fees.
7. Complete the required 21 SCH hours of course work as shown below:

   ED 5306  Assessment of Individual Intelligence
   ED 5312  Advanced Survey, Exceptional Children
   ED 5320  Advanced Methodology for Exceptional Children
   ED 5321  Foundations of Special Educational Law
   ED 5323  Appraisal of Educational Disabilities
   ED 5325  Advanced Educational Remediation
   ED 7318  Practicum in Special Education

With the approval of the Graduate Advisor, a maximum of six hours of equivalent course work may be substituted or transferred from an accredited institution.

**MASTER OF EDUCATION WITH A MAJOR IN COUNSELING**

A master's degree in Counseling requires 36 semester hours from the Core courses. All course work requires approval of the major advisor and must be completed within 6 years. Students enrolled in the graduate level counseling program may be expected to meet with the Counseling faculty at any point during the program in order to evaluate progress.

**CORE (36 Hours)**
* ED 5307  Graduate Research
  ED 5313  Career Development and Life Planning
* ED 5314  Personality and Counseling Theories
  ED 5315  Assessment in Counseling
* ED 6308  Advanced Human Growth and Development
  ED 6344  Counseling in a Multicultural Society
  ED 6346  Ethical and Legal Issues in Counseling
# ED 7301  Clinical Practice in Counseling
**REQUIRED FOR SCHOOL COUNSELOR CERTIFICATION**  
(36 Hours from the Core)

1. Complete the 36 sch School Counselor program;  
2. have a master's degree;  
3. have a minimum of two years teaching in a T.E.A. accredited school; and  
4. pass the TExES examination (#152 School Counselor).

**COURSES REQUIRED FOR LICENSED PROFESSIONAL COUNSELOR (LPC) (36 Hours from the Core plus 12 Hours from these courses)**

- ED 6341 Psychopathology  
- ED 6342 Addictive Disorders  
- ED 6345 Family Counseling  
- ED 7316B Internship in Guidance and Counseling

Internship is required

Students interested in LPC licensure must contact the Texas State Board of Examiners of Professional Counselors in Austin, Texas for requirements.

**MASTER OF EDUCATION WITH MAJOR AS A READING SPECIALIST – ONLINE DELIVERY**

A master's degree in Reading Specialist requires 36 semester 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 6316 Diversity in Public Education  
- ED 6308 Advanced Human Growth and Development  
- ED 6311 Emergent Literacy and Language Development  
- ED 6313 Teaching Reading in the Content Areas  
- ED 6314 Diagnosis and Correction of Reading Disabilities  
- ED 6317 Organization and Supervision of Reading Programs  
- ED 6318 Literacy through Literature  
- ED 7312 Practicum in Reading  

PLUS 6 SCH of electives with advisor approval

* Must be taken within the first 12 hours.
READING SPECIALIST CERTIFICATION PLAN

ED 5308  Foundations of Reading
ED 6311  Emergent Literacy and Language Development
ED 6313  Teaching Reading in the Content Areas
ED 6314  Diagnosis and Correction of Reading Disabilities
ED 6317  Organization and Supervision of Reading Programs
ED 6318  Literacy Through Literature
ED 7312  Practicum in Reading

Consult with advisor about prerequisites for some courses.

Certification as a Texas Reading Specialist:
1. Master’s Degree
2. Valid Texas Teacher Certification
3. TExES #151 (Reading Specialist)
4. Two years of classroom teaching experience.

MASTER OF EDUCATION - SPECIALIZATION

A master's degree in Education General requires 30 semester credit hours (SCH) from Resource & Electives and Area of Specialization. All coursework requires approval of the major advisor and must be completed within a six year period.

Course Requirements
* ED 5305  Technology in the Educational Setting
  ED 5307  Graduate Research
  ED 5316  Diversity in Public Education
  ED 5317  History, Philosophy and Trends in Education
  ED 6308  Advanced Human Growth & Development

And one of the following:
  ED 6313  Teaching Reading in the Content Areas
  ED 5310  Organization and Structure of Public School Curriculum
  ED 5311  Improvement of Instruction in Public Schools

*Must be taken within the first 12 hours.

Plus 12 SCH from the Area of Specialization with advisor approval. Total 30 SCH.

MASTER OF EDUCATION - GENERAL WITH ALTERNATIVE CERTIFICATION

A master’s degree in Education-General requires 36 semester credit hours (SCH) from Resource & Electives and Area of Specialization. All coursework requires approval of the major advisor and must be completed within 6 years.

Course Requirements
* ED 5307  Graduate Research
  ED 5310  Organization and Structure of Public School Curriculum
  ED 5311  Improvement of Public Education
  ED 5316  Diversity in Public Education
  ED 5324  Advanced Educational Psychology
  ED 5360  Professional Roles and Responsibilities
  ED 3613  Teaching Reading in the Content Areas
*Must be taken within the first 12 hours.

Plus 15 SCH from the Area of Specialization with advisor approval. Total: 36 SCH.

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: Instructor's approval.

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, terminology, advocacy litigation, legislation at the national and state levels, and state guidelines, involving special populations.

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.

5320 Advanced Methodology for Exceptional Children (3-0). An advanced study of ways to organize, modify, and supplement the traditional curriculum, to provide appropriate learning activities, and to evaluate progress on an individual basis for the exceptional student.

5321 Foundations of Special Education Law (3-0). A course designed to provide an understanding of the laws governing the area of special education, focusing on current law as such as IDEA, Section 504, and ADA, as well as the legal aspects of the development and implementation of IEPs and IFSPs. Previous cases effecting special education will be examined.
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. Students will examine current trends in programs designed for early identification and intervention of possible educational disabilities. Factors involved in multicultural assessment will be addressed. Prerequisite: Instructor's approval.

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 in order to design and implement individualized instruction programs. Additional focus on functional assessment of behavior and academic performance in order to develop positive behavioral supports as well as intervention plans.

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.

5352 **Social/Emotional Development of the Gifted and Talented (3-0)**. Affective growth and potential adjustment problems of gifted students. Emphasis on self-concept, career concerns, peer relationships, and family interactions.

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.

5353 **Clinical Teaching in the Postbaccalaureate Program (0-6)**. The course serves as a capstone experience for teacher candidates enrolled in teacher education program. Students are required to work within their placement campuses and fulfill the responsibilities and obligations outlined in the student teaching handbook. Students are expected to serve in a teaching and leadership role in a public school classroom(s) under the supervision of an experienced cooperating teacher and university supervisor.

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.

6309 **Administration of the UIL Program (3-0)**. A course designed to provide students the opportunity to study the University Interscholastic League organization and operation for governing interscholastic competition in the public schools of Texas.

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.

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 or addictions, assessment, models of treatment, prevention, and family issues. Prerequisite: Approval of advisor.

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: Approval of instructor.

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: Must be taken in the final semester of degree coursework.

7302 Management of Guidance, Counseling, and Human Services Programs (3-0). A professional orientation course covering program development, organization, management and accountability; professional organizations; codes of ethics; legal aspects of practice; standards of preparation; position functions. Prerequisite: ED 5314

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.

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: 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.

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/principal certification program. Clock hours must be accumulated during two consecutive semesters. 7311:1 is required for enrollment in 7311 ll.

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 Administration Internship (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 150 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 principalship coursework.

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 or identified agency. Students spend a minimum of 100 clock hours under supervision of designated mentor and university faculty. Prerequisite: Instructor's approval.

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.

7404 Leadership in Educational Administration (3-4). This course will provide a comprehensive overview of the leadership aspects of the school superintendency. This would include dealing with the board, the public, the school community and all stakeholders within the district and how to view the big picture of being the CEO of a school district, including keeping all entities fully informed on a continuing basis, long range planning on all levels, leading and managing campus based planning committees and district planning committees, curriculum development and management, and all things else pertaining to school district leadership. Additionally, 75 clock hours of internship with a practicing superintendent in which the students will be exposed to the daily routine of the superintendent in relation to various leadership issues involving the superintendent’s relationship with other school district administration and staff facing the superintendent will be required.

7408 The Superintendency (3-4). This course is an introduction to school superintendency which would provide a broad overview of what a practicing superintendent is required to do so as well as the legal implications of the position. Additionally, the expectations of the Sul Ross State University Superintendency Certification program of study would be clearly delineated. Additionally, 75 clock hours of internship with a practicing superintendent in which the students will be exposed to the daily routine of the superintendent will be required.

7421 Superintendent/School Board Relations (3-4). This course would provide a comprehensive view of the legal ramifications a practicing superintendent faces both on a daily basis and long range and would specifically focus on how this affects the working relationship with the Board of Trustees. This would include dealing with the Board of Trustees on/with the following: policy matters, working with human resources, learning to keep abreast of impending and new enacted legislation and working with the board and school community to develop long range predictions as to how possible future legislation and proposed legislation will affect the school community. Additionally, 75 clock hours of internship with a practicing superintendent in which the students will be exposed to the daily routine of the superintendent in relation to school board issues facing the superintendent will be required.

7422 Superintendent Finance Issues (3-4). This course would provide a comprehensive view of all things financial with which the practicing school superintendent must deal on both a daily basis and as an aspect of long range planning, including budgeting, fiscal growth, facilities planning and the politics of each aspect of finance. Additionally, 75 clock hours of internship with a practicing superintendent in which the students will be exposed to the daily routine of the superintendent in relation to the finance issues facing the superintendent will be required.
DEPARTMENT OF INDUSTRIAL TECHNOLOGY

Department of Industrial Technology
College of Professional Studies
Office: Industrial Technology Building, 101
Phone: (432)837-8138
E-mail: jwassermann@sulross.edu

Instructor and Interim Chair: J. Scott Wassermann

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: (1) to prepare students for leadership roles and careers in a variety of industries; (2) to prepare students for teaching careers in Technology Education; (3) to provide students majoring in other disciplines an opportunity to supplement and enrich their chosen fields; (4) to provide advanced study and skill enhancement in several specific technological areas of industry; (5) to prepare students for further education in the field of Industrial Technology. The philosophy of the Department of Industrial Technology coincides with and supports the philosophy of the University in providing opportunities for a teaching-learning environment in which the student may acquire the knowledge, experiences, and skills necessary for a professional, technical, and liberal education.

Career Opportunities
Industrial Technology courses provide for entry skill level work in industry within the technological areas of manufacturing, construction, communication, transportation, power and energy. Courses also provide preparation in Supervision/Management and Industrial Training. Courses can be combined with Education Certification providing for a career in teaching Technology Education in Middle School/Junior High and High School. When combined with work experience after graduation, students can pursue a career as an instructor in some post-secondary institutions within their specific skill area of experience.

Features
The department is one of only a few remaining programs that continues to teach students in more than just the theory of industrial processes. With fully functioning laboratories in metals, foundry, woods, welding, small engine, drafting, CAD, photography, plastics, CNC, and CIM areas, students are able to acquire skill in addition to knowledge in many of the industrial process they will encounter after they earn their degree. Student lab assistants, hired by the department, allow the facilities to be open extended hours so there is ample opportunity to develop skills to whatever level a student may desire.

Scholarships
The Industrial Technology department has several scholarships available ranging in awards from $200/year to $1000/year. Scholarships offered by the Industrial Technology Department are:
Mr. & Mrs. Jim Cauble Scholarship
Jack C. Crawford Memorial Scholarship
Karen Lyn Graham Memorial Scholarship
W. C. "Bill" Leavitt Excellence Fund
Loyd Oden Memorial Scholarship
Victor J. Smith Memorial Scholarship

Contact the department for scholarship requirements and availability.

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 is design, layout and construction of furniture and cabinets, mass production techniques, using plastic laminates and modern finishing materials and methods. Prerequisite: IT 2305 or equivalent or special permission.

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.
PHYSICAL EDUCATION

Department of Education
College of Professional Studies
Office: (432) 837-8226
Fax: (432) 837-8234
E-mail: rgrant@sulross.edu

Professor and Chair: Jim Hector, Ed.D.

Professor: Roger Grant, Ed.D. and Chet Sample, Ed.D.

Associate Professor and Dean of the College of Professional Studies: Larry Guerrero, Ed.D.


Program Description
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 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
   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 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 Physical Education. 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 and James Victor Oatman 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>Kinesiology and Sports Science</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>P.E. 1302, 1303, 2304, 3305, 3307, 4301, 4302, 4303</td>
<td>24</td>
</tr>
<tr>
<td>Select 6 SCH from: 3301, 3302, 3303, 3304, 3308, 3309</td>
<td></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></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></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></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>
<tr>
<td>Science: must include Biology 2403; 12 hrs. select from (at least two different sciences)</td>
<td></td>
</tr>
<tr>
<td>Astronomy 1401, 1402; Biology 1401, 1402; Chemistry 1401, 1402; Geology 1401, 1402, 2404; or Physics 1401, 1402, 2401, 2402</td>
<td></td>
</tr>
<tr>
<td>Social Science: select from Anthropology 1301; Economics 2300, 2305; Geography 1302, 2302; Philosophy 1301; Psychology 1302; Sociology 2303</td>
<td></td>
</tr>
<tr>
<td>Minor</td>
<td></td>
</tr>
<tr>
<td>Electives: select from any subject area</td>
<td></td>
</tr>
</tbody>
</table>

Total 120
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 any time. Therefore, the student is responsible to stay updated.

For teacher certification information contact the Sul Ross Department of Education or see information at www.sulross.edu

Hours

Kinesiology and Sports Science ................................................................. 36
  P.E. 1302, 1303, 3305, 2303, 2304, 3307,
  4301, 4302, 4303 ........................................................................... 27
Select 9 SCH from: 3301, 3302, 3303, 3304, 3308,
  3309, 4304, 4305, 4306, 4307, 4308, 4309 ........................................... 9
English 1301, 1302, 3312 and 3 SCH sophomore or advanced literature ......................................................... 12
Communication 1303 or Theatre 2304 ................................................. 3
Fine Arts: select from Fine Arts 1301, Art 1301, Music 1312, 1313, or
  Theatre 1302 .................................................................................... 3
History 1301, 1302 ................................................................................. 6
Mathematics: select from 1310, 1315, 1316, 1320 or 1342 ................ 6
Physical Education: 1150 and 1156 ....................................................... 2
Multicultural Studies: select from Education 2311 ............................. 3
Political Science 2305 and 2306 ............................................................ 6
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) ...................................... 16
Social Science: select from Anthropology 1301, Economics 2300
  2300, 2305, Geography 1302, 2302, and Philosophy 1301;
  Psychology 1302; Sociology 2303 .................................................. 6
Education: Courses mandated by the State ........................................... 21
Electives: select from any subject area ................................................. 10

Total 130

Kinesiology and Sports Science Minor
PE 1302, 1303, 2304, 4301, 4302, and 3 SCH advanced electives 18 Hours

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 driver record evaluation established for Texas School bus drivers before you are recommended for endorsement to the Education Department. No Texas test is required. Listed below are the courses you would take:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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</td>
</tr>
<tr>
<td></td>
<td>Education</td>
</tr>
</tbody>
</table>

**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:

<table>
<thead>
<tr>
<th>Course</th>
<th>Description</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>
</tbody>
</table>

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</th>
<th>Description</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</td>
</tr>
</tbody>
</table>

Education
# Recommended Sequence of Courses for a Bachelor of Science  
**Kinesiology and Sports Science Major - 120 hrs**

<table>
<thead>
<tr>
<th>Hours</th>
<th>Freshman Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE 1302, 1303 .................................................................6</td>
</tr>
<tr>
<td></td>
<td>English 1301, 1302 .........................................................6</td>
</tr>
<tr>
<td></td>
<td>Communication* ...............................................................3</td>
</tr>
<tr>
<td></td>
<td>Math* ........................................................................6</td>
</tr>
<tr>
<td></td>
<td>Fine Arts* ..................................................................3</td>
</tr>
<tr>
<td></td>
<td>PE 1150 .......................................................................1</td>
</tr>
<tr>
<td></td>
<td>Social Science* ..............................................................6</td>
</tr>
<tr>
<td></td>
<td>PE 1156 .......................................................................1</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 32</strong></td>
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</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Sophomore Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE 2304 ..............................................................3</td>
</tr>
<tr>
<td></td>
<td>English 2301, and * ................................................6</td>
</tr>
<tr>
<td></td>
<td>History 1301, 1302 ..................................................6</td>
</tr>
<tr>
<td></td>
<td>Political Science 2305, 2306 ......................................6</td>
</tr>
<tr>
<td></td>
<td>Science – Biology 2403 and * .......................................8</td>
</tr>
<tr>
<td></td>
<td>Electives 2403 .............................................................3</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 32</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Junior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE 3305, 3307 and 3 hrs. electives ..........................9</td>
</tr>
<tr>
<td></td>
<td>Multicultural Studies* ..............................................3</td>
</tr>
<tr>
<td></td>
<td>Science* ..................................................................8</td>
</tr>
<tr>
<td></td>
<td>Minor* .....................................................................9</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 29</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hours</th>
<th>Senior Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PE 4301, 4302, 4303 ..................................................9</td>
</tr>
<tr>
<td></td>
<td>Minor* .................................................................9</td>
</tr>
<tr>
<td></td>
<td>Electives* ............................................................9</td>
</tr>
<tr>
<td></td>
<td><strong>TOTAL 27</strong></td>
</tr>
</tbody>
</table>

**GRAND TOTAL 120**

*See Bachelor of Science Degree requirements in this section

A total of 120 semester hours are required to graduate; 36 hours (12 courses) of those must be numbered 3000 level or higher. A grade lower than a "C" will not be accepted in the major field.

## PRE PHYSICAL THERAPY

Students interested in applying for admission to Physical Therapy School may major in any undergraduate field. However, there are required courses (prerequisites) for the pre-physical therapy student to consider taking as part of their chosen degree plan. Some Texas Schools offer master’s degrees in physical therapy. Information and specific prerequisite course work for each physical therapy School can be obtained from your Pre-Physical Therapy advisor. It is important to note that Schools that offer physical therapy programs do not have a standardized prerequisite curriculum and that each sets its own entrance requirements. Students are advised to contact the physical therapy school of choice for the most up-to-date information on entrance requirements to ensure that the courses taken at Sul Ross State...
University will be accepted. Recommended courses for pre physical therapy students include: Anatomy/Physiology, Biology, Chemistry, Mathematics, Physics and Statistics.

**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.

1156 *Aquatic Activities (0-2).* Beginning Swimming, Intermediate Swimming and Life Guarding. Red Cross Certification is available.

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 clap. Elective credit only. May be repeated but may not be used to fulfill P.E. activity course requirements in General Education. Prerequisite: Membership on an intercollegiate athletic team.

**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. (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) Prerequisite: PE 1303

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

344
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 Education in 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)

5305 Administration of UIL Programs (3-0). The course is designed to provide students the opportunity to study the University Interscholastic League organization and operation for governing interscholastic competition in the public schools of Texas. This course is cross listed with ED 6309.

5306 Problems in Athletic Administration (3-0). A course designed to give the teacher/coach a better understanding of the special problems that arise in the administration of a physical education or athletic program in the public schools and colleges.

5307 Mechanical Analysis of Sport Skills (3-0). The course is a study of the basic mechanical principles and physical laws that govern human movement, primarily in sports activities. Special focus will be analysis of sport skills for improvement through instruction.

5308 Health in the Public Schools (3-0). This course is designed for graduate students. The content will center around discussions of current situations and issues of health and wellness related to public school teaching and students.

5309 Sport and Exercise Psychology (3-0). A course designed to expose students to basic concepts and principles of exercise and sport psychology.
and applications in counseling, teaching, coaching, athletic training, and fitness instruction.

5310 Legal Aspects of Sports and Physical Activities (3-0). The focus of the course is to examine the legal aspects of administration of, participation in, and related associations with sports, athletics and physical activity.

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)

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)
Program Description
The vocational nursing program prepares students to take the National Council Licensure Examination for Practical Nurses (NCLEX-PN) for licensure as a Licensed Vocational Nurse (LVN). Approved by the Texas Board of Nursing, the program is administered through the College of Professional Studies. Articulation agreements are in place to facilitate advancement to registered nurse at other schools of nursing.

Requirements for admission are: high school diploma or G.E.D.; satisfactory scores on pre-entrance examinations; application for admission to the program; three work/academic references; evidence of good health; interview; and Biology 2404 -Human Anatomy and Physiology I or Biology 2405 Human Anatomy and Physiology II or Biology 2403 Survey of Human Anatomy and Physiology and minimum 2.0 GPA on all college course work. For further information, prospective students may contact the Director of Vocational Nursing at Box C-58, SRSU or 432-837-8171.

Scholarships
Roxana Holland Donnell Memorial Nursing Excellence Scholarships. Good academic and disciplinary standing.

Pilot Club Scholarship for LVN Student. Good academic standing. Deadline; November 30 of each year. Application available at the Vocational Nursing Department.

Big Bend Regional Medical Center Hospital Auxiliary Scholarship. This scholarship is designed for LVN students who exhibit need, school community involvement and academic achievement. Application available at Vocational Nursing Department. Submit three letters of reference (one personal, one professional and one business). Write a paragraph explaining why you wish to enter a health-care field and your need for assistance. In the event that you are unable to complete your LVN requirements, we request that you refund the scholarship in order to give another candidate the opportunity to use the scholarship.

Keith & Janette Morrow Memorial Nursing Scholarship. Must be resident of Brewster, Presidio, or Jeff Davis Counties in Texas. Must be a full-time undergraduate student in good academic and disciplinary standing at university majoring in a nursing program at university. Beginning freshmen must be unconditionally admitted to university. Returning students must be making normal progress toward a degree and have an overall grade point average of at least 3.0.
Edith Richardson, RN Memorial Nursing Scholarship. Must be a nursing major. Preference will be given to graduates of Alpine, Marfa, and Ft. Davis High Schools. Beginning freshmen and transfer students must be unconditionally admitted to university and be enrolled full-time during period of award. Returning students must be making normal progress toward a nursing certificate or degree, maintain an overall grade point of at least 3.0, and be enrolled full-time during period of award.

Marathon Primary Care Services Scholarship. Requirements: Good academic and (disciplinary standing. Prefer residents of Brewster, Jeff Davis or Presidio Counties.

The following is the required sequence of courses for students majoring in Vocational Nursing.

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<td>VNSG 1227 Essentials of Medication Administration</td>
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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. 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)

1330 Maternal-Neonatal Nursing (48-64). A study of the biological, psychological, and sociological concepts applicable to basic needs of the family including childbearing and neonatal care. Utilization of the nursing process in the assessment and management of the childbearing family. Topics include physiological changes related to pregnancy, fetal development, and nursing care of the family during labor and delivery and the puerperium.

1334 Pediatric Nursing (48-64). A study of the pediatric patient and family during health and disease. Emphasis on growth and developmental needs utilizing the nursing process.

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)

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. (Fall)
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